Measuring Systems Impact of Travel Management Coordination Centers (TMCC)

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Outline

- Why Evaluations
- TMCC Two-tracked Evaluations
  - Institutional Process Evaluation
  - Systems Impact Evaluation
- Preliminary Evaluation Results
Why Evaluations?

- Why TMCC – business case
- Are we doing the right thing right?
- What works (or not) – replicate success, avoid mistakes
- Mandatory

<table>
<thead>
<tr>
<th>Congested Hours</th>
<th>Travel Time Index</th>
<th>Planning Time Index</th>
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</thead>
<tbody>
<tr>
<td>Average daily travel under congested conditions</td>
<td>Peak Period vs. Non-Peak Reliability of Travel</td>
<td></td>
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<tr>
<td>-25 mins. (4:06)</td>
<td>-2% (1.17)</td>
<td>-2% (1.42)</td>
</tr>
<tr>
<td>In 2008: 4:31</td>
<td>In 2008 - 1.19</td>
<td>In 2008 - 1.44</td>
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Institutional Process Evaluation

- Mostly qualitative
- Assess the “who, what and how” of TMCC design development.
- Track activities as the project unfolds over time to draw lessons and ideas for future deployments.
Institutional Process Evaluation Findings

- Completed in 2009
- TMCC design – a truly multi-stakeholder collaborative effort across all the sites
- Important lessons learned on
  - Stakeholder outreach and participation
  - Technical TMCC design
  - Systems engineering process
- Institutional Process Evaluation Report
  - [www.its.dot.gov](http://www.its.dot.gov) or [www.msaa-tmcc.org](http://www.msaa-tmcc.org)
Systems Impact Evaluation

- Mostly quantitative
- An assessment of project impacts
  - Positive and negative impacts
  - Includes intended and unintended consequences
- Not a report card, audit, or IV&V effort
- Effective method to maximize investments
- Common approaches
  - Before/after
  - With/without
Systems Impact Evaluation Strategy

Three Impact Areas
- Efficiency
- Productivity
- Customer Satisfaction

Three Data Sources
- Operational Performance
- Agency Staff Interviews
- TMCC User Surveys
Sample Measures

- **Efficiency**
  - Passengers per revenue mile
  - Passengers per revenue hour
  - Transit provider staff opinions on efficiency of demand response schedules

- **Productivity**
  - Per trip operating cost
  - Per passenger mile operating cost
Sample Measures

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- **Productivity**
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- **Customer Satisfaction**
  - Percentage of users feel services more available, accessible, and affordable
  - Percentage of users feel operators more helpful
  - Percentage of users are aware of TMCC
Preliminary Operational Data from Paducah KY
Revenue Miles by Month

- Demand Response
- Paratransit
- Medicaid

Month:
- Mar 2009
- Apr 2009
- May 2009
- Jun 2009
- Jul 2009
- Aug 2009
- Sep 2009
- Oct 2009
- Nov 2009
- Dec 2009
- Jan 2010
- Feb 2010

U.S. Department of Transportation
Research and Innovative Technology Administration
A Few Notes

- Evaluation is an integral part of the project, not an afterthought
- Project impacts are felt across the board, providers and travelers
- Need to engage all project stakeholders
- Good set of baseline data to see effects
- Often need multiple measures to describe one story
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Aiken SC TMCC Grand Opening – August 17, 2010
Questions and Comments

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