NHTS Update and Data Analysis Plans

presented to
Florida Model Task Force

presented by
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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

<table>
<thead>
<tr>
<th>Region</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1</td>
<td>1,200</td>
</tr>
<tr>
<td>Region 2</td>
<td>1,224</td>
</tr>
<tr>
<td>Region 3</td>
<td>1,200</td>
</tr>
<tr>
<td>Region 4</td>
<td>4,116</td>
</tr>
<tr>
<td>Region 5</td>
<td>2,000</td>
</tr>
<tr>
<td>Region 7</td>
<td>2,250</td>
</tr>
<tr>
<td>Region 8</td>
<td>2,000</td>
</tr>
</tbody>
</table>

![Florida map with regions and sample sizes]
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

http://nhts.ornl.gov
## Final Florida Sample

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

Target Achieved

- Bay County TPO
- Brevard MPO
- Capital Region TPA
- Collier County MPO
- Florida-Alabama TPO
- Hernando County MPO
- Indian River County MPO
- Lee County MPO
- Martin County MPO
- METROPLAN Orlando
- Miami-Dade Urbanized Area MPO
- North Florida TPO
- Okaloosa-Walton TPO
- Palm Beach County MPO
- Pinellas County MPO
- Polk TPO
- Sarasota-Manatee MPO
- St. Lucie TPO
- Volusia County MPO
- Rural

100% target
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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