The source of this data spanned 2 data systems and multiple datasets for passenger car, light truck (GVW 1,2,3), motorcycle, medium and heavy duty truck (GVW 4 – 8) systems. The 2014 data for car, LT, and MCY came from NVPP, 2014 data for MD/HD trucks came from TIP. The 2011 data came entirely from the NVPP system. The TIP sourced data for MD/HD has more detail available to classify vehicles by type, body style, vocation, etc, the NVPP sourced data for MD/HD has no vocation information and very limited vehicle data. Vehicles were classified based on the information we had available from these different systems. Our data is stored in our databases at the VIN level, this data was the source of everything we provided. The code used to classify vehicles in the summarized data for MOVES, MOBILE6, HPMS, was also used to produce the data loaded into the MS Access database application, and the VIN level data files.

All reports except the Trailer report were based from the same time period. We used the July 2011 VIO for the history pull calling that 2011 and July 2014 for the current VIO pull calling that 2014.

The Trailer report was create using new vehicle registrations and included report months of January 1985 to August 2015 for the state of Georgia.

HDV3 vehicle type (10,001-14,000 GVWR) while grouped with "light duty VIN" initially is considered "heavy duty" according to EPD and EPA classifications. EPD in the end organized in such matter with their data inputs. Efforts were made by Polk to assure there was no duplication of data between databases.

For light vehicle data, current (July 2014) and history (July 2011):
   MOVES vehicle type code
      when IHS Vehicle Type = 'CAR' then '21'
      when IHS Vehicle Type = 'LIGHT TRUCK' and Registration Category in('PERSONAL','DEALER/MANUFACTURER') then '31'
      when IHS Vehicle Type = 'LIGHT TRUCK' and Registration Category not in('PERSONAL','DEALER/MANUFACTURER') then '32'
      else 'UNKNOWN'
   MOVES vehicle type description
      when IHS Vehicle Type = 'CAR' then 'Passenger Car'
      when IHS Vehicle Type = 'LIGHT TRUCK' and Registration Category in('PERSONAL','DEALER/MANUFACTURER') then 'Passenger Truck'
      when IHS Vehicle Type = 'LIGHT TRUCK' and Registration Category not in('PERSONAL','DEALER/MANUFACTURER') then 'Light Commercial Truck'
      else 'UNKNOWN'
   HPMS TYPE ID
      when IHS Vehicle Type = 'MOTORCYCLE' then 10
      when IHS Vehicle Type = 'CAR' then 20
      when IHS Vehicle Type = 'LIGHT TRUCK' and GVW Code in('1','2') then 30
      else 50
   MOBILE6 vehicle type
      when IHS Vehicle Type = 'CAR' then 'LDV'
      when IHS Vehicle Type = 'LIGHT TRUCK' and GVW Code = 1 then 'LDT1'
      when IHS Vehicle Type = 'LIGHT TRUCK' and GVW Code = 2 then 'LDT2'

when IHS Vehicle Type = 'LIGHT TRUCK' and GVW Code = 3 then 'HDV3'
else 'UNKNOWN'

MOBILE6 vehicle type id
when IHS Vehicle Type = 'CAR' then '1'
when IHS Vehicle Type = 'LIGHT TRUCK' and GVW Code = 1 then '2'
when IHS Vehicle Type = 'LIGHT TRUCK' and GVW Code = 2 then '3'
when IHS Vehicle Type = 'LIGHT TRUCK' and GVW Code = 3 then '4'
else 'UNKNOWN'

For 2011 data, medium and heavy duty trucks, the only vehicle information available to assign vehicle type classification was vehicle type and GVW code.

MOBILE6 vehicle type, MD/HD trucks, 2011 data:
when GVW Code = 4 then 'HDV4'
when GVW Code = 5 then 'HDV5'
when GVW Code = 6 then 'HDV6'
when GVW Code = 7 then 'HDV7'
when GVW Code = 8 then 'HDV8'

MOVES data, medium and heavy duty trucks:
when IHS Vehicle Type = 'BUS SCHOOL' then '43'
when IHS Vehicle Type = 'BUS NON SCHOOL' then '42'
when IHS Vehicle Type = 'TRACTOR TRUCK' then '62'
when IHS Vehicle Type = 'GARBAGE/REFUSE' then '51'
when IHS Vehicle Type = 'MOTOR HOME' then '54'
else '53'

when IHS Vehicle Type = 'BUS SCHOOL' then 'School Bus'
when IHS Vehicle Type = 'BUS NON SCHOOL' then 'Transit Bus'
when IHS Vehicle Type = 'TRACTOR TRUCK' then 'Combination Long-haul Truck'
when IHS Vehicle Type = 'GARBAGE/REFUSE' then 'Refuse Truck'
when IHS Vehicle Type = 'MOTOR HOME' then 'Motor Home'
else 'Single Unit Long-haul Truck'

NOTE: after this data was generated, bus vehicle data was deleted and completely replaced with data provided

Medium and heavy groups for the July 2014 data set. The breakout listed below outlines the method used for the July 2014 dataset only relative to the medium and heavy duty data pulled from TIP. This more current data set had vocation and vehicle type available and we used those attributes to create the groups listed below.

GVW Class is defined by the VIN decoded gross vehicle weight rating (GVW 1-8). IHS uses the VIN defined GVW. We do not assign the value for GVW. We decode that attribute from the VIN and it is applied consistently.

base code	desc	gvw class	notes		
41	intercity bus	8	vehicle type: bus non school		
43	school bus	4-8	vehicle type: school bus		
		4-8	carrier: all govt.	vocation: bus transportation	vehicle type: cutaway
42	transit bus	4-8	vehicle type: bus non school	vocation: bus transportation	
		4-8	vehicle type: school bus	vocation: bus transportation	
		4-8	vehicle type: cutaway	vocation: bus transportation	
			*exclude "43"		
51	refuse truck	7-8	vehicle type: straight truck	cab type: conventional	vocation: sanitation
		7-8	vehicle type: straight truck	cab type: short conventional	vocation: sanitation
		7-8	vehicle type: straight truck	cab type: medium conventional	vocation: sanitation
		7-8	vehicle type: straight truck	cab type: long conventional	vocation: sanitation
61	combination short haul truck	7-8	vehicle type: tractor	short haul models	
62	combination long haul truck	7-8	vehicle type: tractor	long haul models	
54	motor home	4-8	Motor Homes		
52	short haul truck	4-8	All other vins		

IHS to Moves Fuel Type Mappings

IHS FUEL TYPE	MOVES ADJUSTED FUEL TYPE	MOVES ADJUSTED FUEL TYPE ID
COMPRESSED NATURAL GAS	CNG	03
DIESEL	DIESEL	02
ELECTRIC AND DIESEL HYBRID	DIESEL	02
ELECTRIC	ELECTRIC	09
ETHANOL	ETHANOL	00
ELECTRIC AND GAS HYBRID	GAS	01
FLEXIBLE	GAS	01
GAS	GAS	01
HYDROGEN FUEL CELL	HYDROGEN FUEL CELL	00
METHANOL	METHANOL	00
PROPANE	PROPANE	04
CONVERTIBLE	UNKNOWN	00
UNKNOWN	UNKNOWN	00

Mobile 6 Vehicle Table

VEHICLE_TYPE	DESCRIPTION	FUEL_DESCRIPTION	VEHICLE_TYPE_FUEL	MOBILE6ID_CODE
LDV	Light duty Vehicles (Passenger Cars)	CNG	LDNV	1
LDV	Light duty Vehicles (Passenger Cars)	DIESEL	LDDV	1
LDV	Light duty Vehicles (Passenger Cars)	ELECTRIC	LDEV	1
LDV	Light duty Vehicles (Passenger Cars)	GAS	LDGV	1
LDV	Light duty Vehicles (Passenger Cars)	PROPANE	LDPV	1
LDV	Light duty Vehicles (Passenger Cars)	UNKNOWN	LDUV	1
LDT1	Light duty Trucks 1 (0-6000 lbs GVWR 0-3750 lbs LVW)	CNG	LDNT1	2
LDT1	Light duty Trucks 1 (0-6000 lbs GVWR 0-3750 lbs LVW)	DIESEL	LDDT1	2
LDT1	Light duty Trucks 1 (0-6000 lbs GVWR 0-3750 lbs LVW)	ELECTRIC	LDET1	2
LDT1	Light duty Trucks 1 (0-6000 lbs GVWR 0-3750 lbs LVW)	GAS	LDGT1	2
LDT1	Light duty Trucks 1 (0-6000 lbs GVWR 0-3750 lbs LVW)	PROPANE	LDPT1	2
LDT1	Light duty Trucks 1 (0-6000 lbs GVWR 0-3750 lbs LVW)	UNKNOWN	LDUT1	2
LDT2	Light duty Trucks 2 (6001-10000 lbs GVWR)	CNG	LDNT2	3
LDT2	Light duty Trucks 2 (6001-10000 lbs GVWR)	DIESEL	LDDT2	3
LDT2	Light duty Trucks 2 (6001-10000 lbs GVWR)	GAS	LDGT2	3
LDT2	Light duty Trucks 2 (6001-10000 lbs GVWR)	PROPANE	LDPT2	3
LDT2	Light duty Trucks 2 (6001-10000 lbs GVWR)	UNKNOWN	LDUT2	3
HDV3	Class 3 Heavy-Duty Vehicles (10001-14000 lbs GVWR)	DIESEL	HDDV3	4
HDV3	Class 3 Heavy-Duty Vehicles (10001-14000 lbs GVWR)	GAS	HDGV3	4
HDV3	Class 3 Heavy-Duty Vehicles (10001-14000 lbs GVWR)	PROPANE	HDPV3	4
HDV4	Class 4 Heavy-Duty Vehicles (14001-16000 lbs GVWR)	CNG	HDNV4	5
HDV4	Class 4 Heavy-Duty Vehicles (14001-16000 lbs GVWR)	DIESEL	HDDV4	5
HDV4	Class 4 Heavy-Duty Vehicles (14001-16000 lbs GVWR)	GAS	HDGV4	5
HDV4	Class 4 Heavy-Duty Vehicles (14001-16000 lbs GVWR)	PROPANE	HDPV4	5
HDV4	Class 4 Heavy-Duty Vehicles (14001-16000 lbs GVWR)	UNKNOWN	HDUV4	5
HDV5	Class 5 Heavy-Duty Vehicles (16001-19500 lbs GVWR)	CNG	HDNV5	6

HDV5	Class 5 Heavy-Duty Vehicles (16001-19500 lbs GVWR)	DIESEL	HDDV5	6
HDV5	Class 5 Heavy-Duty Vehicles (16001-19500 lbs GVWR)	GAS	HDGV5	6
HDV5	Class 5 Heavy-Duty Vehicles (16001-19500 lbs GVWR)	PROPANE	HDPV5	6
HDV5	Class 5 Heavy-Duty Vehicles (16001-19500 lbs GVWR)	UNKNOWN	HDUV5	6
HDV6	Class 6 Heavy-Duty Vehicles (19501-26000 lbs GVWR)	CNG	HDNV6	7
HDV6	Class 6 Heavy-Duty Vehicles (19501-26000 lbs GVWR)	DIESEL	HDDV6	7
HDV6	Class 6 Heavy-Duty Vehicles (19501-26000 lbs GVWR)	GAS	HDGV6	7
HDV6	Class 6 Heavy-Duty Vehicles (19501-26000 lbs GVWR)	PROPANE	HDPV6	7
HDV6	Class 6 Heavy-Duty Vehicles (19501-26000 lbs GVWR)	UNKNOWN	HDUV6	7
HDV7	Class 7 Heavy-Duty Vehicles (26001-33000 lbs GVWR)	CNG	HDNV7	8
HDV7	Class 7 Heavy-Duty Vehicles (26001-33000 lbs GVWR)	DIESEL	HDDV7	8
HDV7	Class 7 Heavy-Duty Vehicles (26001-33000 lbs GVWR)	ELECTRIC	HDEV7	8
HDV7	Class 7 Heavy-Duty Vehicles (26001-33000 lbs GVWR)	GAS	HDGV7	8
HDV7	Class 7 Heavy-Duty Vehicles (26001-33000 lbs GVWR)	PROPANE	HDPV7	8
HDV7	Class 7 Heavy-Duty Vehicles (26001-33000 lbs GVWR)	UNKNOWN	HDUV7	8
HDV8	Class 8 Heavy-Duty Vehicles (>33000 lbs GVWR)	CNG	HDNV8	9
HDV8	Class 8 Heavy-Duty Vehicles (>33000 lbs GVWR)	DIESEL	HDDV8	9
HDV8	Class 8 Heavy-Duty Vehicles (>33000 lbs GVWR)	GAS	HDGV8	9
HDV8	Class 8 Heavy-Duty Vehicles (>33000 lbs GVWR)	UNKNOWN	HDUV8	9
MC	Motorcycles (all)	GAS	GMC	10
HDBS	School Bus	CNG	HDNBS	11
HDBS	School Bus	DIESEL	HDDBS	11
HDBS	School Bus	ELECTRIC	HDEBS	11
HDBS	School Bus	GAS	HDGBS	11
HDBS	School Bus	PROPANE	HDPBS	11
HDBS	School Bus	UNKNOWN	HDUBS	11
HDBT	Transit Bus	CNG	HDNBT	12
HDBT	Transit Bus	DIESEL	HDDBT	12
HDBT	Transit Bus	ELECTRIC	HDEBT	12
HDBT	Transit Bus	GAS	HDGBT	12
HDBT	Transit Bus	PROPANE	HDPBT	12
HDBT	Transit Bus	UNKNOWN	HDUBT	12

GA EPA ACCESS GUI

REPORTS

2A - Population (1)
yearID – year of data set, 2011 or 2014
sourceTypeID – Moves or Mobile 6 numerical code
salesGrowth – 0
sourceTypePopulation – number of vehicles in operation
migrationRate – 0
county – county fips code (optional)

Tables VIO_2014, VIO_MOBILE_2011, VIO_MOVES_2011
Insert 0 vehicle volumes using LUT_COUNTIES, LUT_MOBILE6, LUT_MOVES
Split: Optional use of split tables SPLIT_MOBILE6, SPLIT_MOVES_2011,SPLIT_MOVES_2014

2B - Population w/ Fuel (2)
yearID – year of data set, 2011 or 2014
sourceTypeID – Moves or Mobile 6 numerical code
fueltypeid – numerical fuel code
salesGrowth – 0
sourceTypePopulation – number of vehicles in operation
migrationRate – 0
county – county fips code (optional)

Tables: VIO_2014, VIO_MOBILE_2011, VIO_MOVES_2011
Insert 0 vehicle volumes using LUT_COUNTIES, LUT_MOBILE6, LUT_MOVES, LUT_FUEL
Split: Optional use of split tables SPLIT_MOBILE6, SPLIT_MOVES_2011,SPLIT_MOVES_2014

2C – Vocation (3)
yearID – year of data set, 2011 or 2014
vocation – IHS CommercialView standard vocations

sourceTypeID – Moves or Mobile 6 numerical code
sourceTypePopulation – number of vehicles in operation

Table: VOCATION

7 – Age (5)

yearID – year of data set, 2011 or 2014
sourceTypeID – Moves or Mobile 6 numerical code
ageID – vehicle age computed from year model, 0 = current time period or newer year model, 30 = 30 years or older
ageFraction: vehicle in operation share of that bucket expressed as a fraction not a percentage
county – county fips code (optional)

Tables: AGE_MOBILE6_2011, AGE_MOBILE6_2014, AGE_MOVES_2014, AGE_MOBILE6_2014
Insert 0 vehicle ageFractions using LUT_COUNTIES, LUT_AGE, LUT_MOVES,LUT_MOBILE
Split: Optional use of split tables SPLIT_MOBILE6, SPLIT_MOVES_2011,SPLIT_MOVES_2014

1 MkRsch (5)

Uses table MKTRSCH

3 Trailer (6)

Uses table TRAILER

NOTES:

Counties for <ALL> must be manually entered into a string in CmdExport_Click() for the export function to properly export all counties as separate files.

The YearIDs 2011 and 2014 are hard coded into BuildQuery and the two command buttons.

Rows must be inserted into the AGE summary tables (AGE_MOBILE6_2011, etc.) to support the correct output format. The following queries are part of the database to handle these inserts:

xAge$Source#Year_append
yAge$Source#Year_adds

zAge$Source#Year
zCounty$Source

The following queries are used to dynamically to generate the reports:

qryReport1
qryReport2
qrySum
qryUnion