

The New NHTS Online Tool

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Outline

- Introduction of the 2017 NHTS website
- How it works - Overview
- How it works - Demo of basic operations/functions
- Examples on exploring the 2017 NHTS data
- Hands-on exercises

Introduction

- Revamping the 2017 NHTS website
 - Increase user-friendliness of the interface
 - Add contemporary looks and feels
 - Expand data visualization functionality
- Continuous improvements with new features



2017 National Household Travel Survey

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National Household Travel Survey

2017 Data Now Available!

Conducted by the Federal Highway Administration (FHWA), the NHTS is the authoritative source on the travel behavior of the American public. It is the only source of national data that allows one to analyze trends in personal and household travel. It includes daily non-commercial travel by all modes, including characteristics of the people traveling, their household, and their vehicles.

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[Explore NHTS Data](#)



News

[Mid-year Compendium of Uses is Now Available!](#)

How it works - Overview

National Household Travel Survey

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Explore NHTS Data

- 2017 .CSV files ▶
- 2017 .SAS files ▶
- 2017 .XPT files ▶
- 2017 .SPSS files ▶
- 2017 .DBF files ▶
- 2017 Replicate weight (.CSV) files ▶
- 2017 Replicate weight (.SAS) files ▶

[Previous Years](#)

Statistics for Demographic Characteristics and Travel

	Counts
	220,430
in miles)	2,105,882
	371,152
in miles)	3,970,287
	118,308,351

Other¹

2.19

All

1.67

Persons, Drivers, and Workers by Gender

How it works – Overview (Stats & Documents)

Frequently Used National Statistics

Use these shortcuts to quickly and easily obtain your 2017 data for analysis.

Choose from a list of the most common results for the most popular analysis variables.



Vehicles



Vehicle Trips



Vehicle Miles



Persons



Person Trips



Person Miles



Households



Workers



Drivers

2017 Documentation

- Technical Memo (pdf)
- **Codebook (pdf) (xls)**
- Derived Variables (pdf)
- Users' Guide (pdf)
- Frequently Asked Questions 2017 (pdf)

Explore Vehicle Data

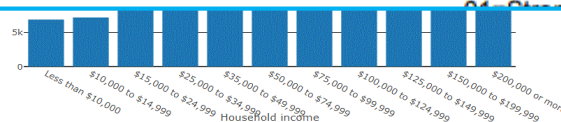
Vehicles are weighted using the

Popular Vehicle Statistics

Household Income	Vehicle Age
Household income	Number of Vehicles
	Sample Size
	Sum (Thousands)
Less than \$10,000	6,124
\$10,000 to \$14,999	7,401
\$15,000 to \$24,999	16,130
\$25,000 to \$34,999	20,097
\$35,000 to \$49,999	28,647
\$50,000 to \$74,999	46,141
\$75,000 to \$99,999	38,069
\$100,000 to \$124,999	30,778
\$125,000 to \$149,999	17,678
\$150,000 to \$199,999	17,580
\$200,000 or more	19,361

2017 NHTS Household File - Public Use Codebook

Name	Label	Type	Length	Code / Range	Frequency	Weighted
BIKE	Frequency of Bicycle Use for Travel	C	2	-9=Not ascertained	14,661	13,787,962
				-8=I don't know	10	10,908
				-7=I prefer not to answer	5	32,672
				01=Daily	1,870	1,979,683
				02=A few times a week	5,363	4,961,863
				03=A few times a month	8,037	7,466,505
BIKE2SAVE	Bicycle to Reduce Financial Burden of Travel	C	2	04=A few times a year	19,323	18,169,514
				05=Never	80,427	71,799,145
				-9=Not ascertained	5,880	5,899,249
				-8=I don't know	8	7,124
				-7=I prefer not to answer	6	14,803



How it works – Overview (Data Explore)

Explore NHTS Data - 2017 Table Designer or Use the [Classic View](#)

Email Address
We'll never share your email with anyone else.

Analysis Variable

Statistics

- Sample size
- Sum
- Percent
- Exclude Missing (e.g., appropriate skip)
- Margin of Error (95% confidence interval)

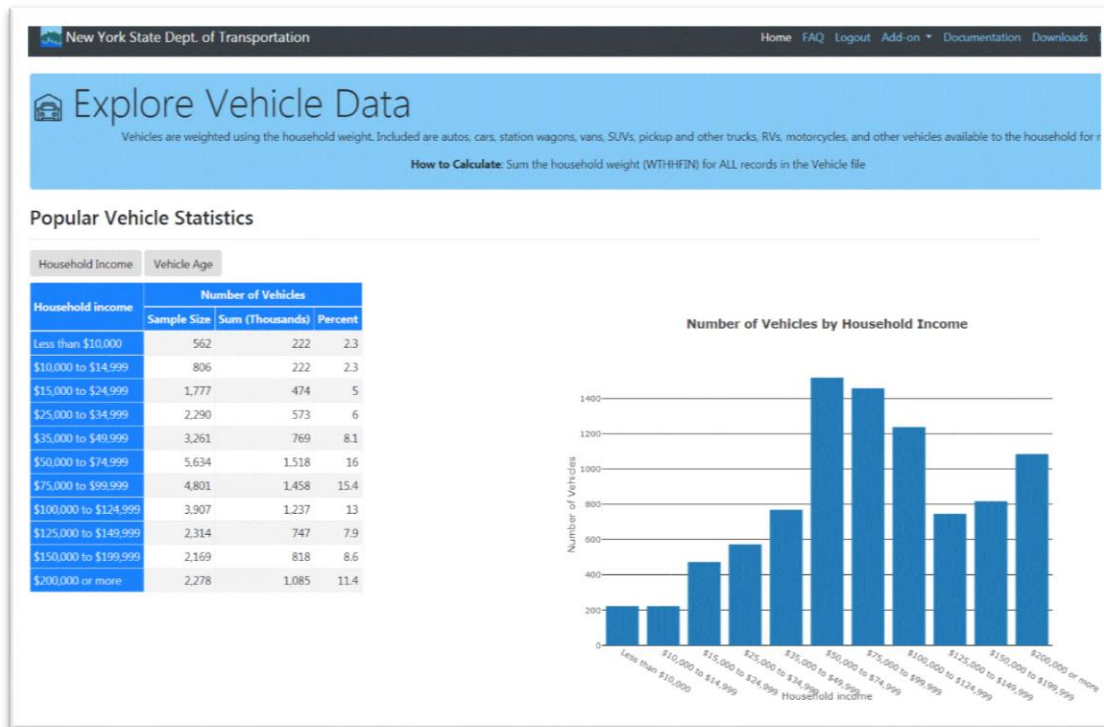
Report Title
Alpha-numeric characters only (a-z, 0-9)

Row Variable
Select your row parameter for evaluation against your chosen analysis variable. Only relevant parameters are included in this select menu. This will create a one-way result.

Column Variable
Select your column parameter for evaluation using your chosen row and analysis variables. Only relevant parameters are included in this select menu. This will create a two-way result.

How it works – NHTS Add-on version

- Added features in add-on sites
- Add-on specific stats
- Further geographic selections
- Choice of weights



Choose Weight 5-day 7-day

Geography

Statistics Exclude Missing (e.g., appropriate skip) Margin of Error (95% confidence interval)

Report Title
Alpha-numeric characters only (a-z, 0-9)

Row Variable
Select your row parameter for evaluation against your chosen analysis variable. Only relevant parameters are included in this select menu. This will create a one-way result.

How it works – Demo

Basic terms, operations, & functions

Hands-on exercises

Data Explore – A detailed overview

Analysis Variable → **What are we calculating?**

Statistics

- Sample Size
- Sum
- Cell percent
- Row percent
- Column percent
- Exclude Missing (e.g., appropriate skip)
- Margin of Error (95% confidence interval)

→ **Statistics we want to calculate**

Report Title
Alpha-numeric characters only (a-z, 0-9)

Row Variable
Select your row parameter for evaluation against your chosen analysis variable. Only relevant parameters are included in this select menu. This will create a one-way result.

Column Variable
Select your column parameter for evaluation using your chosen row and analysis variables. Only relevant parameters are included in this select menu. This will create a two-way result.

Page Variable
Select your page parameter for evaluation using your chosen row, column and analysis variables. Only relevant parameters are included in this select menu. This will create a three-way result.

→ **VARIABLES**

Query Results

Job outputs are retained for 60 days

Job Number	HTML Results	Excel	CSV	Job Log
60718	HTML	Spreadsheet	CSV	Log

Analysis Variables

I) COUNTS

ANALYSIS VARIABLES	CALCULATION
Households	Total Households from Household File
Persons	Total Persons from Person File
Vehicles	Total Vehicle from Vehicle File
Drivers	Total Drivers from Person File (where driver='01')
Workers	Total Workers from Person File (where worker='01')

II) VEHICLE TRAVEL MEASURES

ANALYSIS VARIABLES	CALCULATION
Average Annual miles per Driver	Mean of 'YEARMILE' for Drivers from Person File
Average Annual vehicle miles per vehicle (Self-reported)	Mean of 'ANNMILES' from Vehicle file
Average Vehicle age (years)	Mean of 'VEHAGE' from Vehicle File

Analysis Variables (Continued....)

III) TRAVEL DAY

ANALYSIS VARIABLES	CALCULATION
Annual Person Miles of Travel (Travel Day PMT)	Sum of 'TRPMILES' from Trip File
Annual Person Trips (Travel Day PT)	Total Trips from Trip File
Average Person Trip length (miles Travel Day)	Mean of of 'TRPMILES' from Trip File
Average Person Trip Duration Trips (Travel Day PT)	Mean of of 'TRVLCMIN' from Trip File
Average Vehicle Occupancy	Sum of 'NUMONTRP' for drivers when transportation mode is POV or rental cars - from Trip File
Annual Vehicle Miles of Travel (Travel Day VT)	Sum of 'TRPMILES' for drivers when transportation mode is POV or rental cars - from Trip File
Annual Vehicle Trips (Travel Day PT)	Total Trips for drivers when transportation mode is POV or rental cars - from Trip File
Average Vehicle Trip Length (Travel Day VT)	Mean of of 'TRPMILES' for drivers when transportation mode is POV or rental cars - from Trip File
Average Vehicle Trip Duration (Travel Day VT)	Mean of of 'TRVLCMIN' for drivers when transportation mode is POV or rental cars - from Trip File

Distribution of Total Trips

1. i) Total Person Trips by Mode-choice

Analysis Variable: Annual Person Trips (Travel Day PT)

Row Variable: TRPTRANS

ii) Total Person Trips by Mode-choice for Census Division

Analysis Variable Annual Person Trips (Travel Day PT)

Row Variable: TRPTRANS

Column Variable: Census_D

Select from the List of Statistics what you wish to run:

For this analysis we chose

- *Sum*
- *Margin of Error*
- *Row Percentage*
- *Exclude Missing*

Trip Distance

2. Share of Person Trips by Trip Distance

Analysis Variable: Annual Person Trips (Travel Day PT)

Row Variable: TRIPMILES

Column Variable: Urbrur

*Select from the List of Statistics what you wish to run:
For this analysis we chose*

- *Sum*
- *Column Percentage*
- *Exclude Missing*

To analyze Total Trips by Trip Distance and Mode

Column Variable: Mode

Trip Distance

3.i) Average Person Trip length by Purpose of the Trip

Process: Mean of Tripmiles by Trip Purpose

Analysis Variable: Average Person Trip length (miles Travel Day)

Row Variable: WHYTRP1S

ii) Average Person Trip length by Purpose of the Trip by Area

Analysis Variable: Average Person Trip length (miles Travel Day)

Row Variable: WHYTRP1S

Column Variables: Mode

Page Variable: Urbrur

Vehicle Trips, Age and Occupancy

4.i) Annual Vehicle Trips by Trip Distance

Analysis Variable: Annual Vehicle Trips (Travel Day PT)

Row Variable: TRIPMILES

ii) Annual Vehicle Trips by Age Group & Gender

Analysis Variable: Annual Vehicle Trips (Travel Day PT)

Row Variable: R_Age

Column Variables: R_Sex

Vehicle Trips, Age and Occupancy

5. Average Vehicle Age by Vehicle Type

Analysis Variable: Average Vehicle Age (years)

Row Variable: Vehtype

Column Variable: HHFAMINC (*optional for further analysis*)

Select from the List of Statistics what you wish to run:

For this analysis we chose

- *Mean*
- *Exclude Missing*

Vehicle Trips, Age and Occupancy

6. Average Vehicle Occupancy by Vehicle Type

Process: Mean of Numontrp

For those trips where respondent drove in POV or Rental Car and Tripmiles is more than 0 .
Here the considered weight is TRPMILES*WTRDFIN

Analysis Variable: Average Vehicle Occupancy

Row Variable: TRPTRANS

*Select from the List of Statistics what you wish to run:
For this analysis we chose*

- *Mean*
- *Exclude Missing*

A Few Others

7. Daily Trip Rate

Process: (Total Trips/ Total Persons) / 365
=(371,151,971,524 / 301,599,169) /365
= 3.4

Daily Trip rate by Gender

Step 1:

Analysis Variable: Annual Person Trips (Travel Day PT)

Row Variable: R_Sex

Step 2:

Analysis Variable: Persons

Row Variable: R_Sex

Daily Trip Rate: Step 1 / Step 2 / 365

A Few Others

8. Average Daily Person-Miles per Person by Gender

Process: (Sum of Trp miles / Total Persons) / 365
= (370,904,198,095 / 301,599,169) / 365
= 36.07

Step 1:

Analysis Variable: Annual Person Miles of Travel (Travel Day PMT)

Row Variable: R_Sex

Step 2:

Analysis Variable: Persons

Row Variable: R_Sex

Average Daily Person-Miles per Person by Gender: Step 1 / Step 2 / 365

A Few Others

9. VMT per Driver by Age Group

Process: Sum of Tripmiles by AgeGroup/Total Drivers by AgeGroup
(where *DRVR_FLG* eq '01' and *trpmiles* >= 0 and (*TRPTRANS* > '02' and *TRPTRANS* < '07' or *TRPTRANS* eq '08' or *TRPTRANS* eq '09' or *TRPTRANS* eq '18')).

Step 1:

Analysis Variable: Annual Vehicle Miles of Travel (Travel Day VT)

Row Variable: R_Age

Step 2:

Analysis Variable: Drivers

Row Variable: R_Age

Select from the List of Statistics what you wish to run: For this analysis we chose

- Exclude Missing

VMT per Driver by Age Group: Step 1/ Step 2

A Few Others

OR 9. Average Annual miles per Driver

Process: Mean of Yearmile by AgeGroup
(where $yearmile \geq 0$ and $driver = '01'$).

Analysis Variable: Average Annual miles per Driver

Row Variable: R_Age

Select from the List of Statistics what you wish to run:
For this analysis we chose

- Mean
- Margin of Error
- Exclude Missing
- Margin of Error