Walking is Not Dead: Recent Findings from the NHTS

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National Household Travel Survey

- A snapshot of travel by people in the U.S. (all ages)
- Conducted by FHWA periodically since 1969
- Only national source of trends in daily travel

**Survey Method:**
- Samples from all state and regions, inc. rural and urban areas
- Conducted in English and Spanish
- Telephone recruit--travel-diary mail out
- Telephone retrieval using Computer Assisted Telephone Interviews (CATI)
- Single-day travel-diary for each person’s travel, covering 365 days
- Weighted to represent annual and daily person travel in the U.S.
- All trips, all purposes, all modes on an assigned day for all people
NHTS Content Overview

- **Descriptive statistics**
  - Households
  - People (workers/drivers)
  - Vehicles
  - Trips

- **Travel Behavior**
  - Mode share distribution
  - Travel time, speed, distance,
  - Work and Non-Work Travel
  - Travel to school

- **Special Populations**
  - Older Drivers and non-Drivers
  - Bike and Pedestrian
  - People with Disabilities
  - New Immigrants

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For Each Vehicle:
- Make
- Model
- Age (year)
- How long owned*
- Odometer readings

For Each Household:
- Number of people
- Number of drivers
- Number of workers
- Number of vehicles
- Income

For Each Person:
- Age
- Sex
- Driver status
- Worker Status
- Annual Miles

Daily Travel Data:
- Origin and Destination address (for add-ons)
- Time trip started and ended
- Distance
- Means of transportation:
  1. vehicle type
  2. if household vehicle, which one
  3. if transit, wait time
  4. if transit, access and egress mode*
- Detailed purpose*
- Number of passengers on trip:
- Most recent trip for non-travelers (date)*

www.travelbehavior.us
CA-NHTS is the Add-on Sample distributed proportionately across the State

<table>
<thead>
<tr>
<th>Geography</th>
<th>Total Sample (Households)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>21,225</td>
</tr>
<tr>
<td>District 1 Eureka</td>
<td>255</td>
</tr>
<tr>
<td>District 2 Redding</td>
<td>326</td>
</tr>
<tr>
<td>District 3 Marysville</td>
<td>1,609</td>
</tr>
<tr>
<td>District 4 Oakland</td>
<td>3,808</td>
</tr>
<tr>
<td>District 5 San Luis Obispo</td>
<td>735</td>
</tr>
<tr>
<td>District 6 Fresno</td>
<td>990</td>
</tr>
<tr>
<td>District 7 Los Angeles</td>
<td>3,767</td>
</tr>
<tr>
<td>District 8 San Bernardino</td>
<td>1,566</td>
</tr>
<tr>
<td>District 9 Bishop</td>
<td>22</td>
</tr>
<tr>
<td>District 10 Stockton</td>
<td>815</td>
</tr>
<tr>
<td>District 11 San Diego*</td>
<td>6,050</td>
</tr>
<tr>
<td>District 12 Irvine</td>
<td>1,282</td>
</tr>
</tbody>
</table>

*District 11 (San Diego) had a supplement of 4,600 households*
The 2009 NHTS has an added focus on non-motorized:

Prompts are read by the interviewer at various places in the questionnaire to remind respondents to include walk and bike:

• In the past week, how many times did you take a walk or a jog outside including walk the dog and walks for exercise? (This includes walks from home, work, or some other place)

• Please tell me about all the trips you took on {TRIPDATE}. A "trip" is any time you went from one address to another. Be sure to include stops made for any reason, such as buying gas or taking someone somewhere. And please include any trips made by walking, biking or transit.

• Before we continue, did you take any other walks, bike rides, or drives on {TRIPDATE}? Please include any other trips where you started and ended in the same place.

In addition, Caltrans added questions to obtain more detail and ask about barriers to walking more...
Analyzing Trends
Trends in walking by purpose, 1990-2009

Source: NHTS Data series, McGuckin’s analysis
Trend estimation is complicated by changes in methods and protocol:

Trends in Estimated Walk Trips and Changes in Survey Protocols

- **1990**: Recall of travel ‘yesterday’
- **1995**: Implemented Two-Stage Travel Diary
- **2001**: Added introductory prompts to include exercise
- **2009**: Kept prompts and moved general question before specific travel reports

Source: NHTS data series, McGuckin’s analysis
Many of the added walks are recreational e.g. ‘to walk the dog’

### 2009 NHTS Percent of Daily Walk Trips to “Walk the Dog”

<table>
<thead>
<tr>
<th>State</th>
<th>Percent of Daily Walk Trips to “Walk the Dog”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>8.0</td>
</tr>
<tr>
<td>Georgia</td>
<td>18.0</td>
</tr>
<tr>
<td>Florida</td>
<td>13.9</td>
</tr>
<tr>
<td>South Carolina</td>
<td>13.4</td>
</tr>
<tr>
<td>Virginia</td>
<td>10.9</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>10.7</td>
</tr>
<tr>
<td>North Carolina</td>
<td>10.2</td>
</tr>
<tr>
<td>All Other States</td>
<td>8.2</td>
</tr>
<tr>
<td>Indiana</td>
<td>7.6</td>
</tr>
<tr>
<td>Arizona</td>
<td>7.2</td>
</tr>
<tr>
<td>Texas</td>
<td>7.1</td>
</tr>
<tr>
<td>Iowa</td>
<td>7.1</td>
</tr>
<tr>
<td>California</td>
<td>6.1</td>
</tr>
<tr>
<td>New York</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: 2009 NHTS Day Trip File, McGuckin’s analysis
The number of walks recalled ‘last week’ is higher than the number reported on the travel day...

Recalled versus Reported Walks -- Selected States

[Bar chart showing the comparison of recalled walks 'last week' and diary day walk trips per week for selected states, with data for CA, FL, GA, NC, NY, TX, VA, and US.]
People are likely to over-report walks for exercise and under-report walking errands ‘Last Week’...

Source: CA-NHTS, McGuckin’s analysis
Reports of walks ‘Last Week’ increased between 2001 and 2009, esp. people reporting 5 or more.

Source: NHTS Data series, McGuckin’s analysis
But people who say they walked for exercise or the dog report more minutes walking...

"In the past week about how many minutes did you spend walking outside, including walking the dog and walks for exercise?"

Source: 2009 NHTS California Add-on, McGuckin’s analysis
Access and Egress to Transit
Walking is the major mode of Access to Transit

Source: CA-NHTS add-on, McGuckin’s analysis
How much is added by including transit access/egress?

Annual Walk Trips for Major Transit Markets

<table>
<thead>
<tr>
<th>Region</th>
<th>Walk Trips</th>
<th>Walk Access</th>
<th>Walk Egress</th>
<th>Annual Walk Estimate (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCAG</td>
<td>31%</td>
<td>33%</td>
<td>19%</td>
<td>-600</td>
</tr>
<tr>
<td>MTC</td>
<td>33%</td>
<td>25%</td>
<td>19%</td>
<td>-1,000</td>
</tr>
<tr>
<td>SANDAG</td>
<td>25%</td>
<td>19%</td>
<td>25%</td>
<td>-2,500</td>
</tr>
<tr>
<td>SACOG</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>-4,000</td>
</tr>
</tbody>
</table>

Source: CA-NHTS add-on, McGuckin's analysis
Safe Routes to School
‘Safe Routes to School’ module includes detail on travel to school, including attitudes of parents:

- How many people does your child walk/bike to school with? [If walk/bike is mode]

- At what grade would you allow your child to walk or bike without an adult to/from school? [If walk/bike is not mode]

- Please tell me how much the following issues affect your decision to allow or not to allow your child to walk or bike to or from school:
  - Distance
  - Amount or Speed of Traffic
  - Poor Weather
  - Crime

- Are there any other issues that affect your decision to allow or not allow your child to walk or bike to or from school? (open-ended response)
More children in CA live within walking distance of school...

Source: 2009 NHTS, McGuckin’s analysis
Most children in CA travel to school in a vehicle...

Source: 2009 NHTS, California Add-on McGuckin’s analysis
60% of parents would wait until seventh grade to let their child walk to school...

Grade at which Parents would let their children walk to school...

11% said "never"
Issues in California
Most people in California say they are ‘too busy’ to walk more, but many of the barriers are related to transportation:

- Too busy
- Not Enough Light at Night
- Things to carry
- No shops or other interesting places to go
- No one to walk with
- Fear of street crime
- No nearby paths or trails
- Fast traffic
- No nearby parks
- Unsafe street crossings
- Small children along
- Too many along
- No sidewalks or sidewalks in poor condition
- Poor Health
- Not enough people walking around
- Air pollution
- Streets too wide

Source: 2009 NHTS, California Add-on McGuckin’s analysis
The Districts with the Highest Problem Rating:

<table>
<thead>
<tr>
<th>Barriers to Walking More</th>
<th>Highest District</th>
<th>Second Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streets too wide</td>
<td>Los Angeles</td>
<td>Eureka</td>
</tr>
<tr>
<td>No sidewalks or sidewalks in poor condition</td>
<td>Redding</td>
<td>Fresno</td>
</tr>
<tr>
<td>Too many cars</td>
<td>Los Angeles</td>
<td>Fresno</td>
</tr>
<tr>
<td>Unsafe street crossings</td>
<td>Los Angeles</td>
<td>Fresno</td>
</tr>
<tr>
<td>Fast traffic</td>
<td>Los Angeles</td>
<td>Fresno</td>
</tr>
<tr>
<td>No nearby paths or trails</td>
<td>Eureka</td>
<td>Fresno</td>
</tr>
<tr>
<td>Not Enough Light at Night</td>
<td>San Bernadino</td>
<td>Redding</td>
</tr>
</tbody>
</table>

Source: 2009 NHTS, California Add-on McGucken’s analysis
Transportation planning and policy can:

- Remove barriers to walking through healthy community design (livability)

- Promote safe and convenient opportunities for physical activity through complete streets and active transportation infrastructure

- Reduce the carbon footprint of daily travel while also improving air quality

- Ensure that all people have access to safe, healthy, convenient, and affordable transportation (e.g. walking)
TRB Task Force on New Directions for the National Household Travel Survey (ABJ45T)

- Goal: to reach out to the transportation community re: the use of NHTS and potential impacts of the redesign of the survey
- Task force members represent users from a variety of perspectives (see http://goo.gl/Ll3dC for a list of members)
- If you are interested in participating in an in-person NHTS user discussion, we invite you to join us at one of our upcoming user forums:
  - *NATMEC, Wednesday June 6 from 10:30 to noon in the Continental Room.
  - *Tools of the Trade, Wednesday Sept 12 (as part of the Wednesday morning data workshop)
  - TRB Summer Meeting in Irvine, TBA
TRB Task Force on NHTS:
NHTS-USER Listserv Subscription Instructions:

You can join the list by sending an email to listserv@listserv.tamu.edu and in the BODY put

SUBSCRIBE nhts-user firstname lastname

(for example: “SUBSCRIBE nhts-user stacey bricka”)

**You will receive an email requesting confirmation – please watch for that email and respond promptly, as you have a limited time window in which to confirm.