

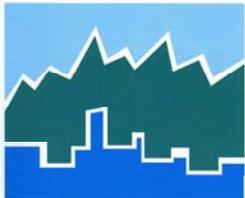
The National Household Travel Survey



Heather Contrino

**US Department of Transportation
Office of Highway Policy Information,
Federal Highway Administration**

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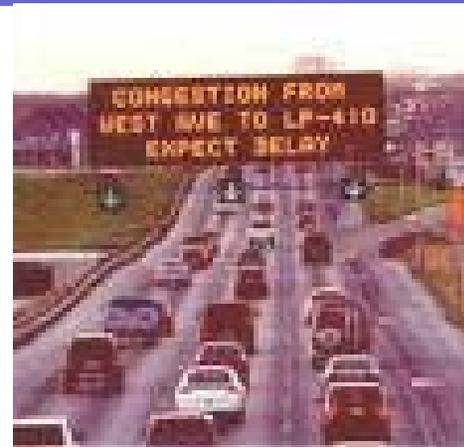
Outline

- *2008 NHTS Program*
- *Data Applications and Tools*
- *The Future NHTS*

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2008 NHTS Program



The NHTS Program – Two Components

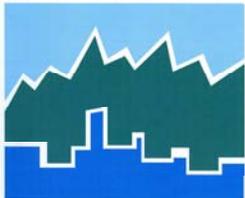
- **National Study**

- Serves the department, congress, and administration
- Sample size of 25,000 households

- **Add-On Program**

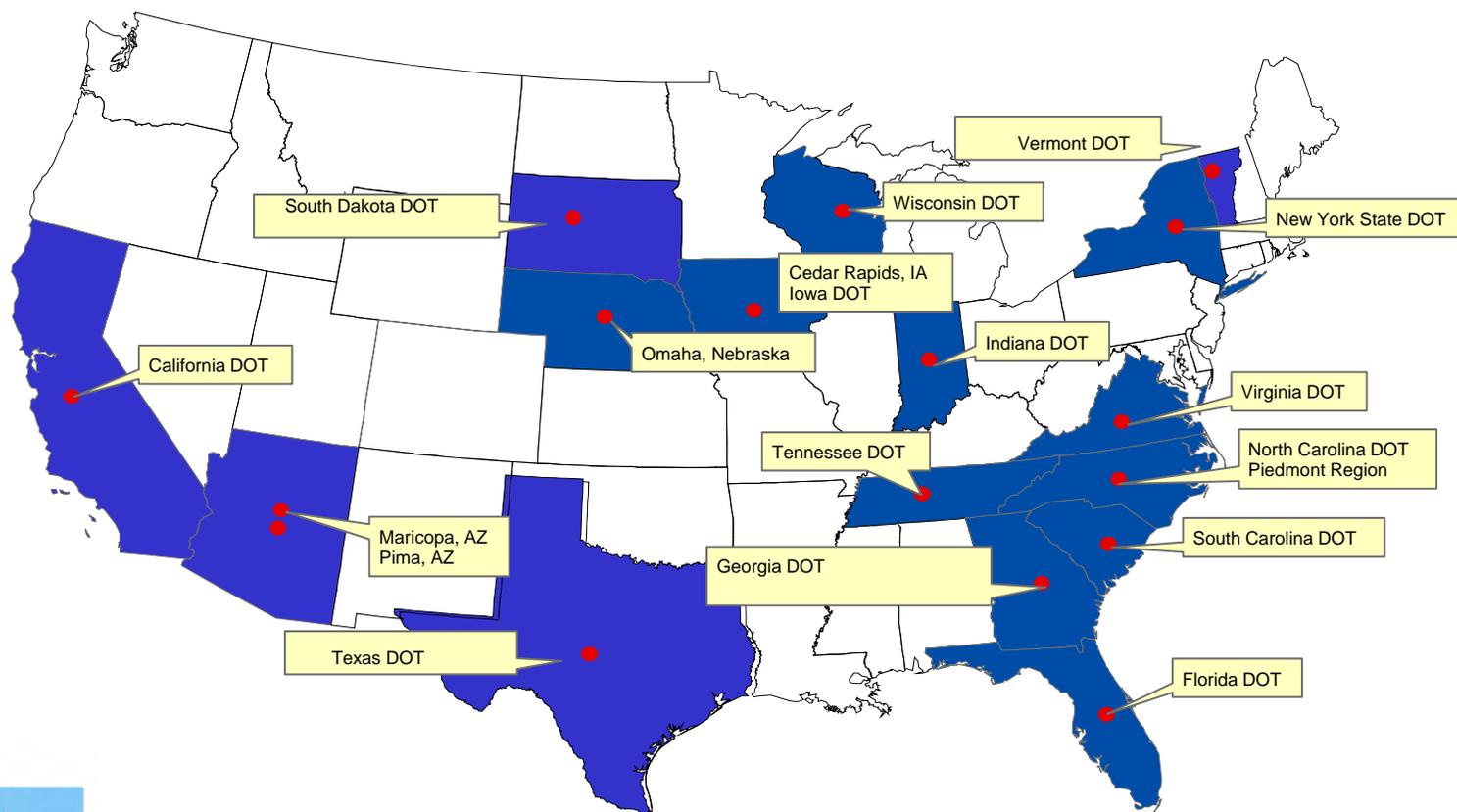
- Allows States and MPOs to purchase additional samples for their local area
- Program participation has doubled every survey year (Sample size of 125,000 households for 2008)

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2008 Add-On Program Participants

125,000 Add-On Samples



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NHTS Add-On Program

- ***Mechanism*** – Pooled Fund Solicitation
- ***Costing/fees*** – Set per interview cost, protocols, timeline, and deliverables.
- ***Matching funds*** – Match is waived for NHTS Program
- ***Coordination and Communication*** – Heavy coordination, quality assurance, and client service role

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NHTS Core Data Content

- **Households**
 - Income, composition, location
- **Persons**
 - Age, sex, race, ethnicity, worker and student status, citizenship, education
- **Geography**
 - High level geography – urban, rural, suburban, state and national analyses
- **Vehicles**
 - Make, model, year, mileage, alternative fuels, commercially licensed
- **Trips**
 - Mode, time of day, purpose, vehicle occupancy, distance, trip length

Major Contribution
*Linkage between people,
travel and vehicles*

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New 2008 NHTS Content

- **Congestion**
 - Interstate use and tolling
 - Telecommuting – opportunity and frequency
 - Work arrival time and flexibility
- **Safety**
 - Safe Travel to School
 - Travel impacts of disability
- **Energy and Environment**
 - Shopping by Internet and deliveries to the household
 - Hybrid/Alternative fuel vehicles
 - Fuel costs by vehicle type and travel behavior
 - Vehicle age, odometer reading, and annual mileage
- **Alternative Modes**
 - Access (to transit) travel party size
 - Frequency of walk and bike
 - Motorcycle ownership and use

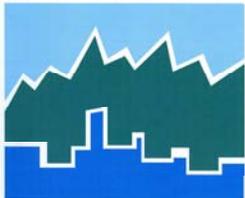
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2008 NHTS Schedule

- Data collection completed – April 2009
- Final weighted data file – October 2009
- Public Use file – January 2010
- Products and Tools – Throughout 2010
- Methods Research (for next NHTS) and work for reauthorization is ongoing

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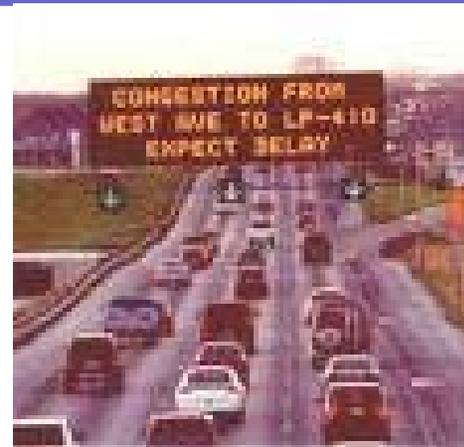
Products/Tools

- On-line Analysis Tool: <http://nhts.ornl.gov>
 - SAS Data Set: <http://nhts.ornl.gov/download.shtml>
- Summary Reports
- Policy Briefs: <http://ornl.gov/publications.shtml#issueBriefs>
- State Profiles
- Data Visualization Tool (in development)
- Local area estimation: <http://fmip.ornl.gov/nhts/>

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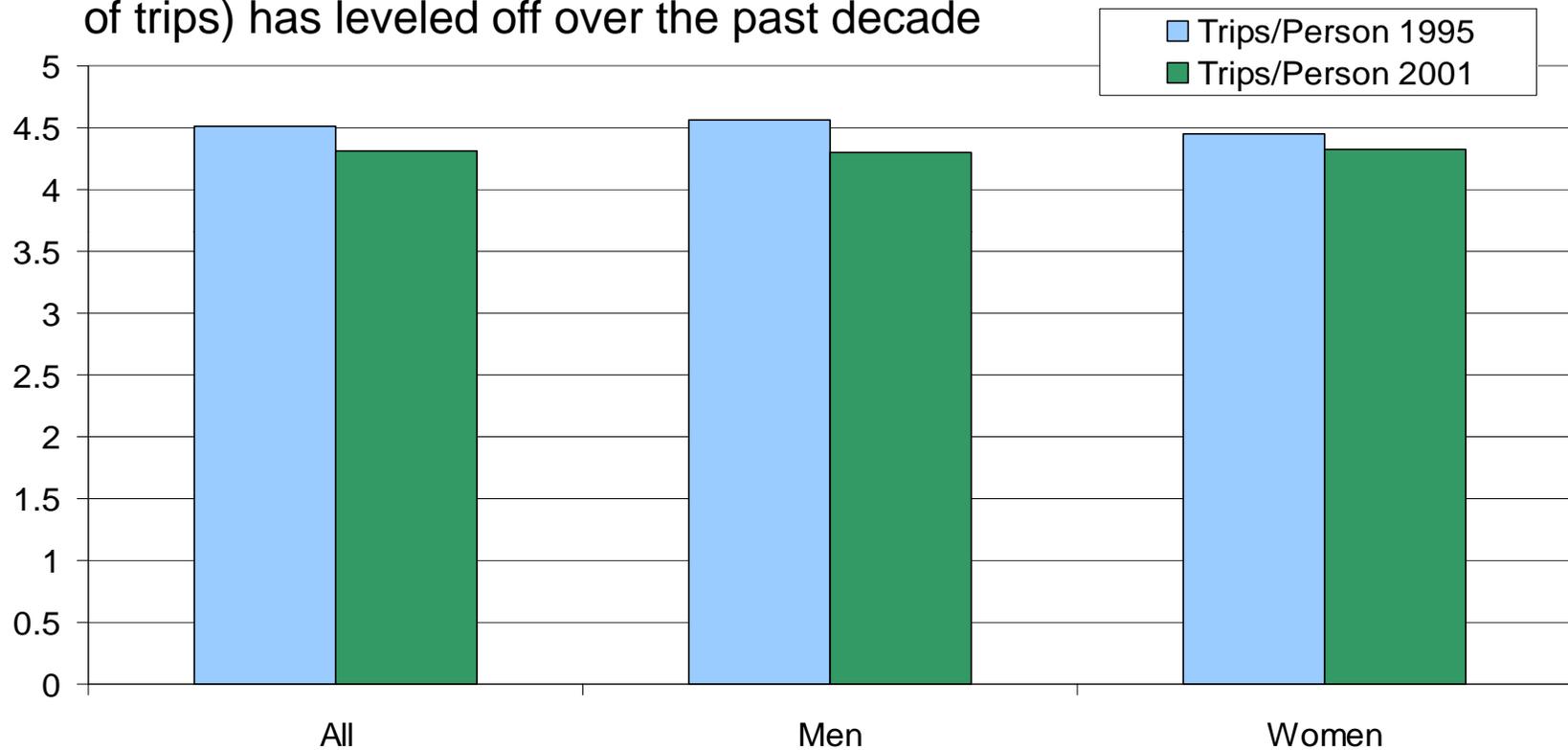


Applications and Tools

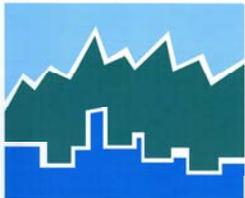


Trends in Demand

Huge growth in travel since 1969, however demand (number of trips) has leveled off over the past decade



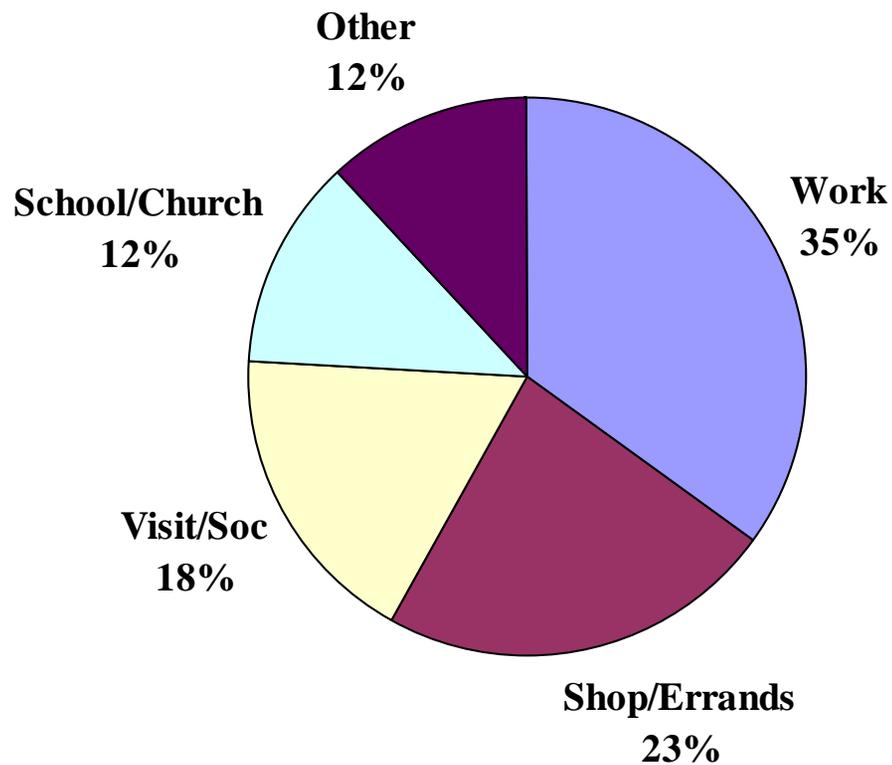
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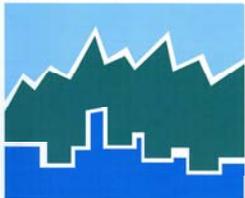
Base: NHTS data series, travelers 16+

Understanding Mode Use

Purpose Distribution of Transit Trips

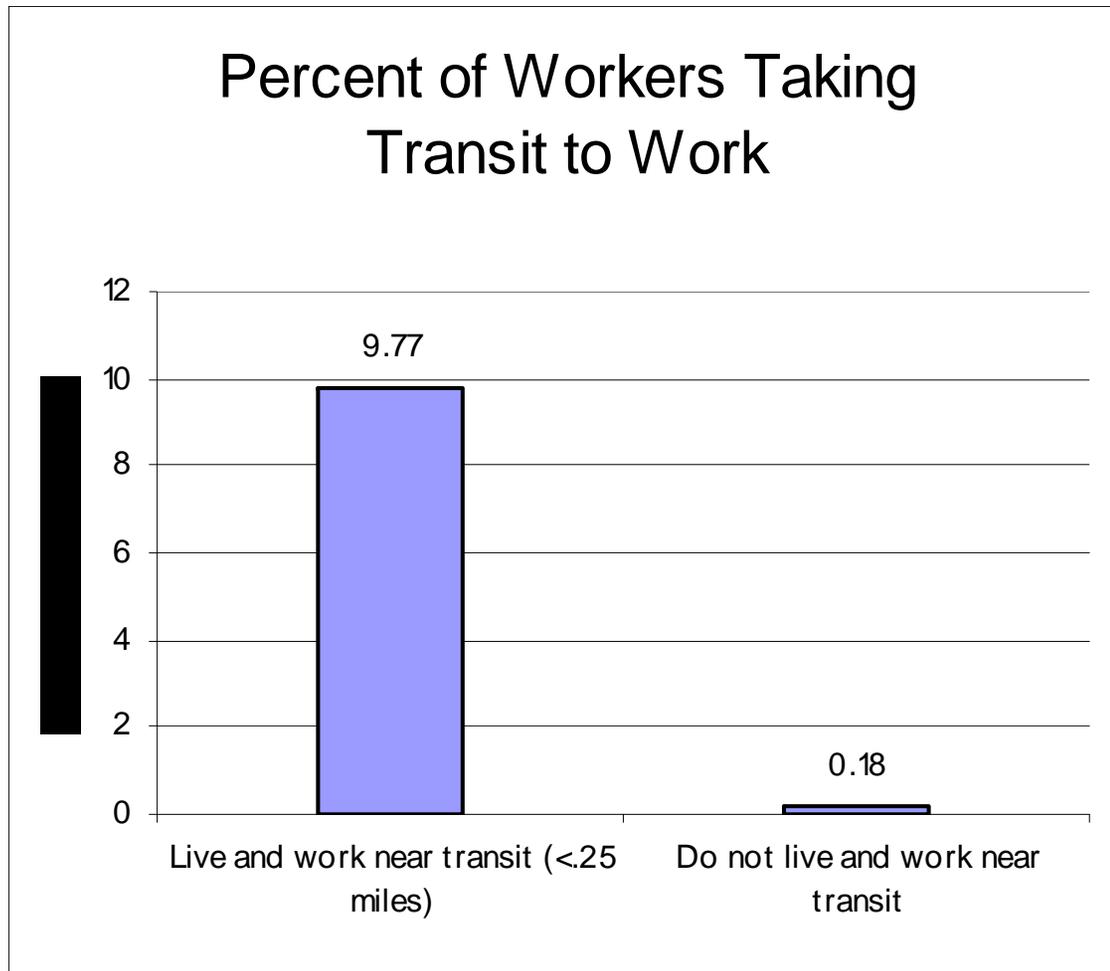


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Source: 2001 NHTS

How Access Fits In...



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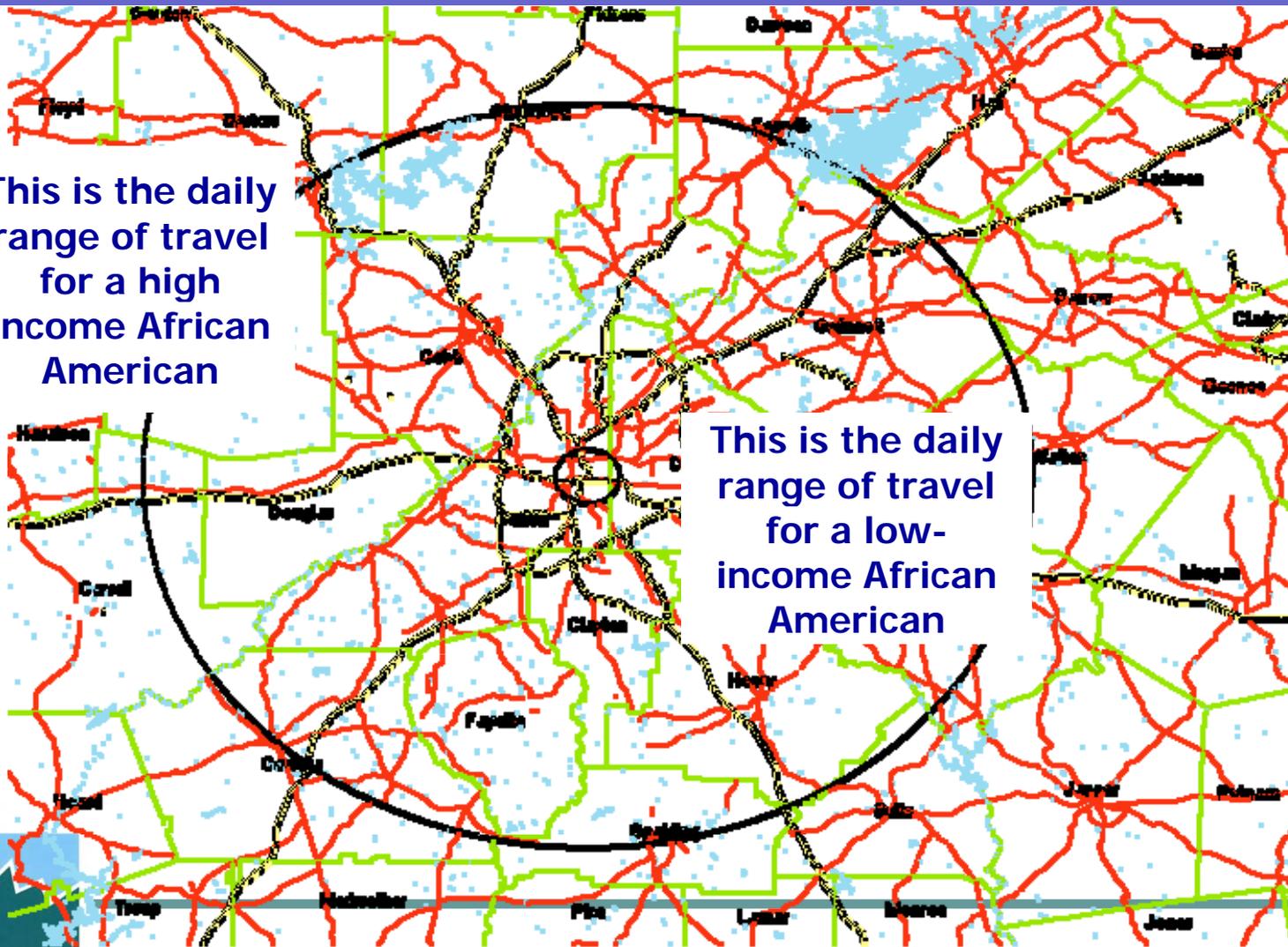
Source: NHTS series since 1969

Link Between Demographics and Mobility

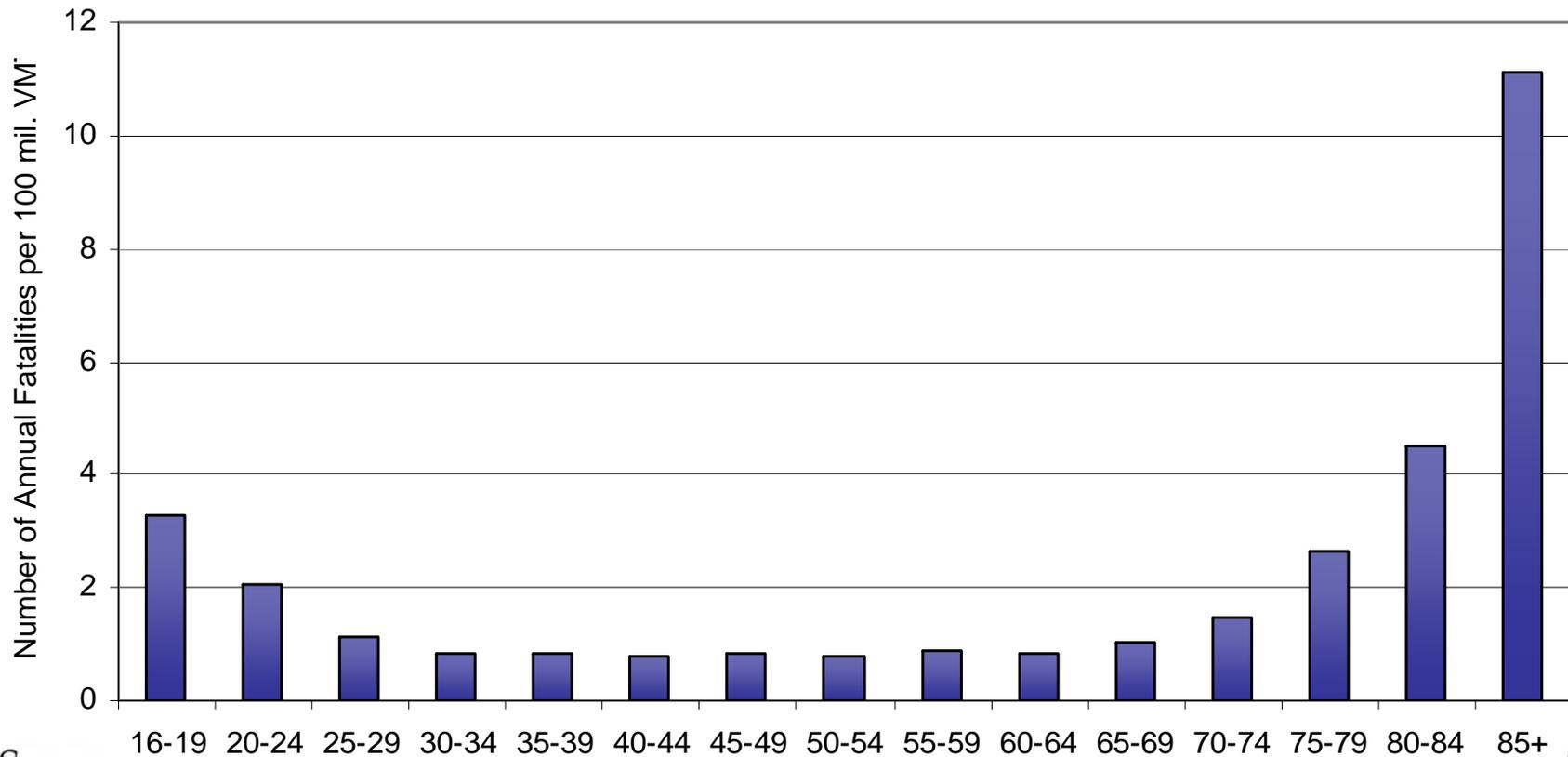
This is the daily range of travel for a high income African American

This is the daily range of travel for a low-income African American

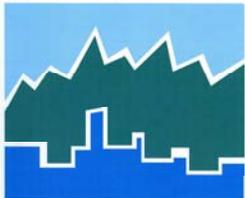
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and Demographics and Safety...

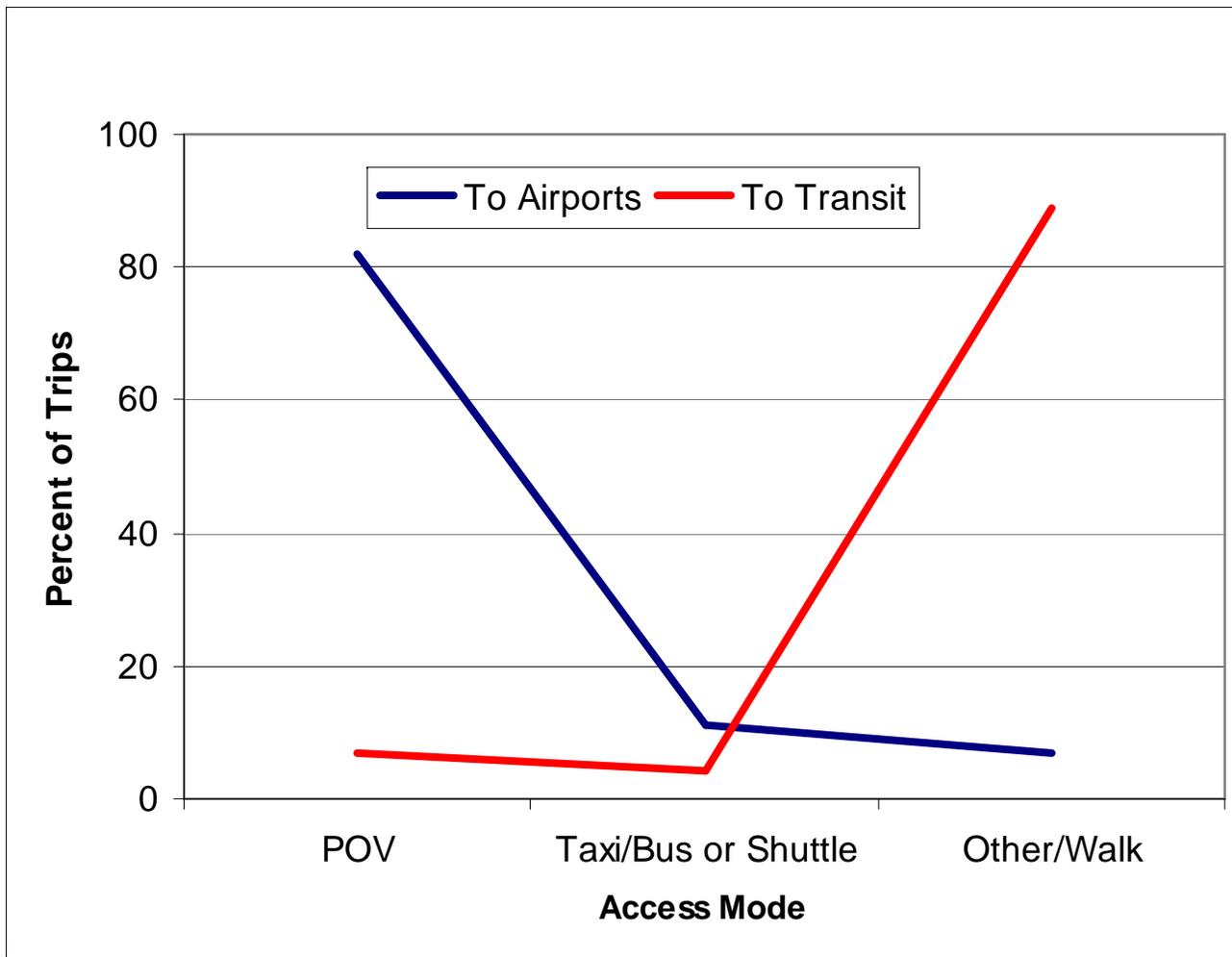


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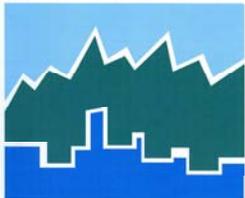


Base: NHTS data on driver miles by age and FARS fatalities

How Highways Serve other Modes

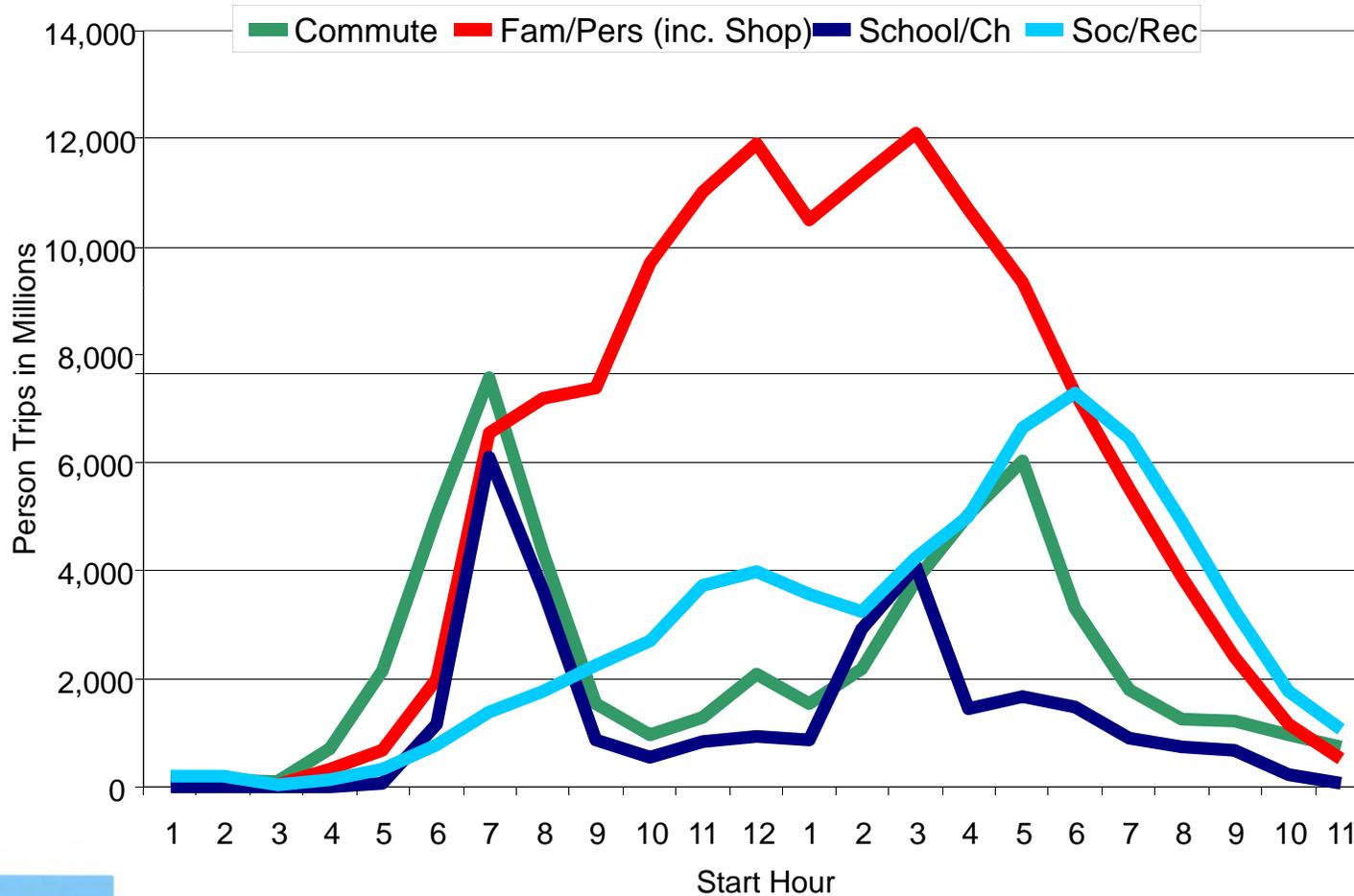


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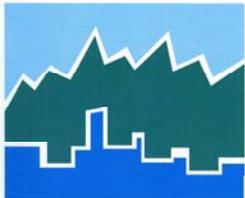


Source: 2001 NHTS

When and Why People Drive

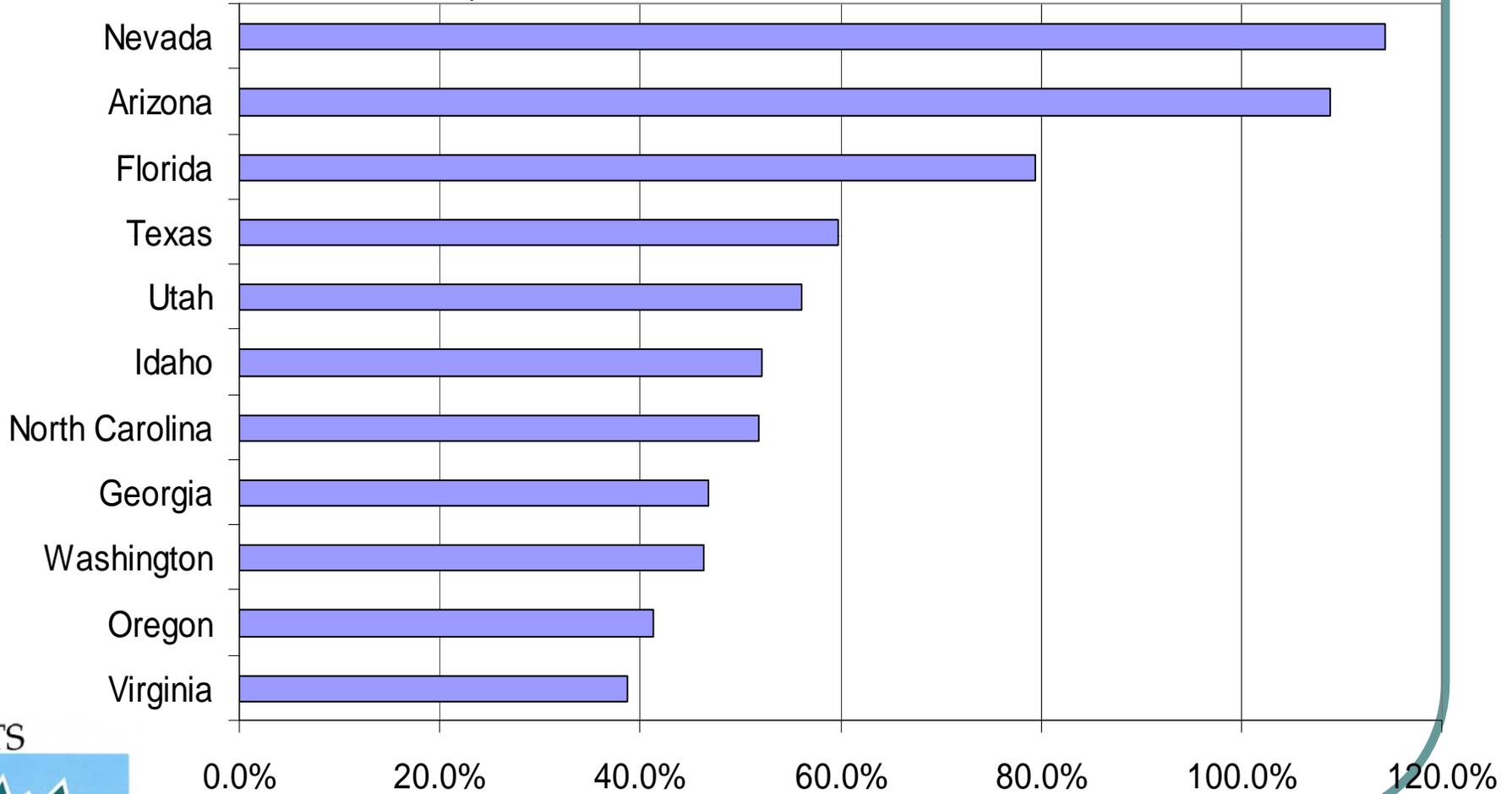


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Future Demand and Population Change

Top Ten States in Pct Growth of VMT to 2050



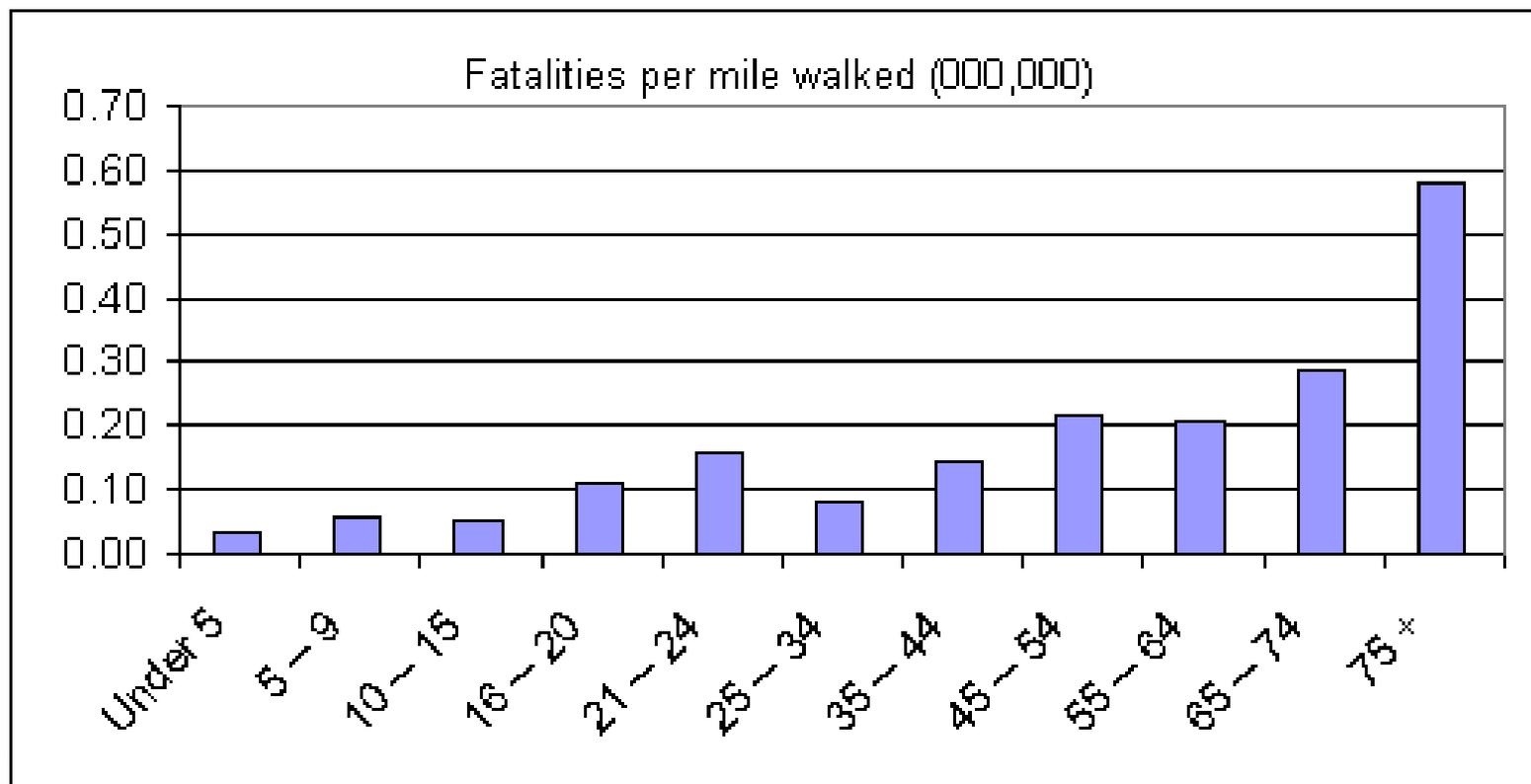
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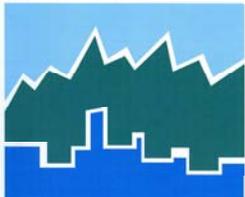
Estimated on current VMT/person from NHTS and Census population forecast

Safety Planning - California

Pedestrian Fatalities per Mile of Exposure



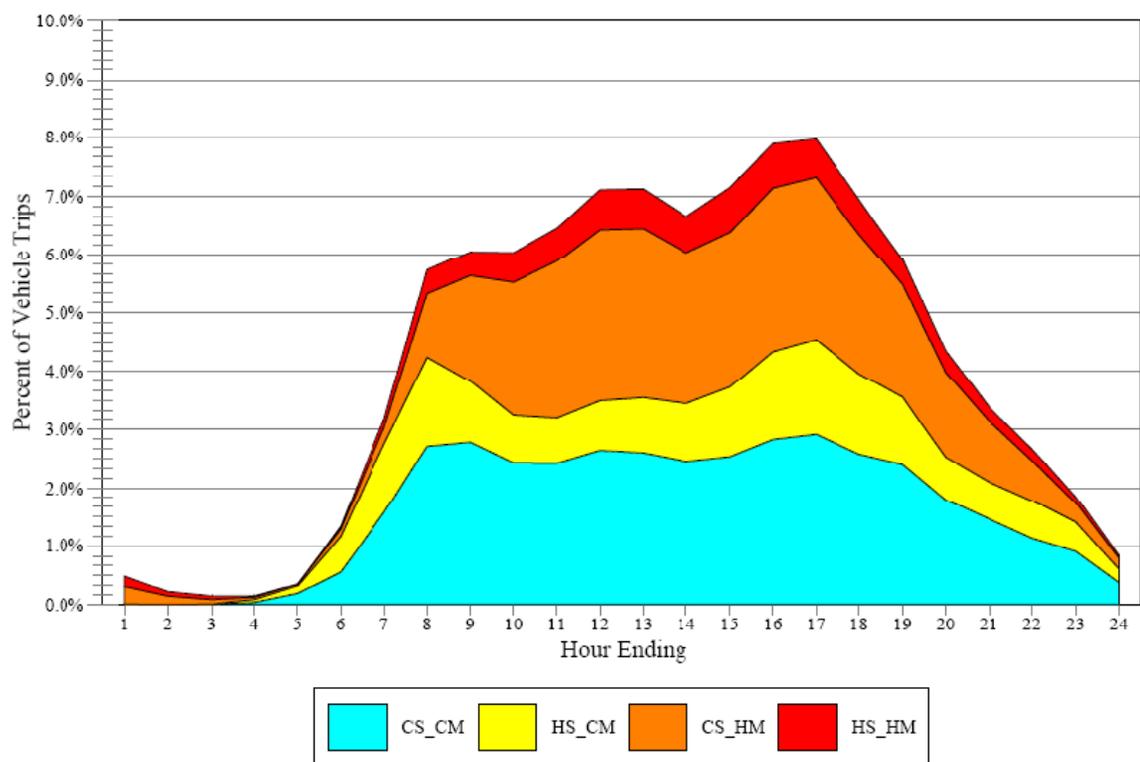
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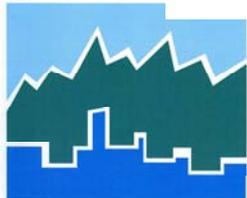
Source: 2001 FARS pedestrian Fatalities and NHTS 2001 miles walked

Air Quality - New York

Vehicle Starts, Trip Lengths by Time of Day and Vehicle Utilization
Engine Mode of Operation



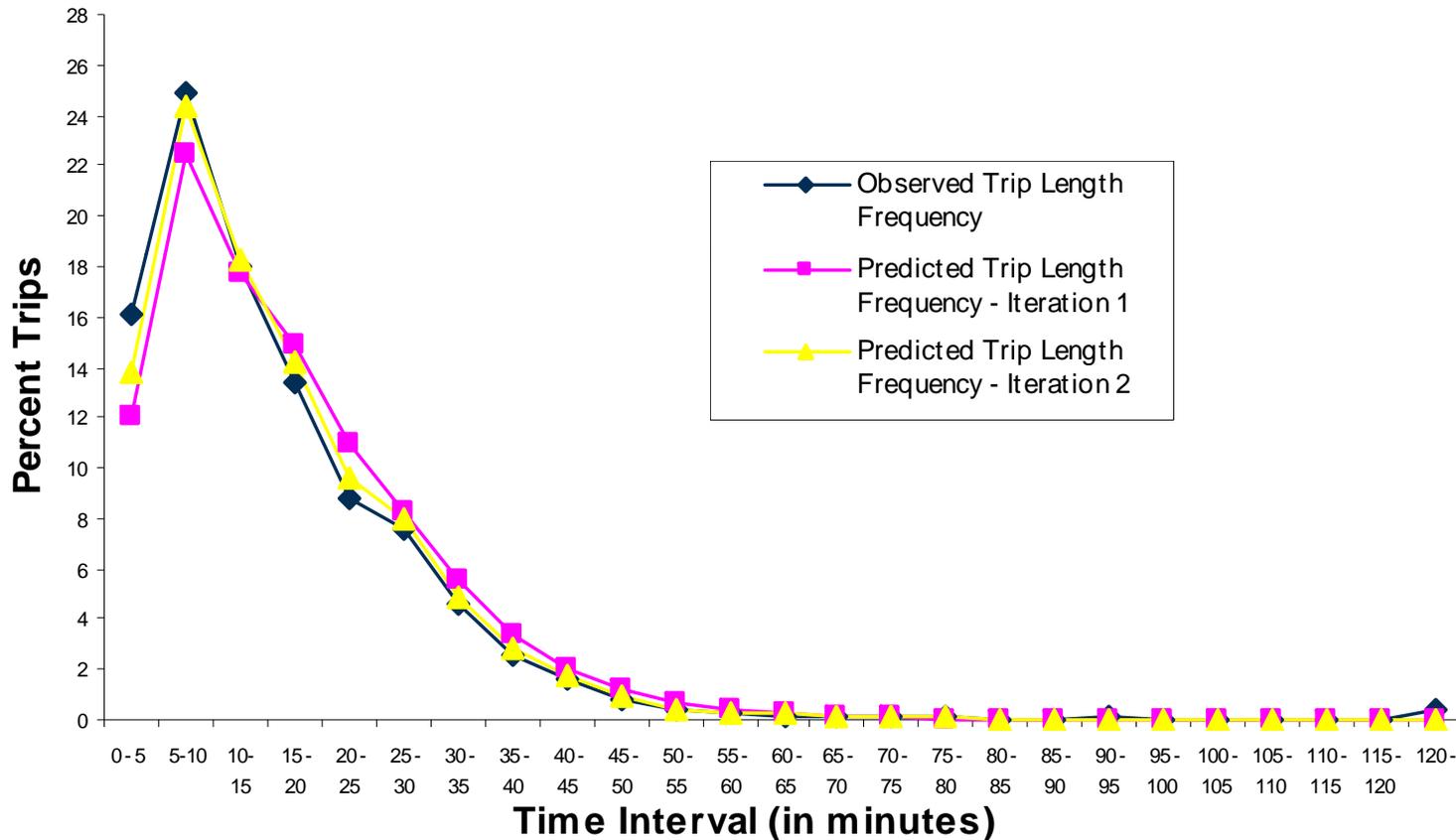
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Source: 2001 NHTS

Statewide Forecasting - Wisconsin

HBW Observed Vs Predicted Trip Length Frequency



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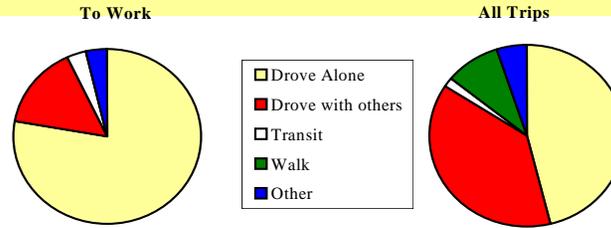
Source: 2001 NHTS Bruce Aunet, WI DOT & Cambridge Systematics Inc.

Performance Measures - Virginia

Mode

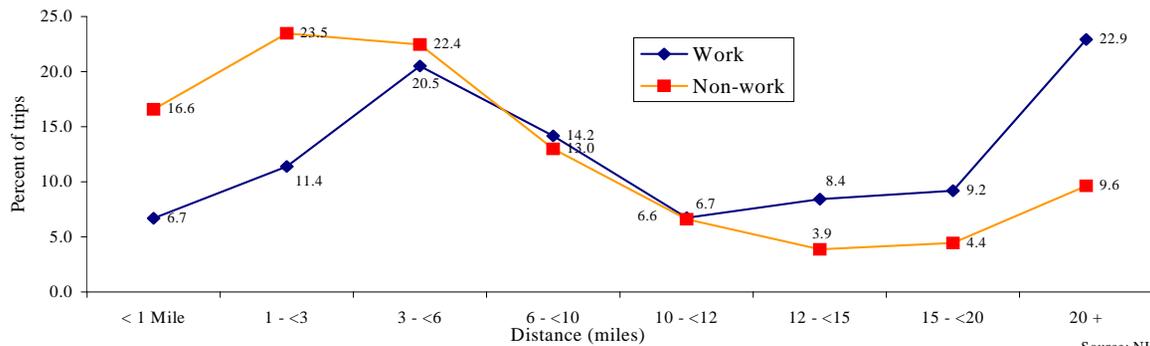
13. Means of Transportation, 2001

Percent of Workers	To Work		All Trips
	NHTS (Actual, Travel day)	Census (Usual last week)	
Drove Alone	77.0	77.1	46.0
Drove with others	15.1	12.7	38.1
Transit	3.2	3.4	1.8
Walk	0.0	2.3	9.2
Other	3.6	4.4	4.9



Source: NHTS

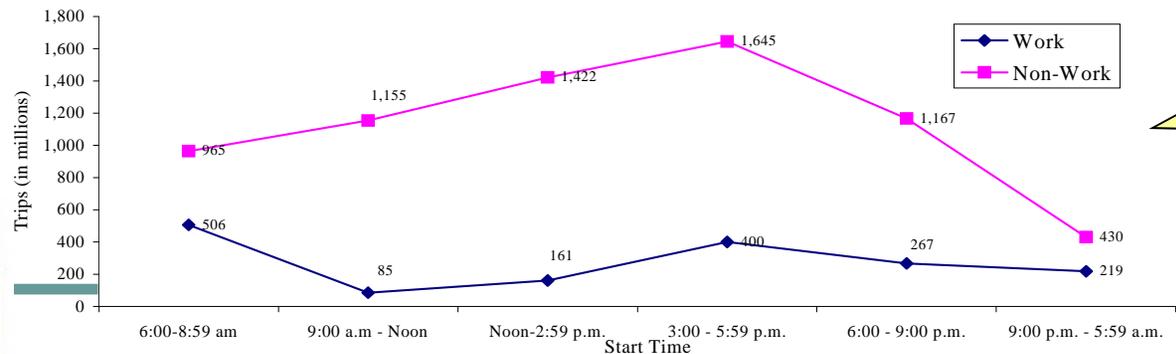
14. Trip Length Distribution for Work and Non-Work Trips



Source: NHTS

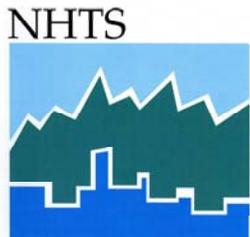
Trip Length Distribution

15. Number of Annual Weekday Trips by Time of Day



Source: NHTS

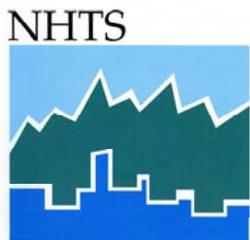
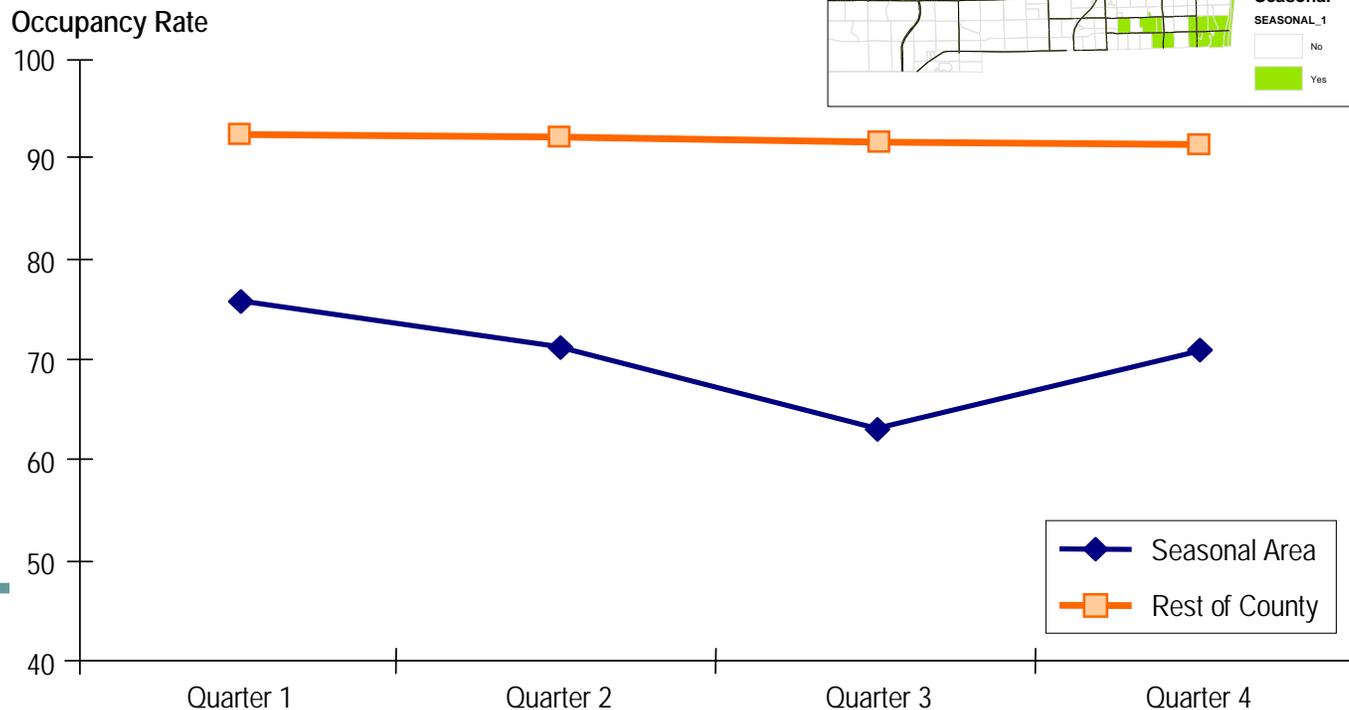
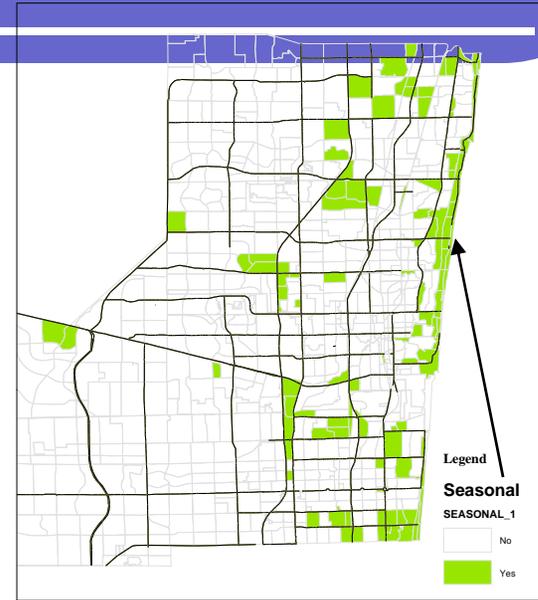
Trips by time of day



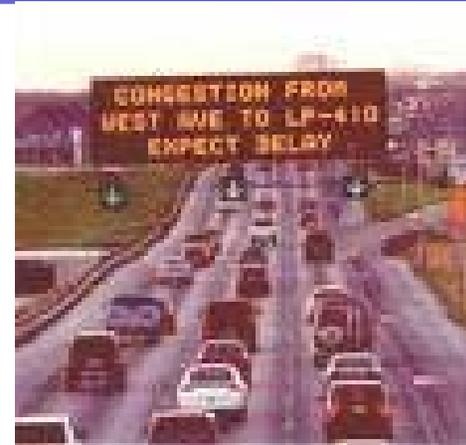
Source: 2001 NHTS

Special Studies - Florida

- Hurricane Evacuation Planning
- Weekend and Holiday Travel Planning
- Event Planning
- Seasonal Resident Impact



Future NHTS Data



The Environment

- Reauthorization
- Big Issues (infrastructure, climate, finance, congestion)
- Competing Programs/Data Flood
- Limited State/Local resources

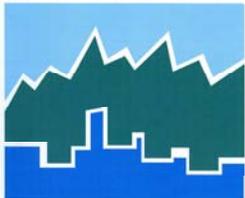
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NHTS Program Future

- Regular Funding Cycle
- Continuous Measurement and Tools
- Dedicated Resources for Methods Research
- Clear Source for Planning and Policy Information Needs
- Active and Robust Add-On Program

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Thank You!
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