The Impact of Race, Sex, and Age in Travel Behavior

Driving and Behavior
National Press Foundation

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National Household Travel Survey

About the Source Data


- **Target Population**: Civilian U.S. residents in households (of all ages). National sample of about 70,000 households and 160,000 people.

- **Information Obtained**:
  - Demographic information (race, age, sex, relationships, immigrant status, income, internet use, worker status)
  - Vehicle information (make, model, year, who is driver, who is passenger)
  - Detailed travel reports from each household member for a single day, for all trips by all purposes
How are the Survey Data Used?

- **Research**: Measure changes in travel (e.g. changes in the purpose of trips, such as eating out) over time

- **Safety**: VMT by age and sex used to calculate accident exposure rates

- **Mobility**: Travel of specific groups: elderly, working women, school children, low income

- **Transportation Planning**: Commuting trends (e.g. miles and minutes for average commutes, trip chaining)
Who uses the survey data?

- Governments: 22%
- Universities: 34%
- Interest Groups: 17%
- Media: 12%
- Consultants: 15%
What does the NHTS tell us about all travel?

- Trends show astounding growth in personal travel contrasted with the decline in emissions and fatalities
- Americans have more and more household vehicles, and are keeping their cars longer
- Weekend and non-work travel is growing faster than commuting
- Our attitudes show little concern for congestion but greater worry about safety
What can we learn about race, sex, and age from the NHTS?

- Whites enter the workforce and drive at earlier ages.
- Half of elderly Hispanic and Asian women don’t drive.
- Older drivers are more likely to drive older cars with fewer safety features.
- Older drivers are more at-risk for fatal accidents.
- Asians and African-Americans who drive to work travel at twice the speed of non-drivers.
- Women drivers of all races have shorter trips than men, perhaps because they work closer to home even with the same occupations.
- The kinds of short stops made during the commute varies according to the race and sex of the commuter.
Whites drive at younger ages than African-Americans or Hispanics.
One-third of all non-drivers are 65 and older, but half of elderly Hispanic and Asian women don’t drive.
There will be more older drivers in the next decades, especially women of color.
Older drivers are more likely to drive older cars, with fewer safety features...especially older women.
And older drivers are more at risk of a fatal crash per mile driven....
Whites enter the workforce at younger ages than African-Americans or Hispanics.
Men of all races are more likely to be in the paid workforce...

Percent of Adults Who are Workers

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Men</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td></td>
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<tr>
<td>African-Amer</td>
<td></td>
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<tr>
<td>Women</td>
<td></td>
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<tr>
<td>White</td>
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<tr>
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</tbody>
</table>
Driving and working combine to increase mobility....
Mobility means access to goods and services, including potential employers...

The smaller circle represents the range of daily travel for a low-income African-American man, and the larger circle the range for a high-income African-American man. This example is in Atlanta, GA.
Hispanic men spend more of their travel in work tours...
Women, especially African-Americans and Hispanics, are much more likely to carpool or take transit to work...
And the vast majority of carpools are “Fam-pools’…

Percent of Carpools with One or More Members of Same Household

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fam-pool</td>
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</tbody>
</table>
More African-American and Hispanic workers live and work near a bus line, but proximity isn’t the whole story…

<table>
<thead>
<tr>
<th></th>
<th>Percent of Workers who Took Transit to Work</th>
<th>Percent of Workers with Workplaces within .25 miles of a Bus Line</th>
<th>Percent of Population Residing within .25 miles of Bus Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>20.0</td>
<td>60.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>40.0</td>
<td>60.0</td>
<td>80.0</td>
</tr>
<tr>
<td>African-Amer</td>
<td>40.0</td>
<td>60.0</td>
<td>80.0</td>
</tr>
</tbody>
</table>
Maybe because driving to work is nearly twice as fast, especially for Asians and African-Americans…
African-Americans who trip-chain live the farthest from work...

- **Great Circle Distance between Home and Work**
  - **Direct H-W Trip**
  - **Chained H-W Trip**

- **White**
  - Direct H-W Trip: 6
  - Chained H-W Trip: 8

- **Hispanic**
  - Direct H-W Trip: 4
  - Chained H-W Trip: 6

- **African-American**
  - Direct H-W Trip: 4
  - Chained H-W Trip: 10
African-American women are the most likely commuters to insert a short stop during the commute …
But fewer of those stops are to shop than in 1995….while shopping has grown for Hispanics.
Conclusions

Basic demographic data can reveal hidden truths about complex social questions, including travel behavior...

Travel is “gendered”, and the travel by men and women varies more or less within race.

Deeply ingrained residential segregation requires persistence and time to change.

Mobility has a long history as part of the civil-rights movement (remember the bus boycotts in the 1950s) because equal mobility is equal access to opportunities, employment, and goods.