2010 Travel Behavior Inventory- Household Survey

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Household Interview Survey

• Component of 2010 Travel Behavior Inventory
• Provide current information on personal travel to inform planning
• Support development of activity-based travel forecast model
• 2 surveys
  – One day travel diary
  – Seven day GPS
Household Survey Data

- Household
- Person
- Trip
- Activity
- Tour
Why do a household travel survey?

What about using Census/ACS or LEHD?
2010 TBI- Travel by Purpose

- Work Commute: 33%
- Other Mandatory: 17%
- Maintenance: 39%
- Discretionary: 11%
Why do a household travel survey?

What about the National Household Travel Survey?

2009 NHTS
   233 households in Twin Cities MSA
   Add-ons $175/HH
Next NHTS?
Sample Design

- Target responses (1% of population) by
  - Geography
  - Household Size
  - Auto Ownership
Sample Design

YOUR SEVEN RANDOM DIGITS

(____) ______-______

WHERE YOU LIVED IN 2005

STRUCTURE OF A US CELL PHONE NUMBER
Survey Process

- Address-Based Sample
  - Recruit
    - Matched- Phone Recruit
    - Unmatched- Web Recruit
  - Travel Packet Deployment
  - Travel Period
  - Retrieval
    - Phone
    - Mail
    - Web
Really?

People participate in a survey this long and intrusive?
Response Rates

• Response Rate:  
  Matched       14%  
  Unmatched     4%  
  Total         11%  

• Conversion Rate: 52%
Actions to Improve Response Rate

• Establish legitimacy of survey: advance letters, website, video, agency contact
• Continual monitoring
• Targeting sample geographically by key variables
• Targeted Incentives
• Converting soft-refusals
Data Cleaning

• Geocoding
• Intra-household joint trips
• Missing/duplicate locations
• Activity imputation
• Age/student status

reconciliation

• Primary mode
• Elimination criteria
• “Reharvest” high trip households
• 10,362 “model-ready” households
Sample Weights

### Household Dimensions
- Geography (7)
- Lifecycle (4)
- Persons (4)
- Workers (3)
- Vehicles (3)

### Person Dimensions
- Geography (7)
- Gender (2)
- Age (6)
- Worker Status (2)

- IPF for households, persons, and between
- Correction for small children
Changes from 2000

• Methodology
  – Address-based-sample vs. RDD
  – Year-long survey

• Economy

• Demographics

• Society
Questions?

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