WYDOT’s ECAR Initiative

Presented to NRITS

August 24, 2009
Background Information

- Weather in Wyo can be breezy

Photo Credit: Dr. Ron Tabler
Wind causes:

1) Blowing Snow – Reduced Visibility
Wind causes:

- 2) Blowing Snow – Road Surface Issues
Background Information (cont.)

- Wind causes:
  - 3) Blowing Snow – Drifting
Background Information (cont.)

- Wind causes:
  - 4) Vehicle blow overs
Background Information (cont.)

- Results: Closures
Results: Crashes and Fatalities

Photos Courtesy of Tim McGary
The Public Demands Accurate, Timely and Credible Information
Interstate 80 – VSL Project
## Roadside Devices

<table>
<thead>
<tr>
<th>DEVICES</th>
<th>Today</th>
<th>5-Year Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMS</td>
<td>65</td>
<td>99</td>
</tr>
<tr>
<td>HAR</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>RWIS</td>
<td>64</td>
<td>68</td>
</tr>
<tr>
<td>Vehicle Detectors</td>
<td>49</td>
<td>84</td>
</tr>
<tr>
<td>Cameras</td>
<td>77</td>
<td>93</td>
</tr>
<tr>
<td>Variable Speed Limit Signs</td>
<td>20</td>
<td>77</td>
</tr>
</tbody>
</table>
TMC Key Personnel

- TMC Operators
- Patrol Dispatch
- Public Affairs
## Comparative Facts – Dec. 2007

<table>
<thead>
<tr>
<th>State</th>
<th>Calls</th>
<th>Max Day</th>
<th>Total Min.</th>
<th>Pop.</th>
<th>Min./Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA</td>
<td>102,393</td>
<td>6,368</td>
<td>144,173</td>
<td>9,363,941</td>
<td>0.02</td>
</tr>
<tr>
<td>NV</td>
<td>103,626</td>
<td>11,624</td>
<td>176,679</td>
<td>2,495,529</td>
<td>0.07</td>
</tr>
<tr>
<td>ND</td>
<td>41,796</td>
<td>4,911</td>
<td>89,676</td>
<td>635,867</td>
<td>0.14</td>
</tr>
<tr>
<td>MT</td>
<td>73,942</td>
<td>8,620</td>
<td>159,449</td>
<td>944,632</td>
<td>0.17</td>
</tr>
<tr>
<td>NE</td>
<td>163,995</td>
<td>18,616</td>
<td>351,521</td>
<td>1,768,331</td>
<td>0.20</td>
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<tr>
<td>KS</td>
<td>281,674</td>
<td>51,864</td>
<td>658,431</td>
<td>2,764,075</td>
<td>0.24</td>
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<tr>
<td>SD</td>
<td>110,678</td>
<td>18,740</td>
<td>206,957</td>
<td>781,919</td>
<td>0.26</td>
</tr>
<tr>
<td>WY</td>
<td>373,256</td>
<td>62,139</td>
<td>958,401</td>
<td>515,004</td>
<td>1.86</td>
</tr>
</tbody>
</table>

Population based on US Census Bureau 2006 Estimates
Peak Website Statistics

- 32 hours = 8 million web hits
- 63 gigabytes of information
- Webcams 7 of 10 top requested pages
So what is the problem?

- The public demands accurate, timely, and credible information.
Old Reporting Process

- Maintenance employees were reporting conditions inconsistently
- Maintenance employees cannot be everywhere at all times
ECAR Project
ECAR

- **Enhanced Citizen Assisted Reporting**

- Citizens provide road condition reports
Ideal candidates are professional commuters. Trained for consistent reporting.
Slick, Drifted Snow
Picture Flip Book

Slick, Favorable
Black Ice Advisory

No Unnecessary Travel

Photo Credit: Dr. Ron Tabler
Picture Flip Book

Photo Credit: Dr. Ron Tabler

Slick, Blowing Snow, Limited Visibility
No Unnecessary Travel
Possible Closure
Benefits

- Reports are more timely and credible
- Maintenance employees have been trained so their reports are consistent
- Public is engaged and assisting WYDOT
- LOW COST SOLUTION!!!!
Results

- Over 200 volunteers
- Reports are very reliable
- Some of our critics have become excellent volunteers
- Need to keep engaging volunteers or call volume drops off
Questions/Comments