Measuring Up: More Bang for the Buck in Transportation Project Selection
July 16, 2014

Beth Osborne, Senior Policy Advisor
Performance Management

- Good governance: define goals, build coalitions, accountability and transparency
- Project optimization
- Fundraising tool, demonstrate ROI
- Analyze policy trade-offs and impacts on other sectors
# MAP-21 Performance Management

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>MEASURE CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATUS I</td>
<td>• Serious Injuries per VMT</td>
</tr>
<tr>
<td></td>
<td>• Fatalities per VMT</td>
</tr>
<tr>
<td></td>
<td>• Number of Serious Injuries</td>
</tr>
<tr>
<td></td>
<td>• Number of Fatalities</td>
</tr>
<tr>
<td>STATUS II</td>
<td>• Pavement Condition on the Interstates</td>
</tr>
<tr>
<td></td>
<td>• Pavement Condition on the Non-Interstate NHS</td>
</tr>
<tr>
<td></td>
<td>• Bridge Condition on NHS</td>
</tr>
<tr>
<td>STATUS III</td>
<td>• Traffic Congestion</td>
</tr>
<tr>
<td></td>
<td>• On-road mobile source emissions</td>
</tr>
<tr>
<td></td>
<td>• Freight Movement</td>
</tr>
<tr>
<td></td>
<td>• Performance of Interstate System</td>
</tr>
<tr>
<td></td>
<td>• Performance of Non-Interstate NHS</td>
</tr>
</tbody>
</table>
MAP-21 Performance Management

National Highway Traffic Safety Administration
- Fatalities and serious injuries
- Unrestrained occupant, un-helmeted fatalities
- Speeding-related, drunk driving fatalities
- Young drivers
- Pedestrians

Federal Transit Administration
- State of Good Repair
- Safety Criteria
Safety Proposed Rule -- Positives

• Establishes a single, consistent definition for “serious injury.”
• Addresses the safety of all users, not just drivers or passengers
• Addresses all public roads regardless of ownership and functional classification
• Offers flexibility to States and MPOs to go beyond baseline performance measure targets
Safety Proposed Rule -- Negatives

- States only need only “meet” targets half of the four measures required in law;
- States can “meet” the targets by showing little deviation from pre-existing trends;
- The rule allows for an extreme lag in reporting, responding, and evaluating – usually 4-5 years behind;
- Lumps motorized and non-motorized users together.
Congestion and Performance

- Annual hours of delay
- Average travel time
- Avoided delay
- Vehicles miles traveled
- Corridor throughput
- Miles traveled in severe congestion
- Reliability
## Congestion and Performance

<table>
<thead>
<tr>
<th></th>
<th>Denver 1982</th>
<th>Denver 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Travel Time Index</strong></td>
<td>1.09</td>
<td>1.31</td>
</tr>
<tr>
<td><strong>Average travel time</strong></td>
<td>50.6 minutes</td>
<td>49.6 minutes</td>
</tr>
<tr>
<td><strong>Travel time without traffic</strong></td>
<td>46.4 mins</td>
<td>37.9 minutes</td>
</tr>
<tr>
<td><strong>Extra rush hour delay</strong></td>
<td>4.2 mins</td>
<td>11.7 minutes</td>
</tr>
</tbody>
</table>

![Clocks showing the difference in travel times](images)
Congestion and Performance

Rush Hour Travel Time

Atlanta = 57.4 minutes

- 14.8 minutes extra rush hour delay
- 42.5 minutes without traffic

Chicago = 35.6 minutes

- 24.9 minutes without traffic
- 10.7 minutes extra rush hour delay
What’s Missing?

- Climate/Resilience
- Multimodal freight
- Access to opportunity
- Equity
- Public Health
- Economic
- Other environmental
What’s Missing?

• Current measures are based on data we have, not regional/state goals.
• Need more research into best ways to measure value of time, access, etc.
• Need to pay attention to what measures are being used today – some called design standards.