Work Zone Safety Best Practices
Rocky Mountain Asphalt Conference & Equipment Show
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Work Zone Safety Best Practices

Leadership … from Everyone

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Achieving Improved Safety in Work Zones

Customer Service

Leadership, Safety Culture

Policy, Legislation

Procedures, Guidelines

Data and Situation Analysis

Compliance Reviews

Techniques
Who’s the customer?

What do they expect?

- Safety
- Limited Delays
- Credibility and Reliable information
- Completed project

WZ in alignment with these priorities?

How do we deliver that?
## Work Zone Safety Statistics

### Statewide Construction Zone Crashes

<table>
<thead>
<tr>
<th>Year</th>
<th>PDO</th>
<th>Injury Crashes</th>
<th>Injuries</th>
<th>Fatal Crashes</th>
<th>Fatalities</th>
<th>TOTAL Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>933</td>
<td>81</td>
<td>104</td>
<td>10</td>
<td>11</td>
<td>1024</td>
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<tr>
<td>2010</td>
<td>825</td>
<td>80</td>
<td>100</td>
<td>8</td>
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<td>913</td>
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<tr>
<td>2011</td>
<td>825</td>
<td>90</td>
<td>122</td>
<td>6</td>
<td>10</td>
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<tr>
<td>2012</td>
<td>877</td>
<td>90</td>
<td>117</td>
<td>6</td>
<td>8</td>
<td>973</td>
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<tr>
<td>2013</td>
<td>1212</td>
<td>103</td>
<td>133</td>
<td>8</td>
<td>14</td>
<td>1323</td>
</tr>
</tbody>
</table>

### Construction Zone Related Fatalities

- **2011**: 10
- **2012**: 8
- **2013**: 14
- **2014**: 8

*Note: Year to Date*
WZ account for 10% of all congestion, 20% of non-recurring

Estimated delay impacts to Denver Metro:
- 3 million gallons of wasted fuel
- 7 million hours of total delay
Increasing construction program, $500M to $900M program

New and revised programs: FASTER, RAMP, HSIP, Preservation, Asset Management

Impacts
- Safety, delays, risk of crashes, public inconvenience
CDOT Recent Leadership Efforts:

- More conscientious and focused about our business

- Executive Director:

- Chief Engineer: Safety, Mobility, Preservation, Economic Vitality

- TSMO Director: Safety and Operations

- Initiatives: Cash Mgmt, Program Mgmt, Schedule Mgmt, Performance Measures Lead/Lag

- Guidelines: PD 14, SHSP, Statewide Operations Plan
WZSM FHWA Ruling and CDOT Guideline

FHWA Process Reviews - 2012, 2014, what are they telling us?

Annual Legislative Report on WZ Safety

CDOT WZ Improvement Steering Committee
Specifications and Standards

Work Zone compliance reviews

Data Analysis

Safety Campaigns

Legislation - Fines Doubled, Automated Enforcement
Best Practices / Techniques

- WZSM - TMP
- Lane closure policies
- Accelerated Delivery methods, trade off analysis
- Late merge
- Smart WZ - Smarter WZ
- Better, faster, current information that is applicable to situation
- Coordinated WZ
- Technologies
- WZ operations data collection
- Full-compliance striping
- Nighttime Lighting
- Effective and applicable speed reductions
- Connected Vehicles
- Cone Zone Law Enforcement
- Automated Enforcement
What Can You Do?

- Promote Safety Culture
- Demand the best WZ TC on your project
- Do your homework
- Review “CDOT’s Work Zone Safety and Mobility Rule: Procedures Document”
- Review other resources at: https://www.codot.gov/safety/traffic-safety
Best practices in WZ safety is a mindset of everyone

Tools are available

Mandated - policies, standards, specifications, MUTCD

Chosen - best practices, innovations, customization

More cost? Is it worth it?
Conclusion and Thank You

Your Thoughts

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