Learning about transportation-related livability: A mixed-methods approach

Ingrid E. Schneider, Ph.D., Tian Guo, Research Asst.,
Sierra L. Schroeder, M.S., Kent Gustafson, M.P.A.
Karla Rains, MnDOT
September 7, 2011
Livability...Quality of Life (QOL)
Purpose

• Understand
  – QOL
  – MnDOT role
  – performance measure opportunities
Our route today: 3, 11, 7

• 3 methods
  – 11 quality of life domains
  – 7 transportation elements
3 study methods

- Literature review
- Focus groups
- Questionnaire
3 study methods

- Literature Review
- Focus Groups
- Questionnaire
Method 1: Literature review
Results literature review: QOL points

- 50 years......
- Inconsistently measured
- Variety of domains
Transportation & QOL: infrequent & limited

- Infrequent inclusion
- Limited measures
- Emphasis on mobility & accessibility
- Examples
3 Study Methods

- Literature Review
- Focus Groups
- Questionnaire
Method 2: Focus Groups
Focus group results: 11 QOL domains (alpha order)

- Education
- Employment/finances
- Environment
- Housing
- Family, friends, & neighbors
- Health
- Local amenities
- Recreation & entertainment
- Safety
- Spirituality & individual psychic
- Transportation
Focus group results:
7 transportation elements (alpha)

• 1 Access
• 2 Design
• 3 Environment
• 4 Maintenance
• 5 Mobility
• 6 Safety
• 7 Transparency
Our route today: 3, 11, 7

• 3 methods
  – 11 quality of life domains
  – 7 transportation elements
Method 3: Questionnaire

- Representative sample, 44% response
- Quantify QOL & transportation’s role
- Importance & satisfaction with performance
Our route today: 3, 11, 7

• 3 methods
  – 11 quality of life factors
  – 7 transportation elements

...and the adventure continues!
Implications for research

• Multiple QOL domains

• Nuances of transportation elements

• Multiple-methods: still necessary?
Implications for transportation planning

• Complicated!

• Eventually, ideas where to focus

• Attend to changes: demographically, technologically & attitudinally
Purpose fulfilled?!

- Understand
  - QOL
  - MnDOT role
  - performance measure opportunities
Questions?!  

• Thanks to ....
  – Mn Department of Transportation for project support & Technical Assistance team!
  – Participants in focus groups!
  – Respondents to questionnaire!
  – You for your interest!
  – Contact: ingridss@umn.edu; 612 624 4947
Results: Differences by Age

• Younger (20-34)
  – Access: *public transportation*
  – Safety: *detractor only*
  – Mobility: *travel time detractor*

• Middle (35-59)
  – Access: *service transportation*
  – Mobility: *contributor & detractor*

• Older (60-75)
  – Access: *service transportation*
  – Safety: *discussed most by this age group, contributor & detractor*
  – Mobility: *ease of movement contributor*
## Results:
### Differences by Metro/Non-Metro

<table>
<thead>
<tr>
<th>Metro</th>
<th>Outstate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility contributes to QOL</td>
<td>Accessibility more often detracts from QOL</td>
</tr>
<tr>
<td>Mobility more often described as detractor</td>
<td>Within area &amp; to Metro</td>
</tr>
<tr>
<td>Snow &amp; ice removal very positive</td>
<td>Mobility is described more positively</td>
</tr>
<tr>
<td></td>
<td>Snow &amp; ice removal, but jurisdictional responsibility confusion</td>
</tr>
</tbody>
</table>