

National Household Travel Survey: Add-on Program Data

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Highway Information Seminar

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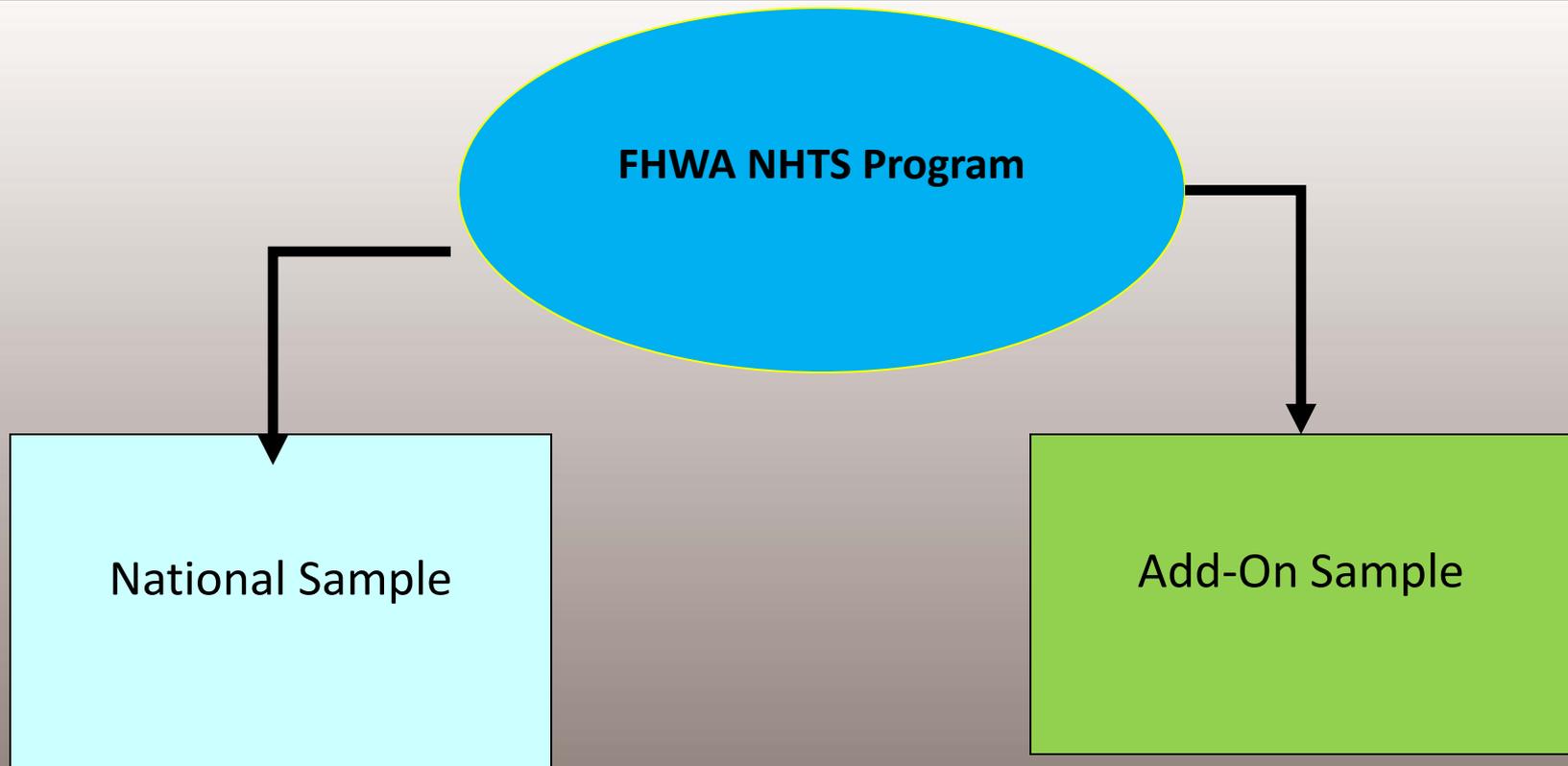


Today's Talk

- Overview about the Program
- Why the NHTS data Matters: Challenges
- Examples of usage
- Add-on Program Activities



NHTS Program : Passenger travel



Collect Data

- Measure the amount, type and trends in travel for national policies and programs
- Exposure rates for vehicle or pedestrian exposure (fatalities/million miles of travel)
- Research on mobility: elderly, immigrants, school children, low income
- Commuting trends and comparison to Journey-to-Work Census Data
- Trip rates for local transportation planning and air-quality analysis



NHTS collects

- For each Household Vehicle
 - Make,
 - model,
 - year &
 - odometer reading

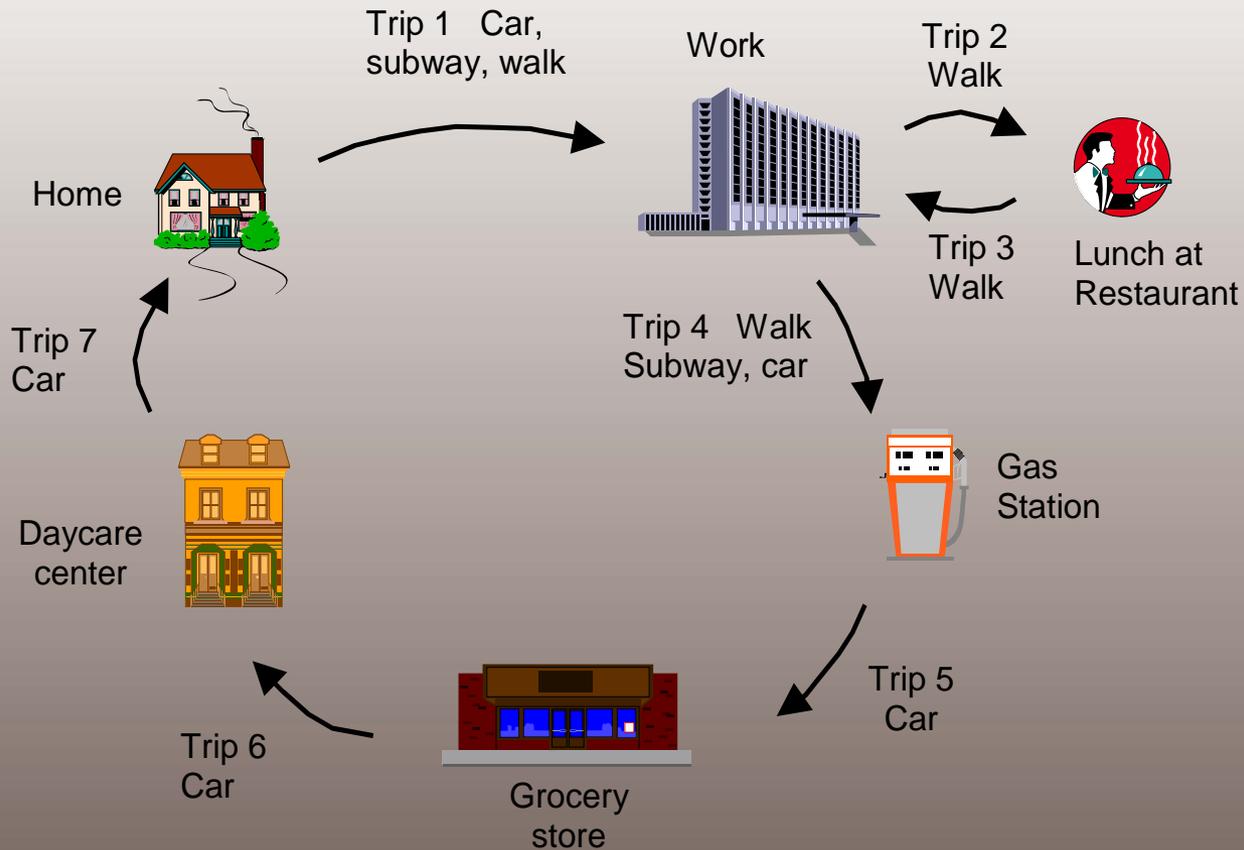


Example of Content Overview

- NHTS is an activity-based survey, recording all trips a household took on a given “travel day”
- Distributions of trip speed, trip time, and trip length are available by day of week
- Soak time not explicitly on dataset, but can be computed



Collect Trip Tour Data



Why does this matter to you?

*Data needs are evolving,
NHTS is helping you meet them*



NHTS Can Help: Performance Management

Challenge: Increasing reliance on performance measures tied to funding sources requires more data on trip-making behavior and facility use.

How NHTS can help: Behavior data can help us to spend funding where it is needed (optimal design).



NHTS Can Help: Multimodal Planning

Challenge: Better understanding non-motorized trips for facility improvements and safe routes to school.

How NHTS can help: NHTS collects highly detailed trip records for all modes, including walking and bicycling. An optional GPS sample ensures data accuracy and minimizes respondent recall issues for short trips.



NHTS Can Help: Air Quality Modeling (MOVES)

Challenge: Accurate air quality modeling in MOVES requires input values specific to your region, instead of using default national values that may result in significantly higher modeled emissions.

How NHTS can help: By collecting detailed data on auto trip-making, including vehicle type, number of stops, and times of day, NHTS add-on data can provide accurate values for cold and hot starts, and for soak times.



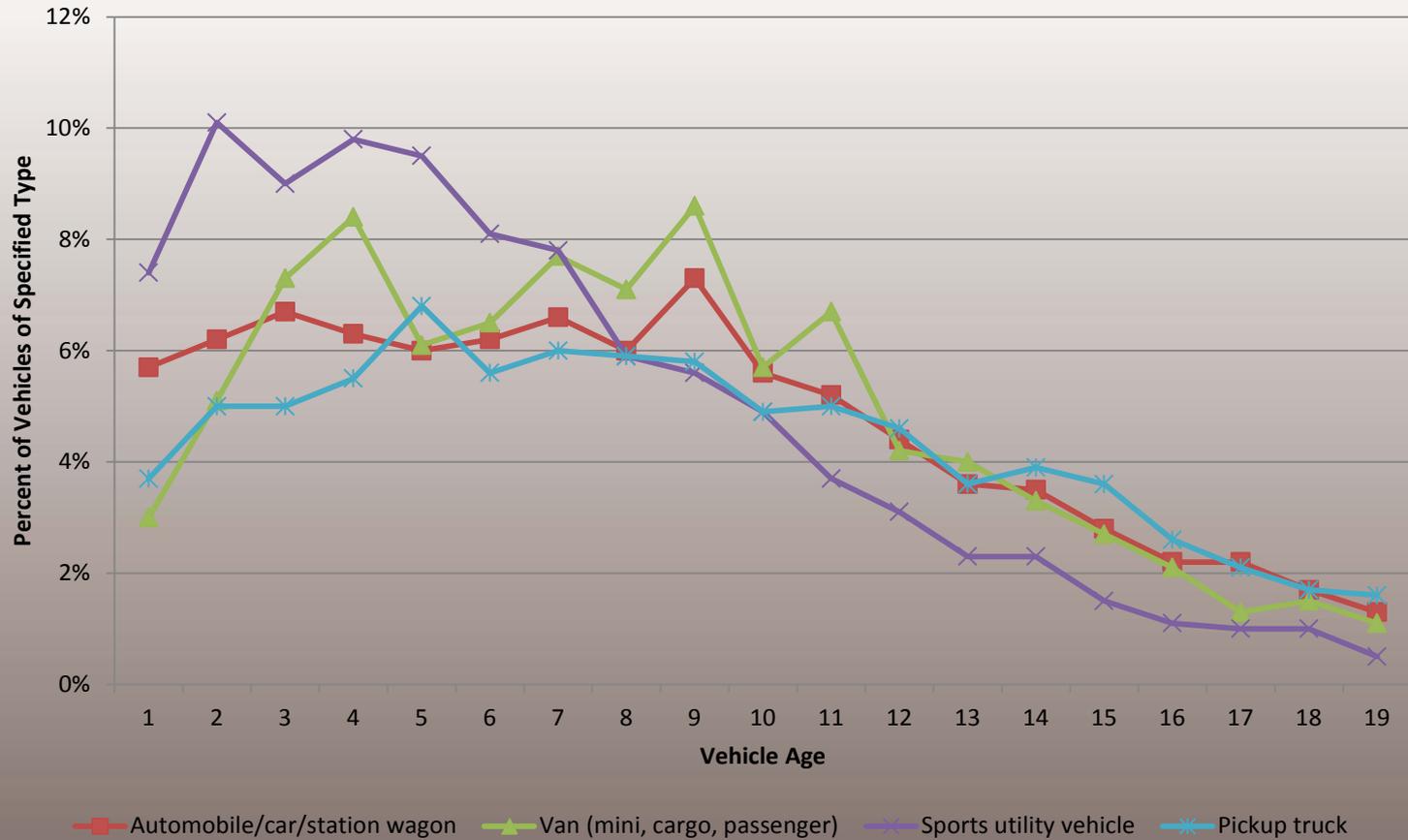
How NHTS Helps Add-On Partners

States and MPOs:

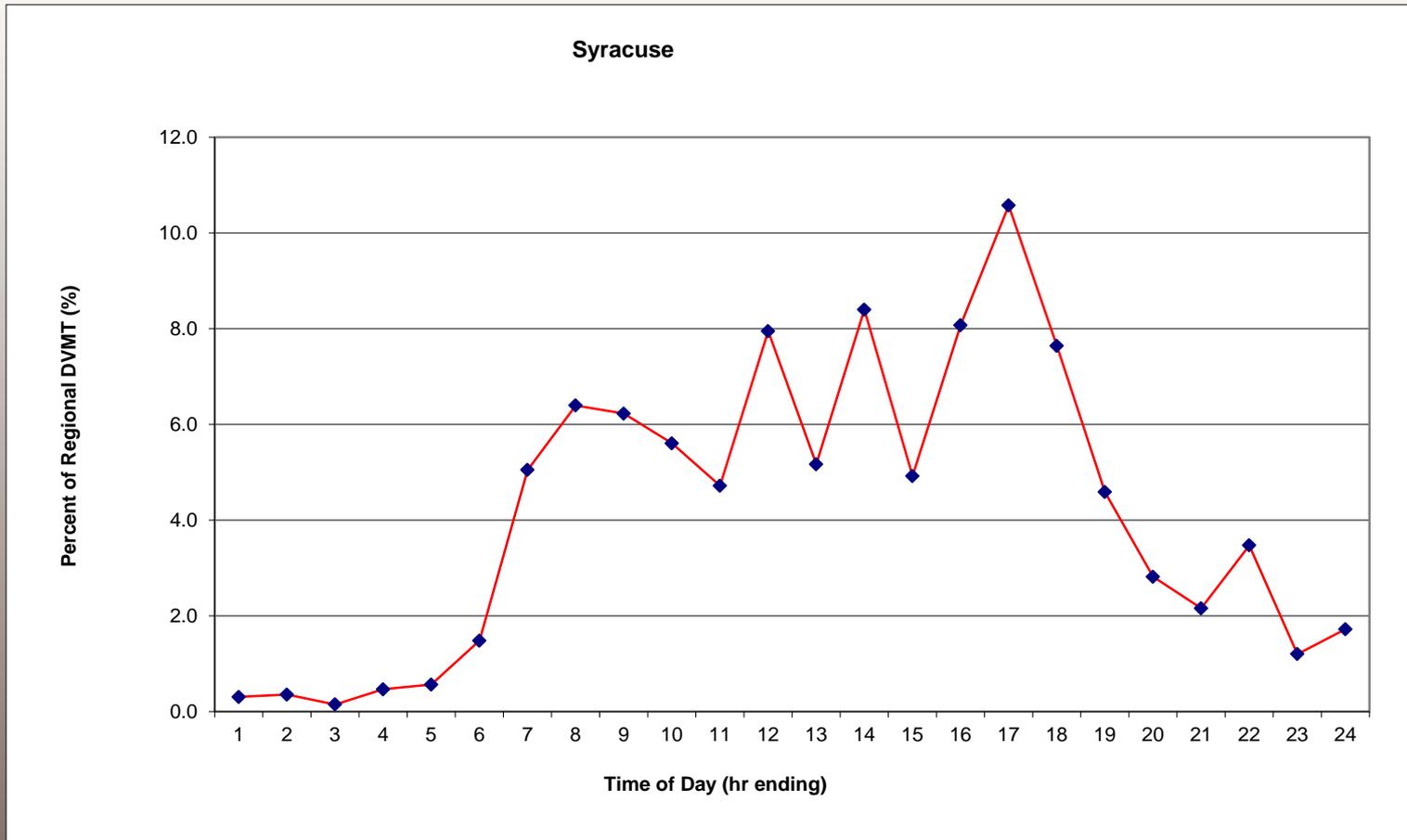
- ✓ Have a unique opportunity to purchase samples of the household travel survey
- ✓ Increased sample size can help to develop travel estimates at small geography levels



NHTS Vehicles by Age and Type

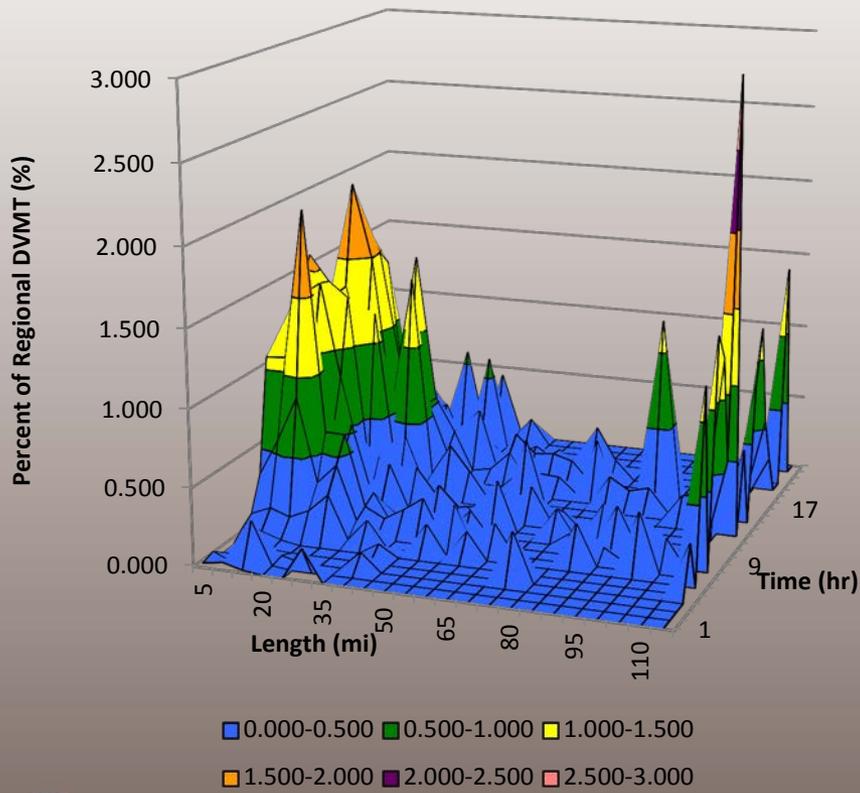


VMT by Time of Day

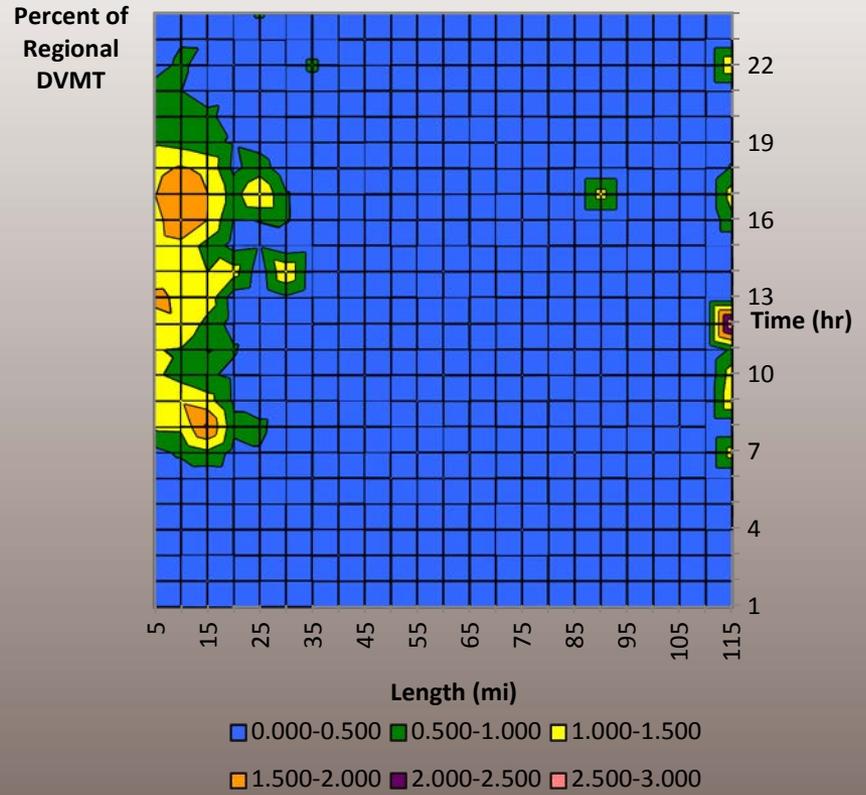


VMT by Trip Length and Time of Day

Syracuse

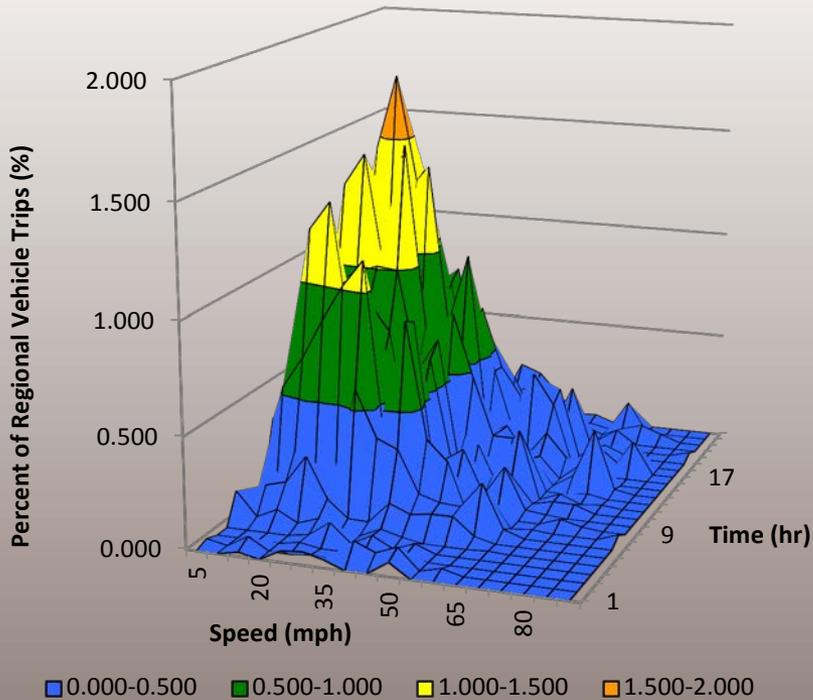


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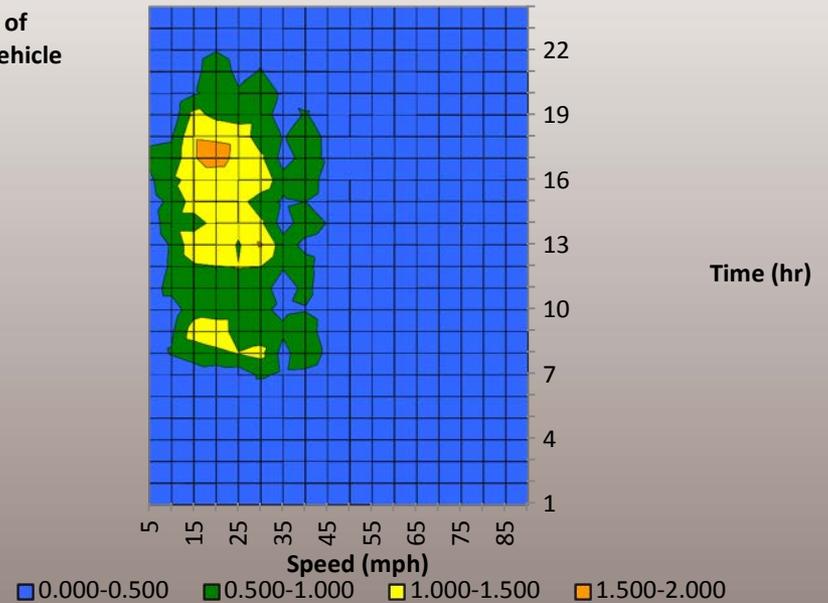
Vehicle Trips by Speed

Syracuse



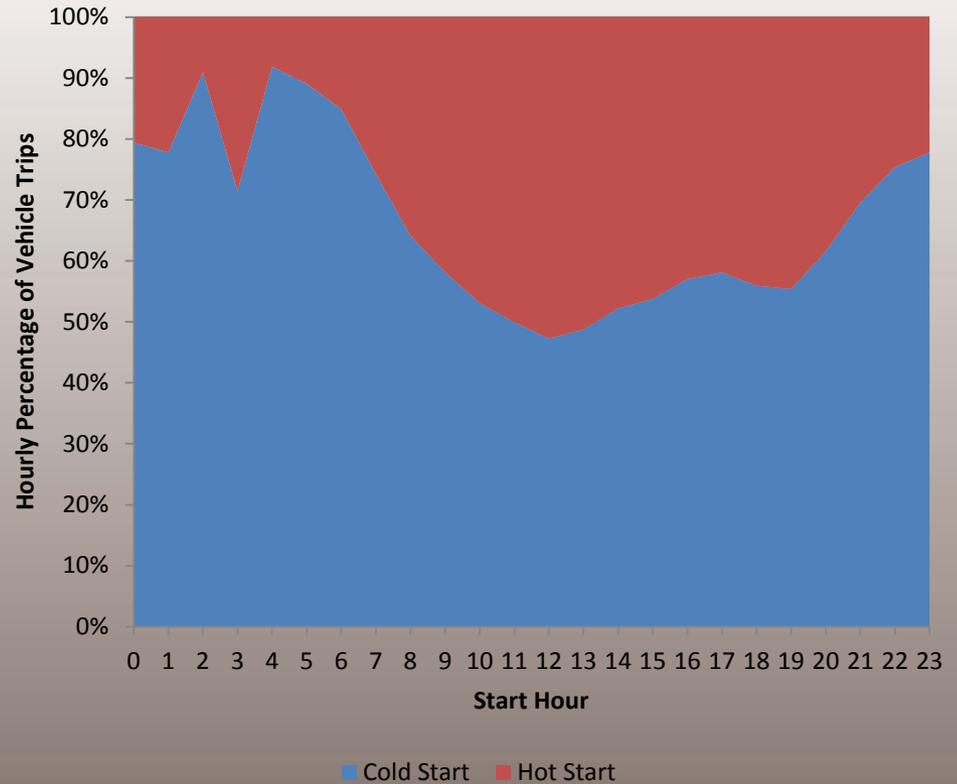
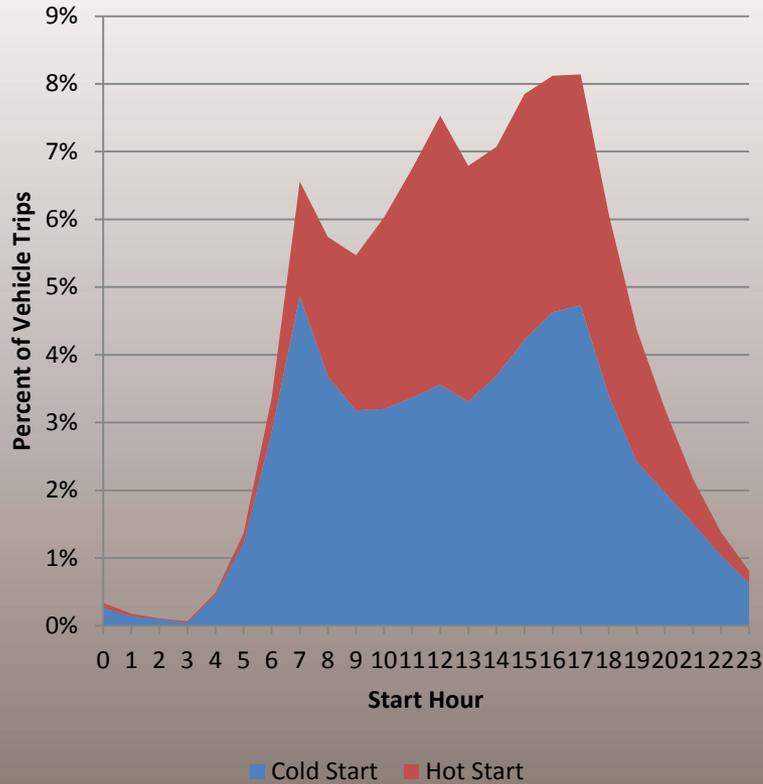
Syracuse

Percent of
Regional Vehicle
Trips



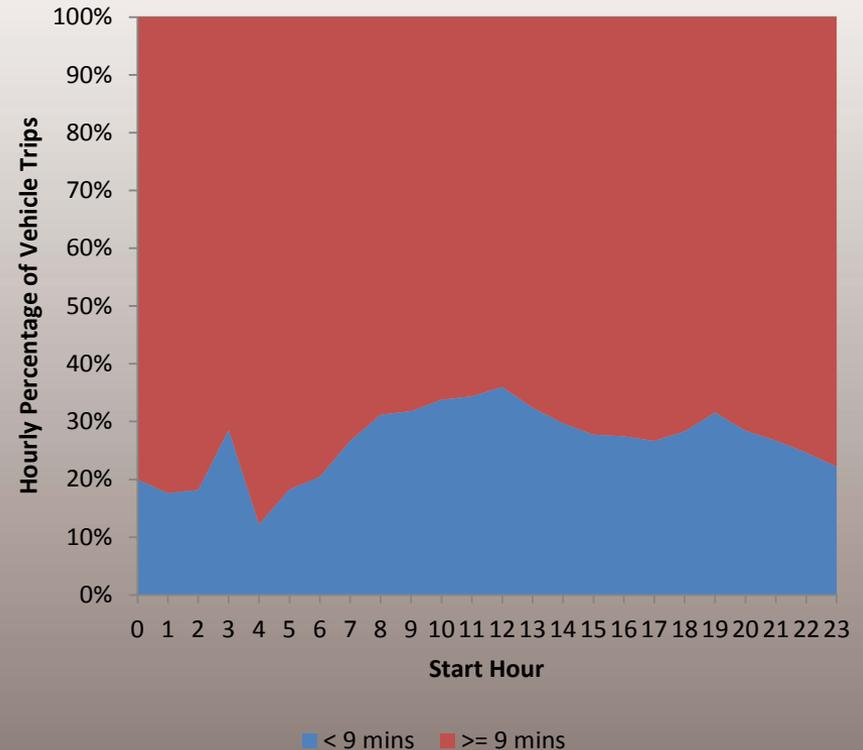
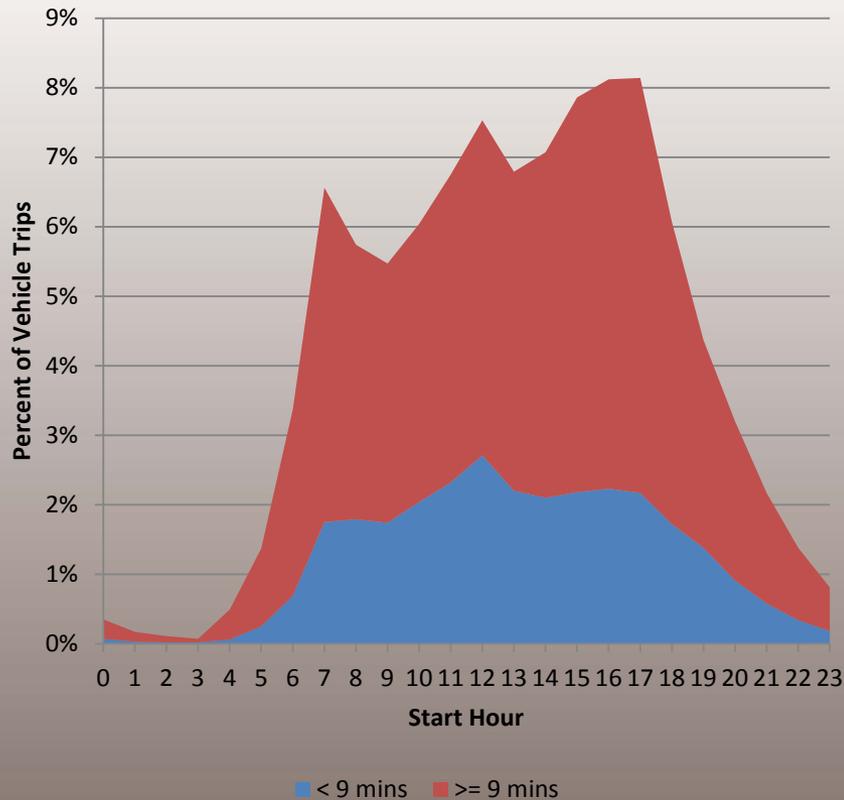
Benchmarking: National Duration between Engine Starts

Cold Start defined as > 60 min. since last start



Benchmarking: National Travel Time

9 min. travel time assumed to be hot/cold mode cutoff



NHTS Add-on Program

- Information for better data driven decisions



Questions and Comments

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