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Outline

- CSTSP Background
- Program Areas
- Why measure?
- How are others measuring?
- How to measure for CSTSP?
- Conclusions
CSTSP Background

- Strong community support
- 2002 - Safe Communities Coalition formed with grant from Oregon DOT
- July 2003 - Portland City Council approved the Portland Traffic Safety Coordination Council
- November 2003 - Community and School Traffic Safety Account created
  - Source: Annual increase in traffic fines
CSTSP Organizational Structure

- Portland Traffic Safety Coordination Council
  - "Leadership Group"

- Portland Safe Communities Coalition
  - "Community Stakeholders and Service Providers"

- Reducing Driver Error
  - TAC

- Pedestrian and Bicycle Safety
  - TAC

- Safe Routes to School
  - TAC

- Research and Evaluation Group
  - "Analytical Support"
Reducing Driver Error

**Goal** – Reduce traffic injuries and fatalities related to driver error

**Strategy**
- Red light running cameras
- Photo radar
- Traffic calming
- Speeding
- Occupant protection
- DUII
- Comprehensive education
Pedestrian and Bicycle Safety

**Goal** – Improve safety for pedestrians and bicyclists and foster better cooperation with auto drivers.

**Strategy**
- Enforcement partnership
- Pedestrian island partnership
- Capital improvement projects
- Share the road/ambassador program
Safe Routes to School

**Goal** – Increase safety in school zones and encourage walking and biking activity

**Strategy**
- Engineering improvements
- Maps and website for education
- Photo radar & speed reader
- Pilot programs
Distribution of Program Resources

- Engineering: 38%
- Enforcement: 38%
- Education: 20%
- Research and Evaluation: 4%

Total $2.5 million
Why measure?

- Direct link to program goals
- Prioritization of strategies
- Allocation of funds
- Accountability
- Communication
How are others measuring safety?

• State
  – Use primarily crash data
  – Safety performance measures are basic
  – Most are used to evaluate highway safety programs
  – Examples
    • Washington DOT “Gray Notebook”
    • Wisconsin DOT “Pedestrian, Bicycle & Pupil Transportation Safety”
How are others measuring safety?

• Regional
  – MPOs partnering with DOTs to develop multimodal long-range transportation plans
  – Implementing more “system” performance measures
  – Not easy to incorporate or measure safety
How are others measuring safety?

• Local
  – Safe Communities Programs
    • Not many performance measures
  – Safe Routes to School (SR2S)
    • Implemented SR2S programs in +- 20 U.S. states
    • Most SR2S are local programs
    • Some related performance measures
Performance Measure Criteria

- Clearly related to defined outcomes
- Measurability
  - Simple, available and quantifiable data
- Captures temporal issues
- Available at needed spatial detail
CSTSP Performance Measurement Plan

• Map desired outcomes for each program strategy

• Identify
  – Measures of outcomes
  – Measures of investment
  – At city, neighborhood or corridor aggregation
  – No plans to measure each “strategy”

• Review existing data and suggest new sources
# Mapping Outcomes – Driver Error

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Eng</th>
<th>Educ</th>
<th>Enfor</th>
<th>Desired Outcome</th>
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<tbody>
<tr>
<td>Red Light Running</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Angle and intersection crashes</td>
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<tr>
<td>Photo Radar</td>
<td></td>
<td>X</td>
<td>X</td>
<td>Speeding on residential streets and crashes</td>
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<tr>
<td>Res. Purchase Project</td>
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<td>Speeding on residential streets and crashes</td>
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<tr>
<td>Speed Awareness</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Speeding and related crashes</td>
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<tr>
<td>DUII</td>
<td></td>
<td>X</td>
<td>X</td>
<td>Driving under the influence crashes</td>
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<tr>
<td>Occupant Protection</td>
<td></td>
<td>X</td>
<td>X</td>
<td>Crashes related to seat belt use</td>
</tr>
</tbody>
</table>
Sample Outcome Measures – Driver Error

• Red light running
  – Angle crashes at intersections
  – Public awareness of red light running

• Photo radar
  – Speed-related crashes (all, residential)
  – Complaints to 503-SAFE
  – Incorporate into citizen survey

• Enforcement
  – Seat belt crashes and injuries

• Education
  – Driver error crashes by age
Sample Investment Measures – Driver Error

• Engineering
  – Number of cameras operating
  – Miles of street calmed
  – Dollars of investment in construction

• Enforcement
  – Number of citations issued
  – Number of enforcement hours
  – Hours of red light camera operating
  – DUII enforcement hours

• Education
  – Number of media events
Example - Intersections
Conclusions

• Performance measures are useful for communication, accountability and program development

• Measuring multimodal safety is challenging
  – Selecting performance measure set is key
  – Will need research
  – Data challenges

• Matching outcomes and investment should allow program modification
Conclusions

• Next steps
  – Need to assemble data sources
  – Research appropriate normalizing measures for outcome and investments

• After conducting annual reports, may need to amend performance measures
Thank You – Questions?

Acknowledgements:
Robert L. Bertini (PSU), Rob Burchfield, Mark Lear, Dakota Inyoswan (PDOT)

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