There were many changes to the 2010 NASS GES, most of which are the result of NHTSA's efforts to standardize variables in the NASS GES and the Fatality Analysis Reporting System (FARS). Additions, deletions, and changes are listed below.

More detailed information on each variable can be found in the NASS GES Coding and Editing Manuals, which NHTSA publishes for each year of data collection. While the 2010 changes are addressed in this Analytical User's Manual, data users should compare the 2009 and 2010 Coding and Editing Manuals for a more thorough understanding. Manuals for 1995 to the present can be found at:

http://www-nrd.nhtsa.dot.gov/cats/listpublications.aspx?Id=k&ShowBy=DocType.

General changes to 2010 NASS GES are:

- Non-harmful events are added to the Cevent (formerly the Event) data set.

- A new data set (Vevent) is added which lists the harmful and non-harmful events for each in-transport motor vehicle.

- Pedestrian/bicyclist typing is updated to use the coding procedures in the document "Pedestrian and Bicycle Crash Analysis Tool Version 2.0" (March 2006). The pedestrian/bicyclist typing information is collected for all pedestrians, bicyclists and people on personal conveyances and is in a data set which is new in 2010, Pbtype. In 2009 and before, the pedestrian/bicyclist information is available for the first qualifying person in the crash and is in the Accident data set.

- The data sets Nmprior and Nmcrash are added in 2010; they replace the Nmaction data set and contain information about what people (who are not occupants of motor vehicles) are doing prior to the crash (Nmprior) and any improper actions or contributing circumstances noted on the PAR (Nmcrash).

- The Trafcon data set is retired in 2010. In prior years (2002-2009) the Trafcon data set could contain multiple traffic controls for each in-transport motor vehicle. In 2010, one traffic control is coded per in-transport motor vehicle eliminating the need for the Trafcon data set. The traffic control coded in 2010 is the one which best describes the traffic controls in the vehicle's environment just prior to its critical precrash event.

2010 Variables with Changes in Definitions, Attributes or SAS Codes

Accident:

A06	First Harmful Event EVENT1
A07	Manner of Collision MAN_COL
A09	Relation to Junction REL_JCT1/REL_JCT2
A10	Relation to Trafficway REL_ROAD
A11/V_A11	Trafficway Description DTRAFWAY/VTRAFWAY
A12/V_A12	Total Lanes of Roadway DNUM_LAN/VNUM_LAN
A13/V_A13	Roadway Alignment DALIGN/VALIGN
A14/V_A14	Roadway Grade DPROFILE/VPROFILE
A15/V_A15	Roadway Surface Conditions DSURCOND/VSURCOND
A16/V_A16	Traffic Control Device DTRAFCON/VTRAFCON
A18/V_A18	Speed Limit DSPD_LIM/VSPD_LIM
A19	Light Condition LGHT_CON
A20	Atmospheric Conditions WEATHER/WEATHER1/WEATHER2
A21	School Bus Related SCH_BUS
A25	Work Zone WRK_ZONE

Cevent/Vevent (only Event in 2009 and prior, modified in 2010):

E03/V24	Areas of Impact (This Vehicle)/ Areas of Impact – Initial GAD/IMPACT1
E03/V38	Areas of Impact (This Vehicle)/ Areas of Impact – Most Damaged GAD/IMPACT2
E04	Non-Collision Category or Object Contacted (Sequence of Events) OBJCONT
E05/V24	Areas of Impact (Other Vehicle) OBJGAD/IMPACT1
E06/VE06	Action E_ACTION

Vehicle:

V02	Hit and Run HIT_RUN
V03	Vehicle Make MAKE
V04	Vehicle Model MODEL
V05	Body Type BODY_TYP
V06	Vehicle Model Year MODEL_YR
V07	Vehicle Identification Number VIN
V08	Special Use SPEC_USE
V09	Emergency Use EMER_USE
V10B	Number of Occupants NUMOCCS
V18	Extent of Damage DEFORMED
V19	Vehicle Removal TOWED
V20	Most Harmful Event V_EVENT
V31	Vehicle Motor Carrier Identification Number MCARR_ID
V33	Cargo Body Type CARGO_BT
V41	Trafficway Description VTRAFWAY (it was V_A11 in 2009)

Parked:

PV05	Parked/Working Body Type PBODYTYP
PV06	Parked/Working Vehicle Model Year PMODELYR
PV07	Parked/Working Vehicle Identification Number PVIN
PV08	Parked/Working Special Use PSP_USE
PV10	Parked/Working Number of Occupants Coded POCCINVL

PV10B   Parked/Working Number of Occupants PNUMOCCS
PV18   Parked/Working Extent of Damage PVEH_SEV
PV19   Parked/Working Vehicle Removal PTOWED
PV31   Parked/Working Vehicle Motor Carriers Identification Number PCARIDNO
PV33   Parked/Working Cargo Body Type PCARGTYP
PV34   Parked/Working Hazardous Materials Placard PHAZPLAC
PV37   Parked/Working Vehicle Location PREL_RWY
PV38   Parked/Working Vehicle Areas of Impact – Most Damaged PIMPACT2

Person:

P03   Person Type PER_TYP
P04   Seating Position SEAT_POS
P06   Ejection EJECTION
P07   Age AGE
P08   Sex SEX
P09   Injury Severity INJ_SEV
P10   Transported to Medical Facility By HOSPITAL
P11A   Alcohol Test Status ALCHTEST
P11B   Alcohol Test Type ALTSTYPE
P11C   Alcohol Test Result ALTRSULT P03 Person Type PER_TYP
P13   Non-Motorist Location at Time of Crash LOCATN
P15   Restraint System/Helmet Use REST_SYS
P17A   Drug Test Status DRUGTEST
P17B   Drug Test Type DRTSTYPE
P17C   Drug Test Result DRTRSULT
P21   Air Bag Deployed AIR_BAG

Safetyeq:

M_P20   Non-Motorist Safety Equipment Use MSAFEQMT

New Variables:

Accident:

A17/V_A17   Device Functioning DTCONT_F/VTCONT_F
A28   Type of Intersection TYP_INT

Vehicle:

V39   Bus Use BUS_USE
V40   Vehicle Configuration V_CONFIG

Person:

P24   Any Indication of Mis-use of Restraint System/Helmet Use REST_MIS
P25   Non-Motorist Action/Circumstances Prior to Time of Crash MPR_ACT
P26   Non-Motorist Action/Circumstances at Time of Crash MTM_CRSH

Parked:

PV38   Parked/Working Vehicle Areas of Impact – Most Damaged PIMPACT2
PV40   Parked/Working Vehicle Configuration PV_CONFIG

Pbtype (new in 2010):

PB27   Marked Crosswalk PBCWALK
PB28   Sidewalk Present PBSWALK
PB29   School Zone PBSZONE
PB30   Crash Type (Pedestrian) PEDCTYPE
PB30B   Crash Type (Bicyclist) BIKECTYPE
PB31   Crash Type Location (Pedestrian) PEDLOC
PB31B   Crash Type Location (Bicyclist) BIKELOC
PB32   Pedestrian Position PEDPOS
PB32B   Bicyclist Position BIKEPOS
PB33   Pedestrian Initial Direction of Travel PEDDIR
PB33B   Bicyclist Direction BIKEDIR
PB34   Motorist Direction MOTDIR
PB35   Motorist Maneuver MOTMAN
PB36   Intersection Leg PEDLEG
PB37   Pedestrian Scenario PEDSNR
PB38   Crash Group (Pedestrian) PEDCGP
PB38B   Crash Group (Bicyclist) BIKECGP

The following are new SAS tables in 2010:

- Vevent
- Nmprior
- Nmcrash

Deleted Variables:

Accident:

A24   Pedestrian/Cyclist Crash Type PED_ACC

Vehicle:

V22   Vehicle Role VEH_ROLE
V25   Damaged Areas DAM_AREA
D02   Violations Charged VIOLATN
D04   Driver's Vision Obscured By VIS_OBSC
D06   Driver Maneuvered to Avoid DR_MANAV
D07   Driver Distracted By DR_DSTRD

Person:

P18   Condition (Impairment) at the Time of Crash IMPAIRMT
P19   Non-Motorist Action ACTION
P20   Non-Motorist Safety Equipment Use SAF_EQMT

Nmaction (this table replaced by Nmprior and Nmcrash):

M_P19   Non-Motorist Action MACTION

Trafcon (this table is not available in 2010):

M_A16   Traffic Control Device MTRAFCON

Other Changes in the 2010 Coding and Editing Manual:

The following variables have changes to the remarks and/or attribute definitions in 2010.

Cevent/Vevent (only **Event** in 2009 and prior, modified in 2010)**:**
E06/VE06 Action E_ACTION

Vehicle:
V21   Movement Prior to Critical Event P_CRASH1

Person:
P03   Person Type PER_TYP
P13   Non-Motorist Location at Time of Crash LOCATN
P15   Restraint System/Helmet Use REST_SYS

Parked:
PV05   Parked/Working Body Type PBODYTYP
PV06   Parked/Working Vehicle Model Year PMODELYR
PV07   Parked/Working Vehicle Identification Number PVIN
PV08   Parked/Working Special Use PSP_USE
PV10   Parked/Working Number of Occupants Coded POCCINVL
PV10B   Parked/Working Number of Occupants PNUMOCCS
PV18   Parked/Working Extent of Damage PVEH_SEV
PV19   Parked/Working Vehicle Removal PTOWED
PV31   Parked/Working Vehicle Motor Carriers Identification Number PCARIDNO
PV33   Parked/Working Cargo Body Type PCARGTYP
PV34   Parked/Working Hazardous Materials Placard PHAZPLAC
PV37   Parked/Working Vehicle Location PREL_RWY
PV38   Parked/Working Vehicle Areas of Impact – Most Damaged PIMPACT2
PV40   Parked/Working Vehicle Configuration PV_CONFIG

Biketraf:
MB_A16   Traffic Control Device-Cyclist BTRAFCON

Summary of the SAS Naming Changes in 2010

Locator Code	2009 SAS Name	New 2010 SAS Name	Variable Name
A05	N/A	LAND_USE	Land Use
A09A	REL_JCT	RELJCT1	Relation To Junction -Within Interchange Area?
A09B	REL_JCT	RELJCT2	Relation To Junction -Junction
A11	TRAF_WAY	DTRAFWAY	Trafficway Description
A12	NO_LANES	DNUM_LAN	Total Lanes in Roadway
A13	ALIGNMNT	DALIGN	Roadway Alignment
A14	PROFILE	DPROFILE	Roadway Grade
A15	SUR_COND	DSURCOND	Roadway Surface Condition
A16	TRAF_CON	DTRAFCON	Traffic Control Device
A17	N/A	DTCONT_F	Traffic Control Device Functioning
A18	SP_LIMIT	DSPD_LIM	Speed Limit
A24	PED_ACC	N/A (deleted)	Ped/Cycle Accident Type
A27	N/A	TYP_INT	Type of Intersection
V12	FACTOR	deleted in Vehicle table	Vehicle Contributing Factors (MFACTOR) stored in Factor table
V22	VEH_ROLE	N/A (deleted)	Vehicle Role
V24	IMPACT	IMPACT1	Areas of Impact - Initial Damage Area
V31	CARINDUM	MCARR_ID	Carrier's Identification Number
V39	N/A	BUS_USE	Bus Use
V40	N/A	V_CONFIG	Vehicle Configuration
D02	VIOLATN	deleted in Vehicle table	Violations Charged (MVIOLATN) stored in Violatn table
D04	VIS_OBSC	deleted in Vehicle table	Violations Charged (MVISOBSC) stored in Vision table
D06	DRMAN_AV	deleted in Vehicle table	Driver Maneuvered to Avoid (MDRMANAV) stored in Maneuver table
D07	DR_DSTRD	deleted in Vehicle table	Driver Distracted By (MDRSTRD) stored in Distract table
P18	IMPAIRMT	deleted in Person table	Condition at Time of Crash (MIMPAIR) stored in Impair table
P19	ACTION	deleted in Person table	Non-Motorist Action (changed in 2010)

Locator Code	2009 SAS Name	New 2010 SAS Name	Variable Name
P20	SAF_EQMT	deleted in Person table	Non-Motorist Safety Equipment Use (MSAFEQMT) stored in Safetyeq table
P24	N/A	REST_MIS	Indication of Restraints/Helmet Mis-Use
P25	N/A	MPR_ACT	Non-Motorist Actions/Circumstances At Time of Crash (MPR_ACT) stored in Nmcrash table
P26	N/A	MTM_CRSH	Non-Motorist Actions/Circumstances Prior to Crash (MTM_CRSH) stored in Nmprior table

The variables in RED are new to 2010 NASS GES.
The variables in BLUE are changed in 2010 NASS GES.