

2016 National Household Travel Survey



Adella Santos

NHTS Program Manager

and

Jasmy Methipara

NHTS Program Analyst

Highway Information Seminar

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Goal of this Briefing

- **Provide you information which is highly relevant to all transportation issues**
- **Seek your ambassadorship to help us get the message distributed further that 2016 NHTS is on its way.**
- **Discuss how the NHTS complements other data programs**



NHTS Background

- NHTS provides information on the travel behavior of the U.S. public
- NHTS has gathered this data since 1969 and continued in years 1977, 1983, 1990 and 1995, 2001 and 2009.
- In 1990, the NHTS expanded its program to include States and MPOs. This component is called the Add-on program.



Core NHTS Data

- Trip purpose (work, shopping, etc.)
- Means of transportation used (car, bus, walk, etc.)
- Travel time
- Time of day
- Day of week
- Vehicle occupancy
- Driver characteristics (age, sex, worker status, education level, etc.)
- Vehicle attributes (make, model, year, annual miles driven)



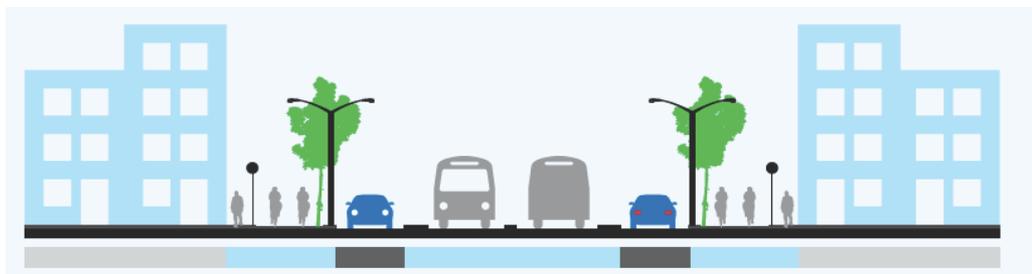
Corresponding Data Sets

- Add-ons
- VM1 in HPMS
- Agency DOTs
- Census
- ACS
- CTTP
- HUD
- CDC
- EIA



NHTS Uses

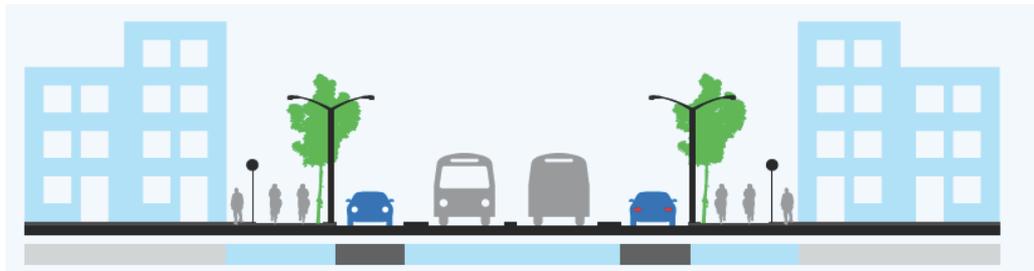
- Quantify travel behavior
- Relate travel behavior to the demographics of the traveler
- Study the **relationship of demographics and travel** over time.
- Utilized outside of transportation in the **medical, social services and safety fields** such as assessing crash exposure rates, bicycle and walking activity and low-income transportation needs



NHTS Uses

Ultimately,

- It support transportation policy development and legislation enactment
- It supports transportation program and project development



Share of Trips Taken by Time of Day



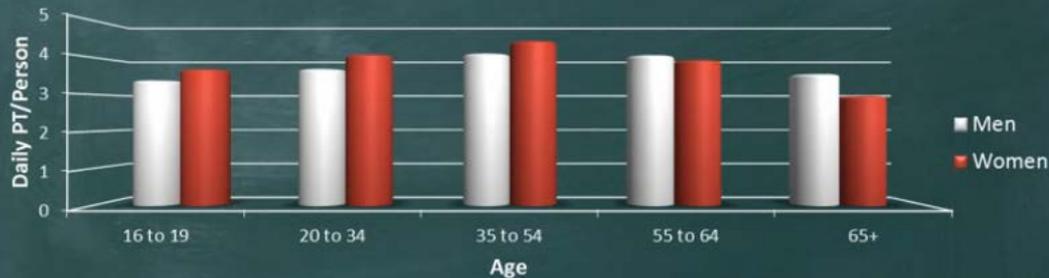
Examples of Analysis



Daily VMT per Household

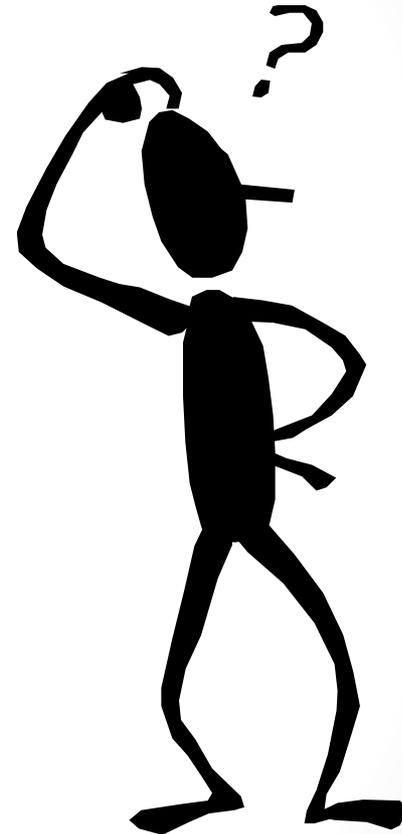


Daily Person Trips Per Person



New Questions Coverage

- Health
- Telecommuting
- Aging and Millennial Travel
- Electric vehicles/emerging technologies
- Fuel type
- Multimodal access
- Active bike and pedestrian travel
- Transit transfers
- Value of time

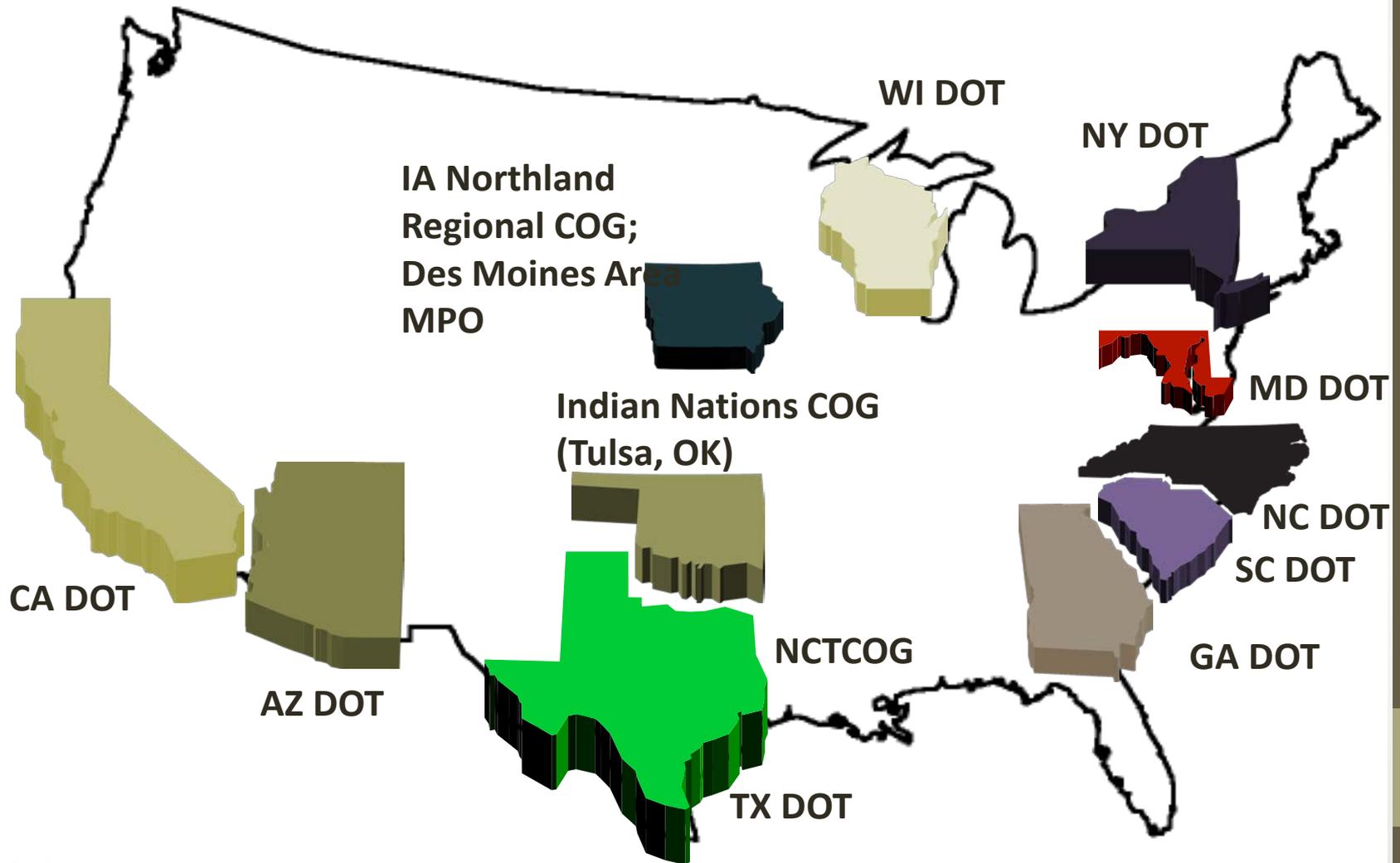


Add-on Program

- ✓ Purchase additional samples to support development of travel estimates at lower geography levels (state/region)
- ✓ Add up to six questions that are unique to local area
- ✓ Add-on agency support



2016 NHTS Add-on Participants



```
graph TD; NHTS([NHTS Program]) --> National[National Study  
(2015) 26,000 Sample Size]; NHTS --> AddOn[Add-On Program  
(2015) 102,668 Sample Size];
```

NHTS Program

National Study

(2015) 26,000 Sample Size

Add-On Program

(2015) 102,668 Sample Size



Support Activities

- Webinars
 - General program update
 - Share Point training
 - Upcoming:
 - Public outreach planning
 - Data usage (examples of agency-wide applications)
- Add-on Questions
 - Assistance in development
 - Cognitive testing
 - Coordinating final list of questions



Add-on Question Topics

- Long Distance Travel
- Tenure/Home Location Choice Factors
- Infrastructure Preferences
- Walk/Bike Travel Behavior
- Other Specific to Region



2016 NHTS Important Dates

- October 2014: Contract Awarded
- Winter 2014/2015: Study design
- Summer 2015: OMB Submission
- Fall 2015: Pretest
- Winter 2016: In Field
- Fall 2017: Data Released



NHTS Tools & Support Services

- Data needs are evolving , NHTS can help you meet them.



NHTS Home Page: <http://nhts.ornl.gov/>

NHTS National Household Travel Survey
Our Nation's Travel

U.S. Department of Transportation
Federal Highway Administration

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The NHTS Academy

The [NHTS Academy](#) is a series of short, informational videos on NHTS topics of interest to new users and experienced analysts. The Academy has grown to five subject areas with nine videos.

NEW Trip Chaining.

Getting Started

- Introduction to the NHTS
- NHTS Compendium of Uses
- About the Add-on Program

Additional Information

- User's Guide
- FAQ
- Data Dictionary
- Codebook

2015/2016 NHTS Survey Submitted to OMB

The NHTS program has completed its internal USDOT review of the 2015/2016 survey plan. On August 3rd, the NHTS submitted its Office of Management and Budget (OMB) package for external review. OMB has up to 90 days to provide questions to the NHTS team.

Call for Posters for 2016 TRB Annual Meeting

The TRB Task Force on *Understanding New Directions for the National Household Travel Survey* (ABJ45T) is calling for posters showcasing innovative uses of the NHTS for presentation at the TRB Annual Meeting on January 10—14, 2016. **Abstracts are due by Friday, September 4, 2015.** See the [announcement](#) for details.

New 2015 NHTS Compendium of Uses

The [NHTS Compendium of Uses](#) provides a summary of the uses and applications of NHTS data in transportation planning and related activities. The most recent Compendium has been posted and contains 192 publications and articles from January — June, 2015.

Millennial Travel and the NHTS

An article on millennial travel titled *Are Millennials Really the "Go-Nowhere" Generation?* was recently published by the Journal of the American Planning Association. In this article, author Noreen McDonald uses NHTS data to look at age cohorts to determine travel changes over time among younger individuals. The report can be found [here](#) ⇨, with a news article based on the report [here](#) ⇨.

News

New NHTS Brief: [Mobility Challenges for Households in Poverty](#)

See the [NHTS TRB Newsletter](#) for a summary of recent activities and announcements.

TRB NHTS Task Force Phase One Report: [Exploring New Directions for the National Household Travel Survey](#) ⇨.

NHTS Briefs

[Mobility Challenges for Households in Poverty](#)



NHTS Academy

The screenshot shows the NHTS Academy website. At the top, there is a navigation bar with the NHTS logo and the text "National Household Travel Survey Our Nation's Travel". To the right is the logo for the U.S. Department of Transportation Federal Highway Administration. Below the navigation bar, the page title is "NHTS Academy". A introductory paragraph states: "The NHTS Academy is a series of short, informational videos on NHTS topics of interest to new users and experienced analysts. We welcome your suggestions for new video topics." Below this is a section titled "NHTS Academy Modules" with a list of video topics, each with a "Play" button. The topics include: "Intro to NHTS (4:21)", "Through the Years with the FHWA NHTS (5:54)", "Trip Purpose" (with sub-topics: "Historical Trip Purpose Development (1888-2008) [WHYTRP80] (2:27)", "Expanded Trip Purpose Definitions Including Trips to Home (1986-2008) [WHYTRP86/WHYTO] (8:34)", "Trip Purpose for Urban Planners: Home-Based and Non Home-based Codes [TRIPPURP] (2:23)"), "Vehicle Miles of Travel (VMT)" (with sub-topics: "VMT Intro (3:23)", "Computing VMT Using the NHTS Website (3:34)", "Computing VMT from NHTS for BA8 Users (3:02)"), "Trip Chaining (4:11)", "Vehicle Occupancy and the NHTS (3:45)", "BESTMILE In the 2008 FHWA NHTS Vehicle File (6:25)", and "2008 NHTS Census Boundary Update Using 2010 Census Boundaries (7:18)". At the bottom of the screenshot, a video player is shown with the title "NHTS Time Frame". The video content includes a list of bullet points: "A Single 'Travel Day' per Household" and "Annualized Data (April 2008- April 2009)". The video player also shows a calendar icon for "JANUAR 1".

NHTS Academy

The NHTS Academy is a series of short, informational videos on NHTS topics of interest to new users and experienced analysts. We welcome your [suggestions](#) for new video topics.

NHTS Academy Modules

- Intro to NHTS (4:21) [Play ▶](#)
- Through the Years with the FHWA NHTS (5:54) [Play ▶](#)
- Trip Purpose
 - Historical Trip Purpose Development (1888-2008) [WHYTRP80] (2:27) [Play ▶](#)
 - Expanded Trip Purpose Definitions Including Trips to Home (1986-2008) [WHYTRP86/WHYTO] (8:34) [Play ▶](#)
 - Trip Purpose for Urban Planners: Home-Based and Non Home-based Codes [TRIPPURP] (2:23) [Play ▶](#)
- Vehicle Miles of Travel (VMT)
 - VMT Intro (3:23) [Play ▶](#)
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NHTS ACADEMY

NHTS Time Frame

- A Single "Travel Day" per Household
- Annualized Data (April 2008- April 2009)

JANUAR 1



Compendium

**NHTS** National Household Travel Survey
Our Nation's Travel

U.S. Department of Transportation
Federal Highway Administration

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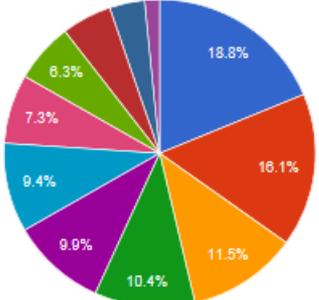
NHTS Compendium of Uses

The NHTS Compendium of Uses is a series of reports that provide a summary of the use and applications of the NHTS data in transportation planning and related activities.

1. NHTS Compendium of Uses [2015, PDF] **New**
2. NHTS Compendium of Uses [2014, PDF]
3. NHTS Compendium of Uses [2013, PDF]
4. NHTS Compendium of Uses [2012, PDF]
5. Uses of National Household Travel Survey Data in Transportation [2011, PDF]
6. NHTS Users and Uses [2006, PDF]

2015 Compendium publications by topic category (as of July, 2015)

Energy Consumption	36
Trend Analysis and Market Segmentation	31
Policy and Mobility	22
Survey, Data Synthesis, and Other Applications	20
Bicycle and Pedestrian Studies	19
Travel Behavior	18
Special Population Groups	14
Environment	12
Traffic Safety	10
Transit Planning	7
Demographic Trends	3



Topic Category	Percentage
Energy Consumption	18.8%
Trend Analysis and Market Segmentation	16.1%
Policy and Mobility	11.5%
Survey, Data Synthesis, and Other Applications	10.4%
Bicycle and Pedestrian Studies	9.9%
Travel Behavior	9.4%
Special Population Groups	7.3%
Environment	6.3%
Traffic Safety	5.0%
Transit Planning	3.7%
Demographic Trends	1.2%

- Energy Consumption
- Trend Analysis and Market Segmentation
- Policy and Mobility
- Survey, Data Synthesis, and Other Applications
- Bicycle and Pedestrian Studies
- Travel Behavior
- Special Population Groups
- Environment
- Traffic Safety
- Transit Planning
- Demographic Trends

Security Notice Plug-ins

Developed by the CTA, ORNL under funding from the FHWA



Data Center

http://nhts.ornl.gov/download.shtml

Fatality Analysis R... Inbox - jasmy.met... NHTS Data Ce... x



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NHTS Data Center

- 2009 NHTS
- 2001 NHTS
- 2001 NHTS Transferability
- 1995 NPTS
- 1990 NPTS
- 1983 NPTS
- Research Datasets

NHTS Data Center

Citation

To recognize the valuable role of National Household Travel Survey (NHTS) data in the transportation research process and to facilitate repeatability of the research, users of NHTS data are asked to formally acknowledge the data source. Where possible, this acknowledgement should take place in the form of a formal citation, such as when writing a research report, planning document, on-line article, and other publications. The citation can be formatted as follows:

U.S. Department of Transportation, Federal Highway Administration, 2009 National Household Travel Survey. URL: <http://nhts.ornl.gov>.

2009 NHTS - Version 2.1, February 2011

Also see [2009 Publications](#) for documentation.

Datasets

File Format	Download Size (MB)	Installed Size (MB)
SAS Windows Binary (.sas7bdat)	100	670
SAS Transport	100	600
DBase .dbf	90	990
ASCII .csv	100	620

Replicate Weights

Description	Download Size (MB)	Installed Size (MB)
SAS Windows Binary (.sas7bdat)	530	930
ASCII .csv	380	990

Roster File

Description	Download Size (MB)	Installed Size (MB)
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Online Analysis Tools

**NHTS** National Household Travel Survey
Our Nation's Travel

U.S. Department of Transportation
Federal Highway Administration

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Online Analysis Tools

Frequently-Asked For Tables	Browse the catalog for popular, ready-made tables. You can view tabulations in HTML format, export them to Excel, or load the table specifications into Table Designer to modify your customized table.
Table Designer	Updated for the 2009 NHTS. Build customized data tabulations quickly and easily. Tabulations are in HTML and Excel spreadsheet formats.
Codebook Browser	Online version of the NHTS Codebook document provides quick access to dataset and variable characteristics including methods to sort, filter, and search.
Data Extraction Tool	This data extraction tool allows users to obtain data from the 1995, 2001, and 2009 NHTS to examine total travel (i.e., person trips, person miles traveled, vehicle trips, and vehicle miles traveled). This tool also allows users to extract data from all three surveys for trends analysis. The user can select one or more elements using selection criteria to generate a customized dataset. This customized dataset can be downloaded in CSV format for additional analyses.
2009 NHTS Transferability	The Bureau of Transportation Statistics (BTS) has developed 2009 NHTS Transferability Statistics ⁽³⁾ by Census Tract. Support is provided by BTS .
2001 NHTS Transferability	Transferability refers to "transferring" the 2001 NHTS results to small geographic areas (e.g., Census Tracts). The Transferability methodology provides estimates of regional or local travel, including vehicle trips (VT), vehicle miles of travel (VMT), person trips (PT), and person miles of travel (PMT) by trip purpose and a number of demographics. The online tool generates statistics for selected Tracts and TAZs by state and county. The map-based tool is currently not operational. The 2001 NHTS Transferability National datasets are available on the download page . See the report for additional information.
1995 NHTS Transferability	1995 NHTS Transferability includes a methodology and a spreadsheet to enable users to get results for cities, counties, and metropolitan statistical areas (MSAs).

Citation

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U.S. Department of Transportation, Federal Highway Administration, 2009 National Household Travel Survey. URL: <http://nhts.ornl.gov>.

[Security Notice](#) | [Plug-In](#) | Developed by the [CTA](#), [ORNL](#) under funding from the [FHWA](#)



Frequently Asked for Tables (FAT)

The screenshot shows the NHTS Tables website interface. At the top, there is a logo for NHTS Tables and navigation links for Help, Online Analysis Tools, and NHTS Home. Below the navigation is a section titled "Frequently Asked-For Tables". There is a dropdown menu for "Survey" set to "2009 NHTS" and a search input field. The main content is a table listing various data tables with columns for HTML, Spreadsheet, Table Designer, Description, Table Dimensions, and Variables.

HTML	Spreadsheet	Table Designer	Description	Table Dimensions	Variables
			Number of Vehicle Trips (VT) by Trip Distance (TRPMILES) Including Trips 2 Miles or Less	1	TRPMILES
			Average Annual Vehicle Miles per Vehicle (self reported) by Vehicle Age and Type	2	VEHAGE, VEHTYPE
			Average Annual Vehicle Miles per Vehicle (best estimate) by Vehicle Age and Type	2	VEHAGE, VEHTYPE
			Number of Person Trips (PT) by Mode	1	TRPTRANS
			Average Vehicle Trip (VT) Length by Purpose	1	WHYTRP1S
			Average Person Trip (PT) Length by Mode and Purpose	2	TRPTRANS, WHYTRP1S
			Number of Vehicle Miles (VMT) by Household Vehicle Count	1	HHVEHCNT
			Number of Vehicle Miles (VMT) by Age and Gender	2	R_AGE, R_SEX
			Number of Vehicle Miles (VMT) by Household Income	1	HHFAMINC
			Number of Vehicle Miles (VMT) by Purpose	1	WHYTRP1S
			Number of Vehicle Trips (VT) by Household Vehicle Count	1	HHVEHCNT
			Number of Vehicle Trips (VT) by Age and Gender	2	R_AGE, R_SEX
			Number of Vehicle Trips (VT) by Household Income	1	HHFAMINC
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			Number of Person Trips (PT) by Household Income	1	HHFAMINC
			Number of Person Trips (PT) by Mode and Purpose	2	TRPTRANS, WHYTRP1S



Data Extraction Tools

DET - Total Travel by Selected Trip Characteristics

Year	Age	Gender	Worker	Mode	Purpose	Miles
Select All	Combine Total	Combine Total				
1995	Select All	Select All				
2001	5-15	Male	Worker	POV	Earn a Living	Under 1 mile
2009	16-17	Female	Non-Worker	Air	Family/Personal Business	1-2 miles
	18-24	Unreported		Transit	School/Church	2-3 miles
	25-29			Walk	Social & Recreational	3-4 miles
	30-34			Bike	Other	4-5 miles

[Clear Results](#)

[>>Download Results as a CSV file](#)

[Submit](#)

Year	Mode	Person Trips (in millions)	Person Miles (in millions)	Vehicle Trips (in millions)	Vehicle Miles (in millions)
1995	Walk	20,325.16	10,821.07	.00	.00
1995	Bike	3,341.77	4,585.61	.00	.00
2001	Walk	33,144.87	23,522.43	.00	.00
2001	Bike	3,213.27	6,161.85	.00	.00
2009	Walk	40,961.82	27,943.24	.00	.00
2009	Bike	4,081.82	8,956.44	.00	.00



Online Table Designer

[Help](#) [Online Analysis Tools](#) [NHTS Home](#)

Login

Please enter your email address:

This is the first time I've used this email address at this site

← → http://nhts.ornl.gov/tables09/ae/TableDesigner.aspx Table Designer

NHTS Tables

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Table Designer

Output Area

Statistics	
Survey	2009 NHTS ▼
Analysis Variable	Annual person miles of travel (Travel Day PMT) ✎
Type of Table	Two-way ▼
Statistics	<input checked="" type="checkbox"/> Sample size <input checked="" type="checkbox"/> Sum <input type="checkbox"/> Cell percent <input checked="" type="checkbox"/> Row percent <input checked="" type="checkbox"/> Column percent <input type="checkbox"/> Margin of error (warning: takes a long time) <input checked="" type="checkbox"/> Exclude missing (e.g., appropriate skip)
Categorize Results By	
Row Variable	Transportation mode used on trip (as reported by respondent) (TRPTRANS) ▼ + - ✎
	<input checked="" type="checkbox"/> Use my variable categories ✎
Column Variable	1990 Trip Purpose (WHYTRP90) ▼ + - ✎
	<input checked="" type="checkbox"/> Use my variable categories ✎
Options	
Title	Number of Person Miles (PMT) by Mode and Purpose
Subgroup	<input type="text"/>



Questions or Comments

Adella Santos

202-366-5021

Adella.Santos@dot.gov

Jasmy Methipara

202-366-4073

Jasmy.Methipara.ctr@dot.gov

