Roadway Safety: Worthy of Investment

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The Traffic Safety Problem

- 30,000 fatalities each year in the U.S.
  - More than 80 every day
- 1,300,000 fatalities each year worldwide
The IDAHO Traffic Safety Problem

- 200 fatalities each year
- 1,200 serious injuries each year
- Most are preventable

35 fatalities in Ada/Canyon Counties
### Most Common Crash Attributes

**Ada & Canyon Counties**

<table>
<thead>
<tr>
<th>Year</th>
<th>Attribute 1</th>
<th>Attribute 2</th>
<th>Attribute 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Intersections</td>
<td>Aggressive</td>
<td>Impaired</td>
</tr>
<tr>
<td>2010</td>
<td>Run Off Road</td>
<td>Aggressive</td>
<td>Impaired</td>
</tr>
<tr>
<td>2011</td>
<td>Intersections</td>
<td>Aggressive</td>
<td>Run Off Road</td>
</tr>
<tr>
<td>2012</td>
<td>Intersections</td>
<td>Aggressive</td>
<td>Impaired</td>
</tr>
<tr>
<td>2013</td>
<td>Intersections</td>
<td>Aggressive</td>
<td>Impaired</td>
</tr>
</tbody>
</table>

*Note: Top 3 common elements each year. Not listed in 1-2-3 order*
# Most Common Crash Attributes

## 2013 Fatalities - Idaho

<table>
<thead>
<tr>
<th>Statewide</th>
<th>Ada &amp; Canyon Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Run Off Road</td>
<td>1. Aggressive Driving</td>
</tr>
<tr>
<td>2. Unrestrained</td>
<td>2. Impaired Driving</td>
</tr>
<tr>
<td>3. Impaired Driving</td>
<td>3. Intersection Related</td>
</tr>
<tr>
<td>4. Aggressive Driving</td>
<td>4. Unrestrained</td>
</tr>
<tr>
<td>5. Distracted Driving</td>
<td>5. Run Off Road</td>
</tr>
</tbody>
</table>
focus on the predictable

Our Job in Safety
1. Predict the Future
2. Intervene to Change the Future
Contributing Factors

- Driver Factors: 57 (93%)
- Roadway Factors: 3 (34%)
- Vehicle Factors: 3

Intersection:
- 27
- 6
- 3

Total:
- 13%
How can we make a difference?
Behavioral Solutions

Figuring out the human element
Example: Missouri Unrestrained Fatalities
Good News:
Engineers can help, too

- Reduce number of mistakes
- Limit the ramifications of mistakes
Signals

Intersections

Left-Turn Signal with Four-Arrow Display

Steady Red Arrow
If turning left, you must stop and wait

Steady Yellow Arrow
Prepare to stop

Flashing Yellow Arrow
Proceed with left turn after yielding to any oncoming traffic and pedestrians

Steady Green Arrow
Proceed with left turn
Median U-Turns
Engineering Solutions

Corridors
- Oversized Warning Signs
- Fluorescent Yellow Sheeting
Road Diet

BEFORE

AFTER

[Image of road diagrams and real-world photo of a road after transformation]
Results of Safety Improvements
Engineering & Enforcement

Friday (Memorial Day Weekend 2004) - Drivers Over 80 M.P.H.
Engineering & Enforcement

Friday (Memorial Day Weekend 2005) - Drivers Over 80 M.P.H.
Cable Median Barrier - Missouri

One year before on I-70, I-44

One year after

Overall Missouri fatalities

2005: 1,257
2013: 757
Investing in Roadway Safety
Sources of Safety Funding

- Highway Safety Improvement Program (HSIP)
  - Infrastructure Solutions
- National Highway Safety Traffic Administration (NHTSA) funds
  - Behavioral focus (impaired, speed, seat belts)
- State Safety Funds

**KEY FACT:** Nearly every transportation funding source can be used for safety improvements.
But wait...

Is there really a direct correlation between Safety spending and increased roadway safety?

Is there a real-world return on investment?
Increased Safety Funding Investment → ? → U.S. Traffic Fatalities
Roadway Safety: Worthy of Investment

- The problem is real
- The solutions work
- Return on investment: saved lives

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