

# NHTS Update and Data Analysis Plans

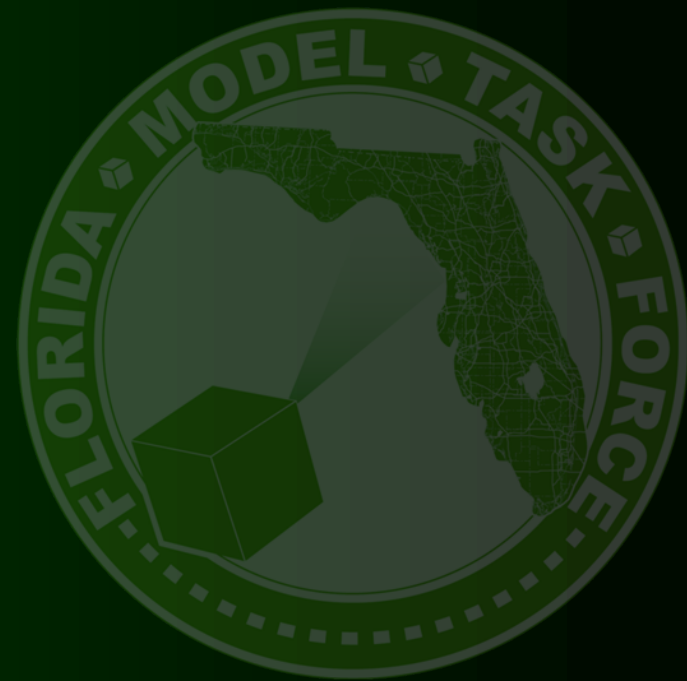
*presented to*

**Florida Model Task Force**

*presented by*

**Krishnan Viswanathan**

**November 10, 2009**





# Agenda

- **Funding and NHTS background**
- **Sampling Plan**
- **Data Collection**
- **Final Florida Sample**
- **Data Deliverables**
- **Analysis Plans**



# NHTS Update

- NHTS background
- Sampling Plan
- Data Collection
- Final Florida Sample
- Data Deliverables



# NHTS Background

- **Daily data collected includes**
  - **Purpose of the trip (work, shopping, etc.)**
  - **Means of transportation used (car, bus, subway, walk, etc.)**
  - **How long the trip took, i.e., travel time**
  - **Time of day when the trip took place**
  - **Day of week when the trip took place**
  - **Private vehicle trip details**
    - **number of people in the vehicle , i.e., vehicle occupancy;**
    - **driver characteristics (age, sex, worker status, education level, etc.); and**
    - **vehicle attributes (make, model, model year, amount of miles driven in a year).**



# NHTS Background

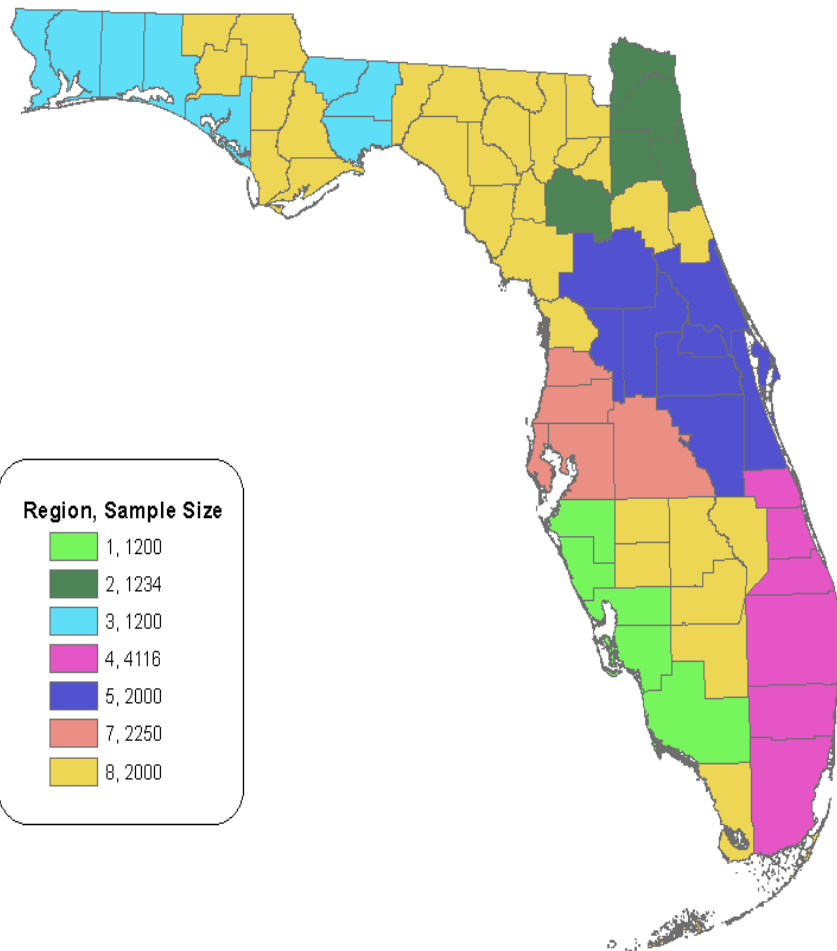
- **Data items not included**
  - **Travel costs**
  - **Information on specific routes**
  - **Longitudinal information**
  - **Reasons for specific mode**



# NHTS Background

- **Important demographic variables collected by the NHTS**
  - **Age**
  - **Education**
  - **Type of Vehicles Available**
  - **Employment Status**
  - **Occupation**
  - **Internet usage**
  - **Temporary or permanent handicap**
  - **Born in the United States**
  - **Household Income**

# Sampling Plan



| Region   | Sample Size |
|----------|-------------|
| Region 1 | 1,200       |
| Region 2 | 1,224       |
| Region 3 | 1,200       |
| Region 4 | 4,116       |
| Region 5 | 2,000       |
| Region 7 | 2,250       |
| Region 8 | 2,000       |



## Data Collection

- Data Collection from April 2008 to May 2009
- List assisted Random Digit Dialing (RDD) sample
- Computer aided telephone interviews (CATI)
- Data collection consists of :
  - Advance letter with \$5 incentive
  - Household recruitment
  - Mail out diary packets
  - Reminder calls
  - Person level retrieval





## Data Collection

- **Collected interviews from HH people ages 5 & older within 7 days of Travel Date**
- **Collected Proxy interviews**
  - 5 – 13 year olds (always)
  - 14 – 15 year olds (unless parent requests in-person)
  - 16+ years old (only after day 3)
- **Recruit—10 minutes/Retrieval – 18 minutes per interview**
- **A complete HH interview required 50% of all adult household members**

# Data Coverage

- Weighted to represent one calendar year for annual estimates
- Every sampled HH was assigned a travel day

The screenshot shows a web browser window displaying the NHTS website. The address bar contains the URL <http://nhts.ornl.gov>, which is also highlighted in a red box on the page content. The page features the NHTS logo and the text "National Household Travel Survey". Navigation links include Home, New Users, Online Analysis Tools, Publications, Download Data, and User Support. The "About the NHTS" section states that the NHTS is the authoritative source of national data on travel behavior. The "2008 Survey" section lists key details: 155,000 US households will participate, the survey was conducted from April 2008 through May 2009, and the public use dataset will be released in January 2010. It also mentions a webinar and a questionnaire. The "2008 Survey Participant" section provides a link to an FAQ for participants. The "2001 Survey" section offers links to download or tabulate data, and reports, briefs, and publications. The "Earlier Surveys" section mentions data for previous years (1983, 1977, 1969). The "Tools" section lists reports, users, analysis tools, support, profiles, and transferability. A "NHTS Brief" section features a photo of a man looking at a document in a car, with the caption: "Household travel accounts for three-quarters of the CO2 emissions from 'on-road' sources. The 'Carbon Footprint' of Daily Travel, March, 2009 [PDF]".

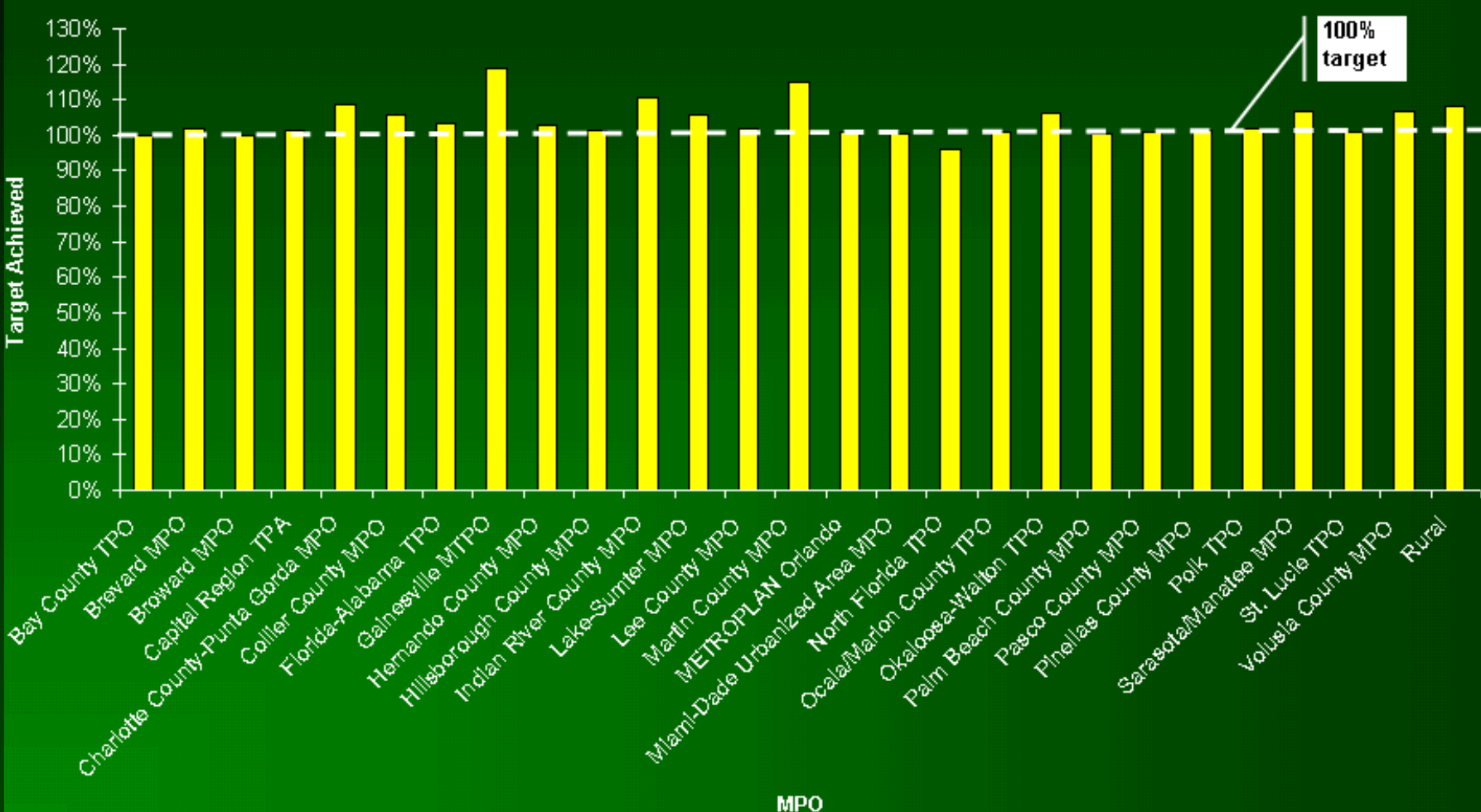


# Final Florida Sample

| Region       | Number of Households | Sample Size   |               |                  |
|--------------|----------------------|---------------|---------------|------------------|
|              |                      | Target        | Completed     | Percent Complete |
| 1            | 545,158              | 1,200         | 1,261         | 105.1%           |
| 2            | 613,890              | 1,234         | 1,223         | 99.1%            |
| 3            | 424,149              | 1,200         | 1,234         | 102.8%           |
| 4            | 2,150,666            | 4,116         | 4,154         | 100.9%           |
| 5            | 1,040,095            | 2,000         | 2,053         | 102.7%           |
| 7            | 1,196,954            | 2,250         | 2,280         | 101.3%           |
| 8            | 370,209              | 2,000         | 2,160         | 108.0%           |
| <b>Total</b> | <b>6,341,121</b>     | <b>14,000</b> | <b>14,365</b> | <b>102.6%</b>    |



# Final Florida Sample





# Data Deliverables

- **Florida Add on Data Available : October 5, 2009**
- **Deliverables include :**
  - Questionnaire
  - Code Book
  - Data Dictionary
  - Copies of Field documents
  - User's Guide ( Spring 2010)
  - Examples of Data Uses
  - Location file (Geo-coded)
  - Structure and Use of the Main data files (4)



# Analysis Plans

- **Travel behavior at the individual and household level**
- **Characteristics of travel, such as trip chaining, use of different transportation modes, amount and purpose of travel by time of day and day of week, and other attributes**
- **Relationship between demographics and travel**
- **Characteristics of rural travel**



# Analysis Plans

- **Develop Time of Day factors**
- **Analysis of residential location choices**
- **Prototype dataset for Activity based models**



## Next Steps

- **Awaiting data from FHWA**
- **As soon as data is available, it will be immediately released to all MPOs and Districts**
- **In coordination with MPOs and Florida DOT districts Central Office will proceed with the various analysis plans detailed earlier**
- **Please coordinate with Central Office to prevent duplication of analysis efforts**





# Contact Information

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