Update on FHWA Crash Costs Initiative

AASHTO SCOHTS SMS Meeting

April 2017
Objectives

- Develop synthesis of national and state crash costs
- Explore the feasibility of establishing national crash cost values
Synthesis of National and State Crash Costs

• National crash costs
  – Published in various reports or publications (e.g. HSM)
  – Used by various federal agencies (e.g. FHWA, NHTSA).

• Crash cost values currently used by States
  – For safety programs and project development efforts
  – Methodology used by States to establish and apply those cost values
State Crash Costs Questionnaire
Preliminary Findings

• Almost every State using different crash cost values

• Mix of crash-level and person-level costs

• Most states update crash cost values annually
Crash Cost Sources

- HSM: 27%
- VSL: 30%
- NSC: 13%
- NHTSA: 6%
- Other: 17%
- No crash costs: 7%
## Preliminary Findings – Crash Cost Values

<table>
<thead>
<tr>
<th>Crash Severity</th>
<th>Min Crash Cost</th>
<th>Mean Crash Cost</th>
<th>Max Crash Cost</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>$190,200</td>
<td>$3,936,100</td>
<td>$9,600,000</td>
<td>$3,330,573</td>
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<tr>
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<td>$720,200</td>
<td>$3,300,000</td>
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<td>B</td>
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<td>$149,000</td>
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<td>$651,000</td>
<td>$135,600</td>
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<tr>
<td>O</td>
<td>$0</td>
<td>$11,100</td>
<td>$42,298</td>
<td>$10,100</td>
</tr>
</tbody>
</table>
Existing Application of Crash Costs

- More States use comprehensive crash costs
- Many States use spreadsheets or software to apply crash costs
- Majority of States generate weighted averages from base costs
National Crash Costs

• Most states indicated national crash costs would be advantageous or had no preference
• Some indicated a preference to adjust national values to local conditions
White Paper Outline

• Synthesis of Literature
• Synthesis of Practice
• Crash Cost Considerations
• Recommended Methodology for Developing and Updating Crash Costs
• Summary of Recommendations for Future Practice
Next Steps

• 5/15: First Draft White Paper
  – For Review by FHWA and HSM PFS

• 6/13: Second Draft White Paper
  – For Presentation at TRB HSP Committee Mid-year Meeting

• 7/28: Final White Paper