Minnesotan’s Quality of Life: A customer-centric approach for transportation

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Quality of Life (QOL)
Destination: Customer centric
QOL via 3, 11, 7

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

- Literature review
- Focus groups
- Questionnaire
Method 1: Results literature review

QOL points

- 50 years……
- Inconsistently measured
- Variety of domains
Construed vs consumer...?
Method 2: Focus groups in 29 locales, with 3 age groups & 4 ethnically diverse groups

- Alexandria
- Bemidji *
- Brainerd
- Detroit Lakes
- Duluth
- Mankato
- Metro, plus a pilot study *
- Rochester
- St. Cloud
- Virginia
- Willmar *
Method 3: Questionnaire

- Representative sample, 45% response (Dillman, et al. 2007)
- Quantify QOL & transportation’s role
- Importance & satisfaction with performance
Destination: customer centric QOL
Our route today: 3, 11, 7

- 3 methods
  - 11 quality of life domains
  - 7 transportation elements
Focus group results: 11 QOL areas

- Education
- Employment/finances
- Environment
- Housing
- Family, friends, & neighbors
- Health
- Local amenities
- Recreation & entertainment
- Safety
- Spirituality, faith & serenity
- Transportation
Questionnaire:
Minnesotans’ satisfied with Quality of Life

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger (18-34)</td>
<td>6.14</td>
</tr>
<tr>
<td>Middle (35-59)</td>
<td>6.05</td>
</tr>
<tr>
<td>Older (60+)</td>
<td>6.23</td>
</tr>
<tr>
<td>Overall</td>
<td>6.14</td>
</tr>
</tbody>
</table>
Importance of QOL areas

- Health
- Safety and security
- Family, friends and neighbors
- Housing
- Employment and finances
- Environment
- Education
- Spirituality faith and serenity
- Transportation
- Local services and amenities
- Rec and entertainment

Legend:
- Very unimportant
- Somewhat unimportant
- Neither
- Slight important
- Somewhat important
- Very important
Importance of 5 QOL life areas differ significantly across age groups

- Education
- Transportation
- Spirituality, faith, & serenity
- Local services
- Employment & finance
## Relationship among 11 QOL areas

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Education</td>
<td>Local services/amenities</td>
</tr>
<tr>
<td>Family/friends</td>
<td>Environment</td>
<td>Recreation</td>
</tr>
<tr>
<td>Safety/security</td>
<td>Employment</td>
<td></td>
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<td></td>
<td>Housing</td>
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<td></td>
<td>Transportation</td>
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<tr>
<td></td>
<td></td>
<td>Spirituality, faith &amp; serenity</td>
</tr>
</tbody>
</table>
Destination: Customer centric QOL via 3, 11, 7

• 3 methods
  – 11 quality of life domains
  – 7 transportation elements
Focus group results: 7 transportation areas

- Access
- Design
- Environment
- Maintenance
- Mobility
- Safety
- Transparency (planning & communications)
All transportation areas are important

- Accessibility: 6.79
- Safety: 6.72
- Maintenance: 6.64
- Mobility: 6.57
- Design: 6.36
- Planning: 6.15
- Environment: 5.77
- Communications: 5.6
8 out of 10 Minnesotans’ satisfied with MnDOT services
Satisfaction of MnDOT services consistent across regions
7 of 8 areas significant predictors of satisfaction with MnDOT services

Satisfaction with MnDOT services

Accessibility 0.13
Planning 0.17
Design 0.13
Safety 0.11
Communication 0.11
Mobility 0.04
Maintenance 0.27
Four areas identified as ‘good work’
Important for Minnesota’s future?

Short term (5-10 years)
• Maintenance
• Access
• Safety

Next generation...
• Access
• Maintenance
• Safety
Maintenance: 5 significant predictors statewide

- Keep road surface smooth, .48
- Road/pavement markings clearly visible, .12
- Visual appeal of roadsides, .08
- Clearing roads of debris, .07
- Rest areas for road trips, .05

Satisfaction with maintenance
Maintenance: most important selected items (identified by 10%+)

- Clearing roads of snow and ice: 76%
- Keeping road surfaces smooth: 54%
- Clearing sidewalks of snow and ice: 13%
- Making road/pavement markings clearly visible: 11%
- Making highway signs clearly readable: 11%
Next stop…

• Understand
  – QOL
  – MnDOT role

• Performance Measures Review
Quality of Life (QOL)
Questions?

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