MANAGEMENT OF TRAFFIC WITH REAL TIME MONITORING

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Work Zone Peer Exchange May 2013
Presentation Outline

• Setting the Base Line
• Determining Travel Time Thresholds
• Development of Specification
• Contracting
• Future of WZ Performance Measures
Setting the Base Line

• Minimum 1 week of Bluetooth data collection
• Collect “Traditional” traffic data
• Model
• Calibrate model with Bluetooth
• Development of WZ scenarios
  » Develop possible WZ set ups
  » Model anticipated WZ set ups
  » Collect model travel times
Thresholds

- Determine “acceptable” level of delay
- Develop thresholds from model runs
- Adjust to practical times
- Warning and Tiers

<table>
<thead>
<tr>
<th>Movement</th>
<th>Existing Avg. (min)</th>
<th>Warning (min)</th>
<th>First Tier (min)</th>
<th>Second Tier (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-80 Eastbound</td>
<td>9.7</td>
<td>11.3</td>
<td>12.8</td>
<td>14.6</td>
</tr>
<tr>
<td>I-80 Westbound</td>
<td>9.9</td>
<td>11.3</td>
<td>12.8</td>
<td>14.6</td>
</tr>
</tbody>
</table>
Development of Specification

- Based off standard DB format
- Additional required personnel for contractor
- Removed prescriptive language added performance language
- Performance measure incentives/disincentives

<table>
<thead>
<tr>
<th>Non-Compliance with Delay Parameters</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Tier Violation per movement</td>
<td>$1,000</td>
</tr>
<tr>
<td>Second Tier Violation per movement</td>
<td>$2,500</td>
</tr>
</tbody>
</table>
Specification Details

- Safe & Efficient passage of traffic through WZ
- Maintain vehicle mobility of facility and access at interchange locations
- Correct all traffic control deficiencies immediately
- Provide advance information to public regarding expected travel impacts
Specification Details (cont.)

• Contractor is responsible for maintaining required travel times
• Traffic control plans must address peak and off-peak periods
• Traffic restrictions shall not increase corridor travel times beyond the identified thresholds
• Department will install and maintain the monitoring system
Contracting

- Night work exemption?
- Realistic availability of lane closures
- Exemptions for major work items
- Emergency incidents
  - Documentation
- Items not under contractor control
Future of WZ Performance Measures

• Department’s continued support for implementation

• Coordination with local AGC
  » Partnering is key

• Help all stakeholders understand benefits
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