Intercity Travel Market Analysis

Committee for a Study of Intercity Passenger Travel Issues and Opportunities

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Background and Purpose
Basic Data Needs:

- Volume in Highway, Air, Rail, other
- Mode share percents
- Purpose percents
- Market demographics
- Travel Time
- Cost
Questions about Intercity Passenger Travel:

- What are the mode shares and how do people make mode decisions?
- What are the traveler characteristics that are critical to understand?
- What proportion of inter-city travel is for business? leisure?
- Are most travelers alone or with others? Are children along on the trip?
- Are there important trends in long-distance travel to consider?
This presentation includes:

A Description of Long-Distance Travel:
- The proportion of PMT for long-distance travel
- Trends in Air versus Roadway long-distance travel
- Trends in Mode and Purpose of Long-Distance Travel

A brief Market Analysis (specifically trips of 100-500 miles)
Description of Long-Distance Travel*

*Person trips of 100 miles or more from home by all travelers unless otherwise noted
Trends show long-distance travel accounts for about 15-20 percent of all person miles of travel (PMT):

<table>
<thead>
<tr>
<th></th>
<th>1977</th>
<th>1995</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-Distance Trips per Household (100+ miles one-way)</td>
<td>6.3</td>
<td>9.8</td>
<td>12.1</td>
</tr>
<tr>
<td>Long Distance Trips per Capita (100+ miles one-way)</td>
<td>2.2</td>
<td>3.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Annual PMT in Everyday Travel per Capita</td>
<td>8,816</td>
<td>13,120</td>
<td>14,690</td>
</tr>
<tr>
<td>Long Distance PMT per Capita</td>
<td>1,584</td>
<td>3,075</td>
<td>2,642</td>
</tr>
<tr>
<td>Long Distance Person Trips as Pct of All PT</td>
<td>0.06%</td>
<td>0.05%</td>
<td>0.06%</td>
</tr>
<tr>
<td>Long Distance Person Miles as Pct of all PMT</td>
<td>15.2%</td>
<td>19.0%</td>
<td>15.2%</td>
</tr>
</tbody>
</table>

Source: ATS 1977 and 1995 (published) and McGuckin’s analysis of NHTS 2001 Long Distance, trips 100 miles or more
In 2001, nearly 80 percent of trips over 100 miles were inter-city trip length (100-500 miles):

- More than 500 Miles, 21%
- 100-500 Miles, 79%

Source: McGuckin’s analysis of NHTS 2001 Long Distance—trips 100 miles or more by travelers 18+
Most long distance trips in the US were in vehicles:

Source: ATS 1977 and 1995 (published) and McGuckin’s analysis of NHTS 2001 Long Distance—trips 100 miles or more
Trends show air passenger miles growing slightly faster than vehicle miles of travel (VMT):

Source: HPMS VMT and Air Revenue Miles from RDM Associates, McGuckin’s trend analysis
Trends show declines in the ticket price for domestic air and slight increases in gas cost:

(Ticket price does not include fees and taxes (air) and gas cost does not include operating expenses)

Source: McGuckin’s analysis
see notes

(1) start in 1995 to match 1995 ATS

(2) http://www.planetickets.com/airfare.html Cost of Tickets for Q1 shown

(3) Current dollars calculated by http://www.usinflationcalculator.com/

(4) Historic Gas Costs from www.eia.gov

(5) Calculated by dividing ticket cost in current dollars (3) by estimated trip length (7)

(6) Assumes national average of 22 mpg (from NHTS)

(7) http://web.mit.edu/airlinedata/Revenue and Related/Passenger Revenue/System Passenger Revenue per Equivalent Seat Mile (PRESM).htm
Non-auto modes were concentrated in a few areas:

Non-Auto Mode Distribution, Trips 100-500 miles

Source: McGuckin’s analysis of 1995 ATS, trips between 100-500 miles, travelers 18-75
NY-NJ had more than twice the amount of inter-city bus as the next highest metro area:

<table>
<thead>
<tr>
<th>Mode Distribution, Trips 100-500 Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Inter-city Trips</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>POV</td>
</tr>
<tr>
<td>Air</td>
</tr>
<tr>
<td>Bus</td>
</tr>
<tr>
<td>Train</td>
</tr>
<tr>
<td>Ship/Other</td>
</tr>
<tr>
<td>All</td>
</tr>
</tbody>
</table>

Source: McGuckin’s analysis of 1995 ATS, trips between 100-500 miles, travelers 18-75
Trends in the Purpose of Travel

Purpose: Pct Change 1977-2001:

- Shopping: 636%
- Personal Business and Medical: 142%
- Sightseeing, vacation and relaxation: 606%
- Entertainment: 95%
- Outdoor Recreation: -19%
- Business or Convention: 142%
- Visit Friends and Family: 67%

Source: published data for 1977 and 1995 ATS, McGuckin’s analysis 2001 NHTS trips of 100 miles or more
While higher income people traveled more, middle income people accounted for the majority of trips:

The majority of long distance trips were made by people with household incomes of less than $100K

Source: McGuckin’s analysis of NHTS 2001 Long Distance—All trips 100 miles or more by travelers 18+, 2001 dollars
We still don’t know how 9/11 affected mid-range mode choice:

Source: McGuckin’s analysis of 1995 ATS and 2001 NHTS (post 9/11) trips of 100 miles or more one way, private vehicle and air only
Market Analysis for Intercity Travel*

*Trips of 100-500 miles in length taken by travelers 18-75
Inter-city travel markets can be described with demographic groups:

- People in Couple HHs (inc. Ret.)
- People in families with children 5+
- People in families with small children-
- People in Single HHs (inc. Ret.)

Source: McGuckin’s analysis of NHTS 2001 Long Distance, people aged 18-75 and trips 100-500 miles in length
Basic Trip Purpose:

• Business
  • ‘To Work’, ‘For Business’, or ‘Combined Business and Pleasure’

• Leisure/Other
Market Segment Description:

1. People in single-person or couple HHs traveling for Business or Bus/pleasure
2. People in single-person or couple HHs traveling for Leisure/Other
3. People in HHs with small children traveling for Bus or Bus/pleasure
4. People in HHs with small children traveling for Leisure
5. People in HHs with Older Children Traveling for Bus or Bus/Pleasure
6. People in HHs with Older Children Traveling for Leisure
7. Retired Singles or Couples Traveling for Any Reason
Leisure travel was more common than business
Overall about 75% of trips are for leisure and 25% for business

Source: McGuckin’s analysis of NHTS 2001 Long Distance, trips 100-500 miles in length, travelers 18-75
The majority of trips included people who traveled together:

30-45% of trips were by lone travelers

55% - 70% of trips were people traveling with others**

**over one-third of these were with children

Source: McGuckin's analysis of 1995 ATS and 2001 NHTS, trips between 100-500 miles, travelers 18-75. 1995 ATS shows 44% alone, 56% with others, the 2001 NHTS shows 32% alone, 68% with others. Pie distribution and proportion with children from 1995 ATS.
More than half of the trips included people who traveled together and... 

About as many people traveled with children as traveled alone for business:

<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>Leisure</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveled alone</td>
<td>18%</td>
<td>26%</td>
<td>44%</td>
</tr>
<tr>
<td>Traveled with other adults</td>
<td>5%</td>
<td>31%</td>
<td>36%</td>
</tr>
<tr>
<td>Traveled with Children</td>
<td>1%</td>
<td>19%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: McGuckin’s analysis of 1995 ATS trips 100-500 miles in length travelers 18-75
Purpose had a larger influence on travel party size than income:

Source: McGuckin’s analysis of NHTS 2001 Long Distance, trips 100-500 miles travelers 18-75 years old
And traveling with others influenced mode choice:

<table>
<thead>
<tr>
<th>Mode of travel: alone and with others</th>
<th>National</th>
<th>Originated in NY MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alone</td>
<td>w/ Others</td>
</tr>
<tr>
<td>Vehicle Travel</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>Air</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Bus</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>Train</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>All</td>
<td>32%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Source: McGuckin’s analysis of NHTS 2001 Long Distance, trips 100-500 miles travelers 18-75
Summary and Conclusions
Long-distance travel behavior is about motivation, opportunity, resources, constraints, and obligations.

- *Trip purpose is linked to travel party size (sometimes the fun is in going together)*

- *Travel party size effects mode choice (bring the kids and we can’t afford to fly)*

- *Mode choice can be made before destination choice (where can we drive to this weekend?)*
More information is needed about what motivates travelers, what are their opportunities and constraints?

- Baby boomers in second life may increase frequency of recurring long trips to university and second homes.
- As social networking increases, long-distance travel IRL may be increasing.
- People in urban areas with many attractive destinations may travel less frequently.
- People who have strong household ties, such as small children, may travel less.
- The dispersion of treatment centers and specialists may increase recurring long trips for medical purposes.

*Henderson and Trani, 2008

**Auxhuasen, 2008
Summary of Information on Inter-City Passenger Travel:

Trends show about 15-20% of PMT is in long-distance travel:

- Overall, air grew slightly faster than vehicle travel 1995-2010
- 80 percent of trips over 100 miles were inter-city trip length
- The purpose of long-distance travel may be shifting towards leisure activities and personal business (inc. medical)
- Purpose has a big effect on travel party size: Travel party size effects mode decisions

Inter-city Passenger Travel (trips 100-500 miles in length):

- **People travel for leisure**: About 25 percent of travel was business/75 percent leisure
- **People travel together**: Between 56-66 percent of inter-city trips were people traveling together—at least one third of those were with children
- **Purpose and travel party size impacts mode choice**: vehicle travel is 2-3 times more likely when people travel together

About as many people traveled with children as traveled alone for business