

Florida NHTS Add-on Program

presented to:

Using NHTS for Transportation Decision Making: A Workshop

presented by:

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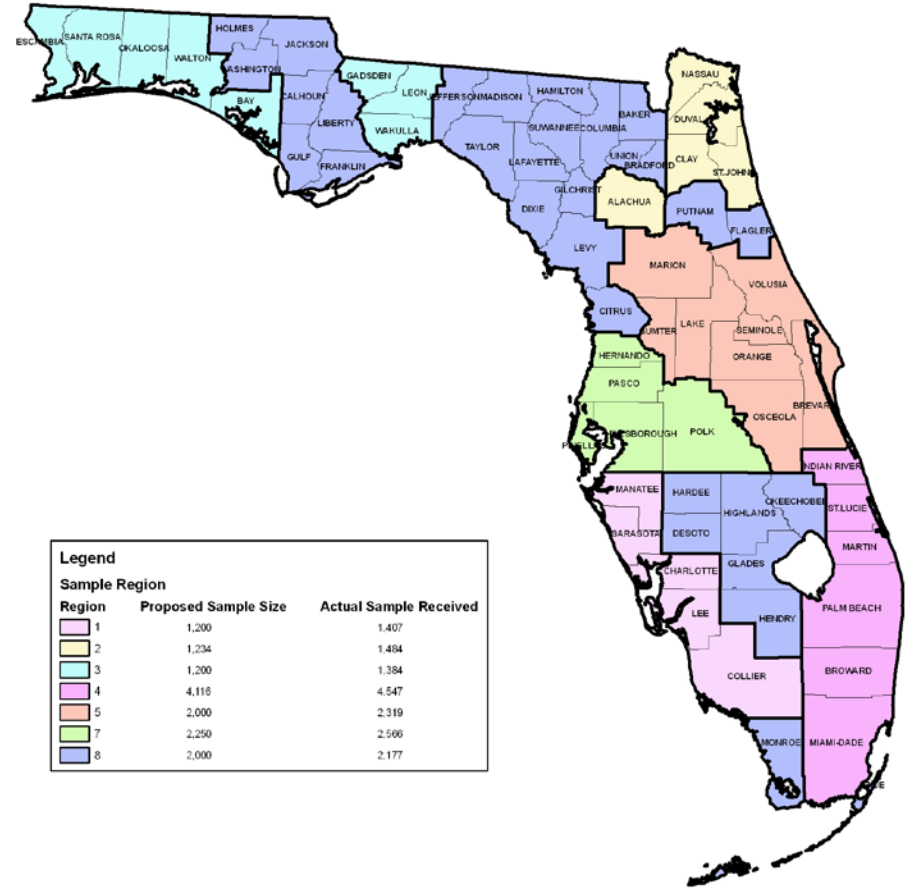
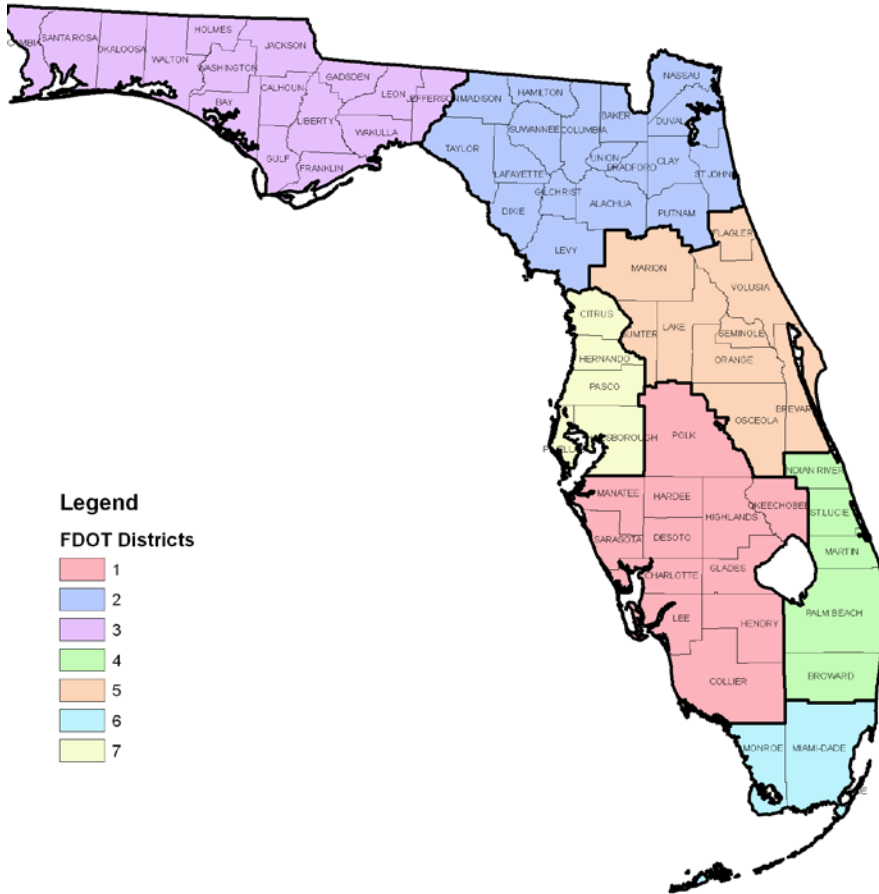
The Add-on Participation Rationale

- Wealth of information useful for travel analysis
 - Develop trip rates
 - Enhance air quality analysis
 - Provide a source for validation benchmarks
 - Understand travel behavior among distinct groups
- Help smaller MPOs obtain high quality household survey data
- Understand rural travel making

Funding

- Funding approved by MPOAC via PL Funds
 - Total cost for 12,000 urban samples is \$2,100,000
 - Data Analysis & Tabulation \$500,000
 - FDOT Allocates \$350,000 for 2,000 rural samples

Sampling Plan



Sampling Plan

- Each MPO will be sampled such that at least 80% of the sampled households from the MPO are included in the region sample
- Why do this?
 - Makes data collection more cost effective
 - Ensures sufficient samples for segmentation

Additional Questions

- How many months of the year do you live in Florida?
- How long ago did you move to this home?
- What is the most important reason you chose your current home location?
- What is the most important reason you have stayed in your current home?
- For public transit like a bus, the subway, or a train to be a good option for your commute, which of the following would be most important to you?
- For public transit like a bus, the subway, or a train to be a good option for the trips you most frequently, which of the following would be most important to you?

Additional Questions

- What is the most important reason you have stayed in your current home?
 - cost/price of home
 - quality of home
 - home or lot size
 - school system.
 - neighborhood quality
 - convenient to work
 - convenient to school
 - convenient to retail (shopping, entertainment, restaurants)
 - close to friends & family
 - close to public transportation
 - close to scenic locations (beach, lake, golf courses)
 - have roots in community
 - moving is too difficult
 - moving is too expensive
 - other

Data Distribution

- Received data from FHWA and distributed to MPO partners
- Distribution package included the following
 - Data (add-on and public)
 - Codebooks for household, person, trip, and vehicle data
 - Preliminary Derived Variables list
 - FHWA Data Usage agreement

Data Usage – NHTS Guidebook

- Includes code for deriving commonly used travel model parameters
- Meant to ensure correct exclusion criteria and variables are being used
- Can also be used a source of validation checks
- SAS and SQL versions

2009 NHTS User Guide

Guidebook for Florida Modelers

draft report

prepared for
Florida DOT

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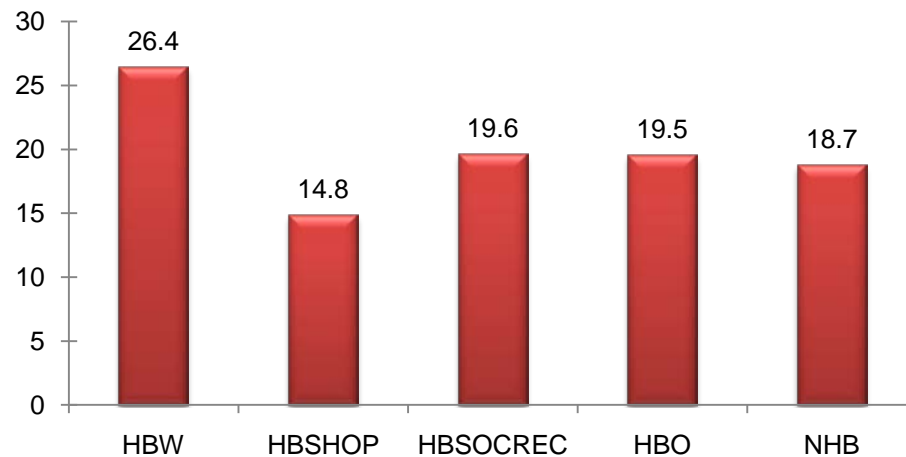
Data Usage – NHTS Guidebook

```
data fltrips; /* The Trips File is used */
  set fltrips;
  trvl_min1 = trvl_min; /* Cap the Derived Trip Time to 180 minutes
(99.6% of observations are 180 minutes or less) */
  if trvl_min gt 180 then trvl_min1 = 180;
run;

proc sort data=fltrips;
  by trippurp;
run;

proc means data= fltrips;
  by trippurp;
  var trvl_min1;
  weight personwt; /* Weight it by person weight */
  where (TRAVDAY = '02' or TRAVDAY = '03' or TRAVDAY = '04' or TRAVDAY =
'05' or TRAVDAY = '06') and TRIPPURP ne '-9' and trvl_min gt 0; /* Ensure
that only weekday trips with travel time greater than 0 minutes are
calculated*/
  output out=nhts2.triplength_purpose mean=traveltime;
run;
```

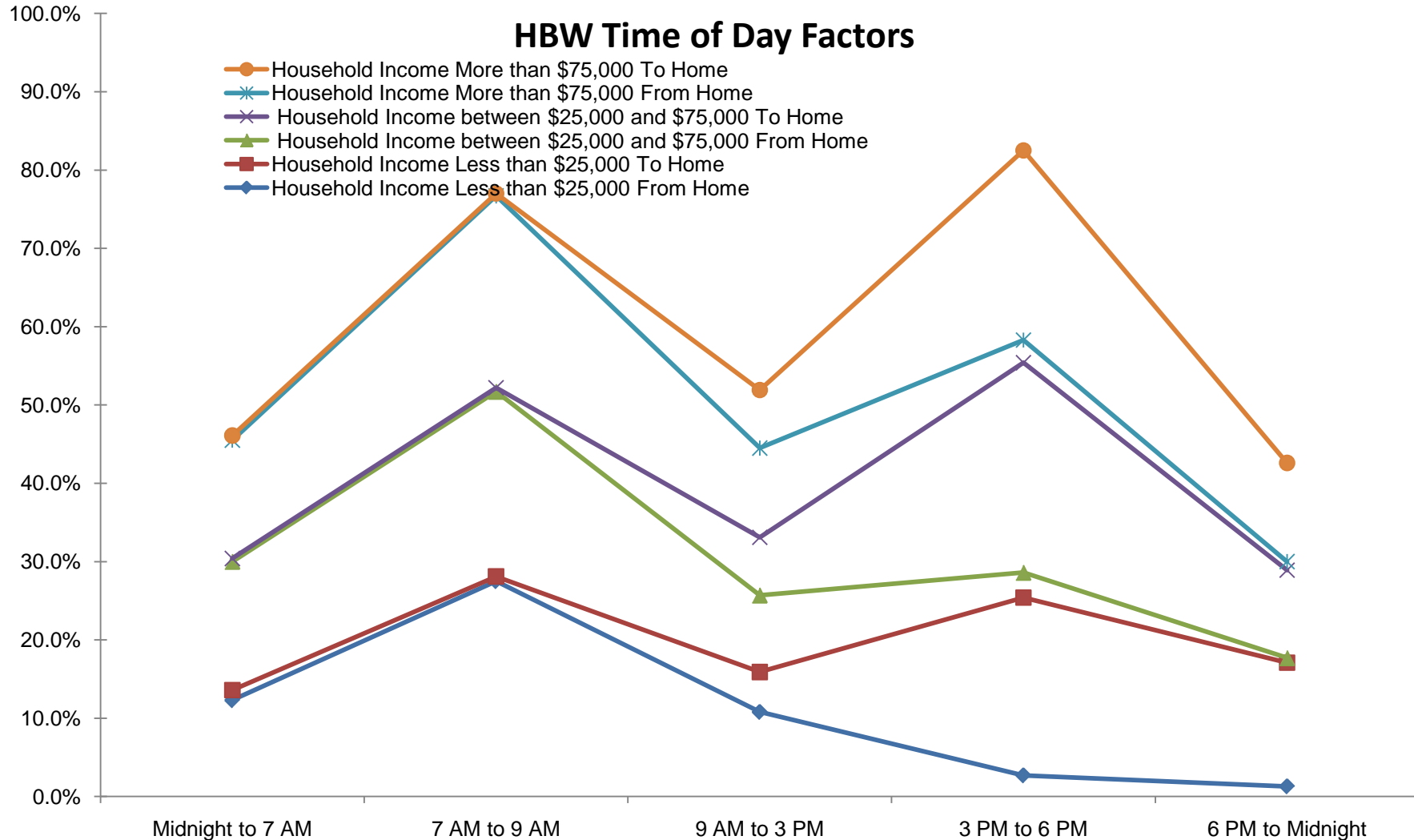
Average Trip Length (min)



Data Usage – Time of Day Factors

- Rationale – Use NHTS data for developing Time of Day factors where local household survey data is not available
- Approach – Divide the state by different geographic segments
 - Sampling Region Segment
 - Urban Size Region Segment
 - Household Income Segment

Data Usage – Time of Day Factors



Data Usage – Statewide Model Validation

- The NHTS data was used to validate the statewide model
- Trip length distribution by time and distance were taken from the NHTS and compared to model outputs by model region

Data Usage – Activity Based Models

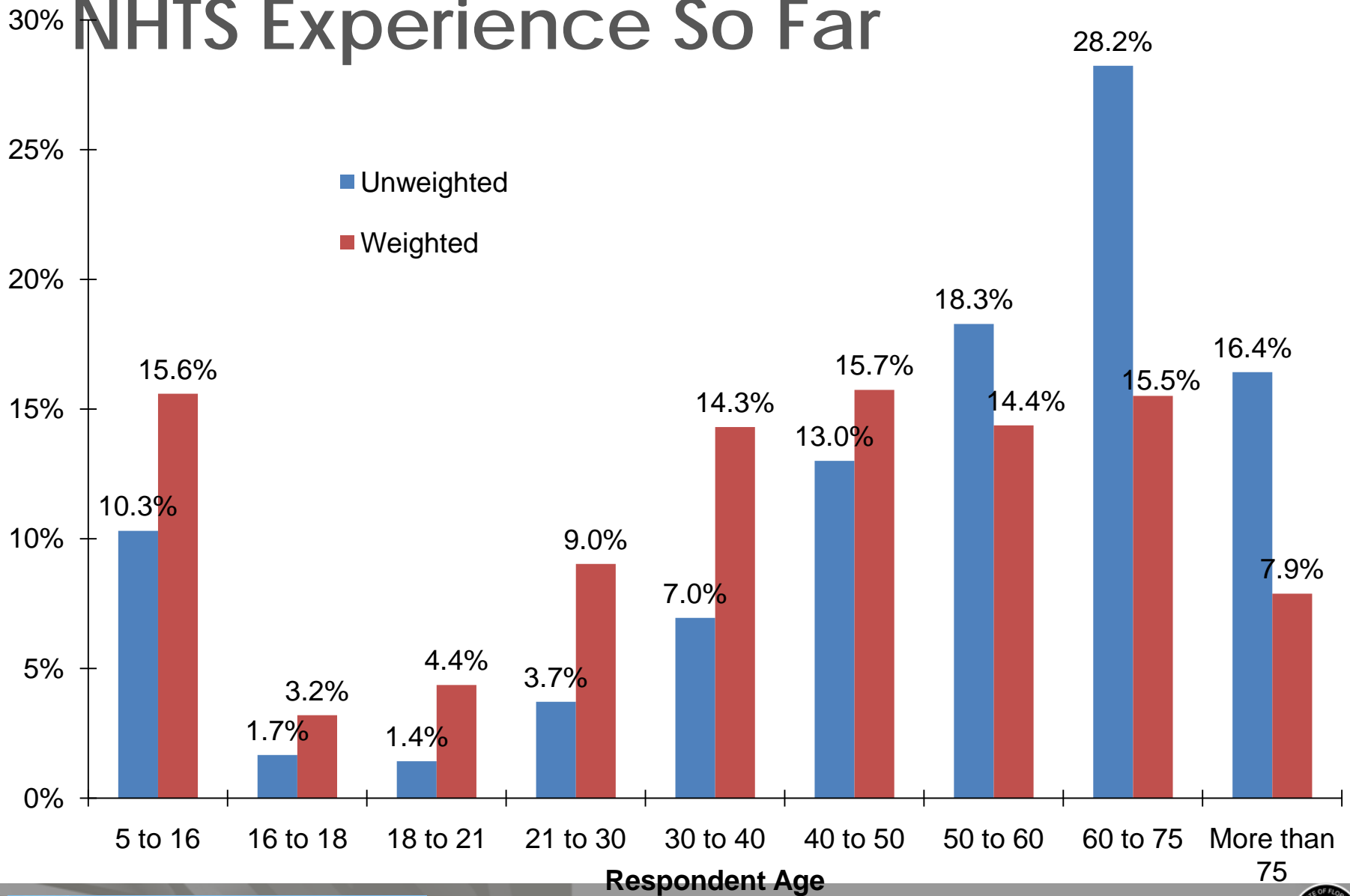
- SHRP2 C10 – Develop Calibration targets
- Using NHTS to estimate TAZ level ABM to investigate model transferability



NHTS Experience So Far

- Initial learning curve to figure out variables especially derived variables
- There is a need to know nuances in the data to ensure meaningful comparisons
 - Example: To distinguish between weekday and weekend should TRAVDAY be used or TDWKND and what are the differences between the two
- What are the implications of having two-thirds of the sample older than 50 years

NHTS Experience So Far



Future Data Usage Plans

- Compare reported and calculated distances
- Determine whether the data can answer policy questions regarding housing location choices
- Identify the travel behavior characteristics of special populations such as the elderly
- Any other policy questions that need to be answered by Florida DOT decision makers

Suggestions for Next NHTS

- Include questions that capture intercity movements
- More samples (0.2 percent of households in current sample)
- Include MOEs – critical due to small sample size

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