Making Rural Highways Safer

Innovations and Solutions
7 Year Fatality Trend

2002 = 1,208
2003 = 1,232
2004 = 1,130
2005 = 1,257
2006 = 1,096
2007 = 992
2008 = 960
Fatal Crash Locations are Random  
Fatal Crash Types are Not

People continue to die on our roadways making the same mistakes year after year

<table>
<thead>
<tr>
<th>Year</th>
<th>No Seat Belt</th>
<th>Run Off Road</th>
<th>Aggressive</th>
<th>Curves</th>
<th>Impaired</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>No Seat Belt</td>
<td>Run Off Road</td>
<td>Aggressive</td>
<td>Curves</td>
<td>Impaired</td>
</tr>
<tr>
<td>2006</td>
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<td>Run Off Road</td>
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</tr>
<tr>
<td>2008</td>
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<td>Impaired</td>
</tr>
</tbody>
</table>
# Fatality Locations

## 2005 Fatalities

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State System</strong></td>
<td>967</td>
<td>686</td>
<td>281</td>
</tr>
<tr>
<td></td>
<td>77%</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Non-State</strong></td>
<td>290</td>
<td>110</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>23%</td>
<td>38%</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,257</td>
<td>796</td>
<td>461</td>
</tr>
<tr>
<td></td>
<td>63%</td>
<td>37%</td>
<td></td>
</tr>
</tbody>
</table>

## 2008 Fatalities

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State System</strong></td>
<td>704</td>
<td>509</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>73%</td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td><strong>Non-State</strong></td>
<td>256</td>
<td>90</td>
<td>166</td>
</tr>
<tr>
<td></td>
<td>27%</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>960</td>
<td>599</td>
<td>361</td>
</tr>
<tr>
<td></td>
<td>62%</td>
<td></td>
<td>38%</td>
</tr>
</tbody>
</table>
Rural Solutions

- System-wide Applications
- Roadway Design
- Intelligent Transportation System
- Rural Emergency Response
Install Median Guard Cable
Implement System-wide Safety

- Improved Driving Surface
- 6-inch Stripes for Major Roads
- Improved Paved Shoulder
Implement System-wide Safety

- Install Rumblestripes
  - Edgeline & Centerline
Implement System-wide Safety

- Curve Speed Plaques
  - Every Curve/Turn sign

- Improved Signs
  - Larger & more visible
Implement System-wide Safety

- Better Delineation
- Emergency Reference Markers
Implement System-wide Safety

- Install More Chevrons
- Paint More Edgelines
Implement System-wide Safety

➢ Remove Objects
Results of Safety Solutions

- Reduced lane departure fatalities by 25%
- Significant reduction in nighttime fatal and disabling injury crashes on rural roads (25 to 77 percent)
- Received an estimated $9.70 in benefits for every dollar spent
- 79 percent of Missouri motorists surveyed believe the improvements have been a good investment
Roadway Design

Shared Four-Lane Roadway
Benefits

Shared Four-Lane

Faster
- Less time spent behind slow-moving vehicles.

Safer
- Reduces crashes & their severity, as much as 55% compared to 2-lane roads.

- Cheaper
  - Up to 75% less right-of-way, construction.

- Flexible
  - Design can fit location.
Rural ITS

- 66 Electronic Message Boards
- 68 Closed Circuit TV Cameras
- 13 Road Weather Information Sensors
Rural Emergency Response

Primary Responsibility: Get the road open and traffic flowing again as soon as possible

- Designated staff and equipment for traffic control on rural corridors
  - 24/7 Response Trucks equipped with traffic control and other basics
  - Trailers positioned at key locations along rural corridors
Traveler Information Map

Legend:
- Road Closures
  - Workzone
  - Incident
  - Flood
  - Winter Weather
  - Planned
- Workzones
  - Expect Delays
  - Possible Delays
- Incidents
  - Expect Delays
  - Possible Delays
- Winter Road Conditions
  - Covered
  - Partly Covered
  - Clear

ROAD CLOSED
US 61
Clark County
Road closed due to flooding
Show: 15 JUN 08
Det. Missouri And Mississippi River At Alexandria

Additional features:
- Refresh Map
- Zoom To Full State
- Find Report (A)
GOAL

850 or Fewer Fatalities By 2012