Perceptions & use of TRAX: Can drivers become happy riders?

Session: Rail~Volution 2005,
Just the Facts: Understanding the Real Benefits of TOD

Barbara B. Brown & Carol M. Werner, U. of Utah
With help from students

Barbara.brown@fcs.utah.edu
Switching from car to new TRAX service

- Successful project
  - Completed early
    - (12/15/01 for 2002 Olympics)
  - Under budget
  - Double projected ridership
    - (14,000 vs. 6,600)
- But how do drivers become riders?
U of U example: Olympics turn a chronic parking shortage into an acute one

- Fall 2001: 14,800 U. parking spaces
- Olympics prep. closes 11 lots!
- Formula:
  - Chronic parking shortage
  - + Acute parking shortage
  - + Publicity
  - + TRAX =
  - Change to transit?
Students irate

- Student government petition
- Class action lawsuit!
- Drivers expect less satisfaction than bus riders with parking shortage
  - Mean = 4.74 vs. 3.30, 7= High satisfaction
    \[(t(22) = 2.86, p < .009)\]
- So outreach & education needed
“No Silver Bullet” for behavior change
Must understand multiple supports for current behavior

Car use & dependence
- Car tax supports
- Car costs hidden
- Car comfort
- Car convenience
- Zoning for cars
- $40 B./yr Car ads
Comfort factor: TRAX vs. Bus stop ambiance & comfort
TRAX offers good service

- Fast
- Good routes
- Makes SLC livable
- Reliable
- Pleasant to use
TRAX fosters pro-SLC attitudes: “BIG CITY COOL”

- Am more interested in living near TRAX
- Will bring more visitors to U
- Want to know what is near TRAX stops
- Am more interested in going downtown
- Like SLC more
TRAX increases transit attractiveness

- Positive perceptions among riders AND non-riders
- "I was not as excited about the bus after my first few rides due to the numerous wackos I encountered"
Can those who drive change to TRAX? A tale of 3 groups

- Always use car
  - Pre-Olympics: 128 people
  - Olympics: 65 people
  - Post-Olympics: 41 people
- Both car & TRAX
  - Olympics: 22 people
- No longer use car
Drivers who report more productive/fun car experiences switch to TRAX less

<table>
<thead>
<tr>
<th>Pre-Olympics (car users)</th>
<th>Post-Olympics</th>
</tr>
</thead>
<tbody>
<tr>
<td># pleasant or productive activities in the car</td>
<td>1.97</td>
</tr>
</tbody>
</table>

Always use car

Use car & TRAX

Never use car
Drivers who try TRAX during Olympics parking disruption switch to TRAX more

<table>
<thead>
<tr>
<th></th>
<th>Pre-Olympics (car users)</th>
<th>Olympics</th>
<th>Post-Olympics</th>
</tr>
</thead>
<tbody>
<tr>
<td># pleasant or productive activities in the car</td>
<td>1.97</td>
<td>1.36</td>
<td>1.41</td>
</tr>
<tr>
<td>Tried transit:</td>
<td>54%</td>
<td>95%</td>
<td>76%</td>
</tr>
<tr>
<td>Always use car</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use car &amp; TRAX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never use car</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Among switchers: Pro-SLC appeal important for women; convenience important for men.

Pre-Olympics (car users)
- Tried transit: 54% used
- # pleasant or productive activities in the car:
  - 1.97: 95%
  - 1.36: 76%
  - 1.41: 54%

Olympics
- 54% used
- 95%
- 76%

Post-Olympics
- Always use car: Students (92%)
  - Not pro-SLC (-.28)
- Use car & TRAX:
  - Female (64%)
  - Students (68%)
  - Had parking pass (86%)
  - TRAX: pro-SLC (.55)
- Never use car:
  - Males (66%)
  - Few parking pass (49%)
  - TRAX: hi service (.19)
For those who try TRAX, productive/fun activities predict ridership

- % riders who report these productive/fun activities on TRAX:
  - Sleep
  - Chat
  - People watch
  - Work/study
  - Read
  - Think, relax

- Total # of productive/fun TRAX activities:
  - Car
  - Mixed
  - TRAX
Summary:
3 types of driver transitions

- “TRAX is not cool” students, who don’t switch
- “TRAX is cool” female riders/car users
- “TRAX has good service” male regular riders
Lessons learned

- Advanced planning crucial
- Multiple supports for transit important
  - Policy (Ed pass, zoning)
  - Psychology (connotations of comfort, multiple pleasures on route, multiple attractive & exciting destinations opened up)
- Market segments exist, but need nurturing
  - Pro-city females
  - Convenience males
- Early “try-it” experience is important
Long term effects

- UU parking: was 14,800, now 11,900 stalls
- TRAX ridership up
Recap: “No Silver Bullet” for behavior change--Look at multiple supports

- Car tax supports
- Car costs hidden
- Car use & dependence
- Zoning for cars
- Car comfort
- Car convenience
- Car ads
- $40 B./yr
- Car tax supports
- Car costs hidden
- Car use & dependence
- Zoning for cars
- Car comfort
- Car convenience
- Car ads
- $40 B./yr
TRAX is getting multiple levels of support

- New TRAX rail line
- Ed./media campaign
- Reduced parking
- Ed. Pass
- Reliability/excitement
- Useful & fun activities
- TRAX use
But rail needs more evidence & coalitions of advocates

- Public health
- Child & Sr. advocates
- Affordability advocates
- Economic dev./redev
- CNU/Livability
- Greens
- Rail use
- Child & Sr. advocates
- Affordability advocates
- Economic dev./redev
- CNU/Livability
- Greens
- Rail use
Current research: measuring METs before and after new TRAX stop opens

Accelerometer MET benefits?

New TRAX rail line

Reduced parking

Ed. Pass

Reliability/excitement

Ed./media campaign

Useful & fun activities
For more details

- email me for PDF of paper: Barbara.brown@fcs.utah.edu

- Others of potential interest