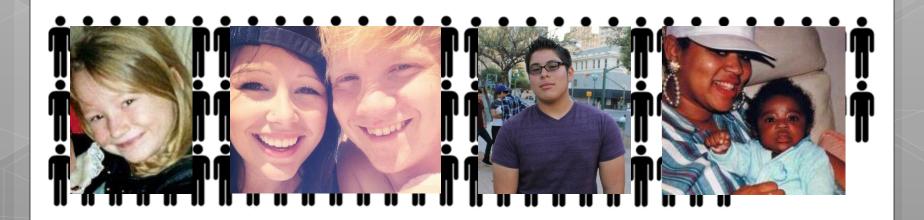
## Roadway Safety: Worthy of Investment

Brian Chandler, P.E., PTOE

**Program Director - Transportation Safety Leidos** 

## 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

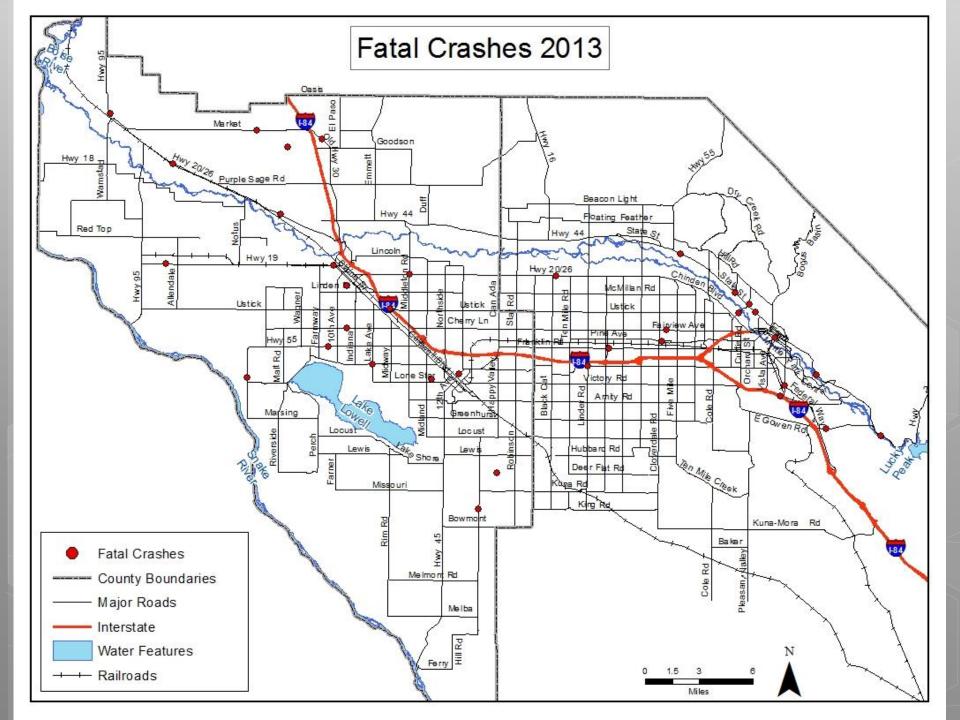


## The IDAHO Traffic Safety Problem

- 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

2009 2010 2013 **2011** 2012 Intersections Run Off Road Intersections Intersections Intersections Aggressive Aggressive Aggressive Aggressive Aggressive Run Off Road **Impaired** Impaired **Impaired Impaired** 

Note: Top 3 common elements each year. Not listed in 1-2-3 order

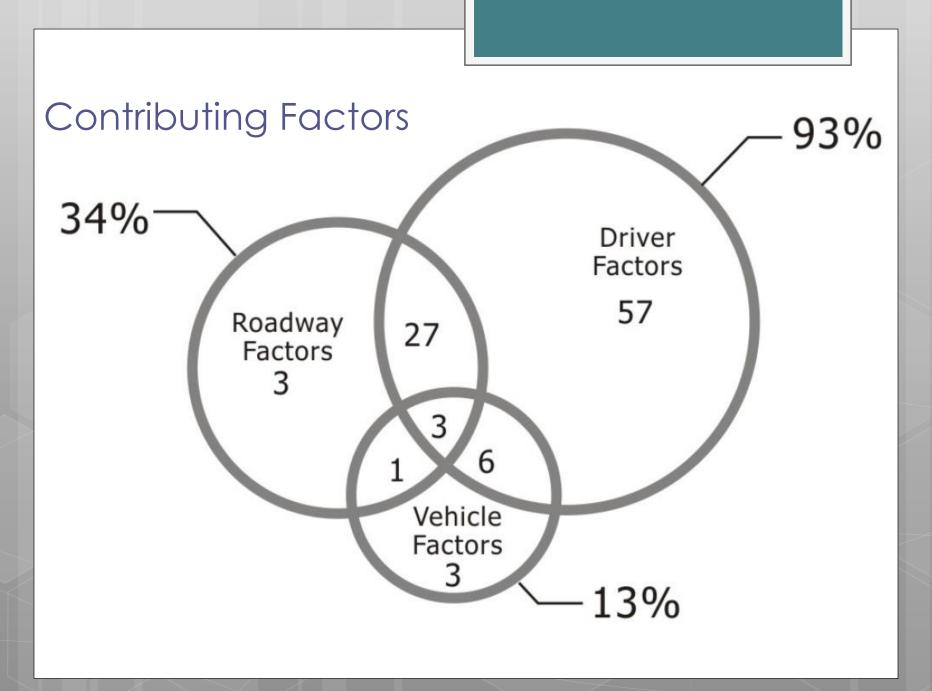
## Most Common Crash Attributes 2013 Fatalities - Idaho

Statewide	Ada & Canyon Counties
1. Run Off Road	1. Aggressive Driving
2. Unrestrained	2. Impaired Driving
3. Impaired Driving	3. Intersection Related
4. Aggressive Driving	4. Unrestrained
5. Distracted Driving	5. Run Off Road

## focus on the predictable

Our Job in Safety

- 1. Predict the Future
- 2. Intervene to Change the Future



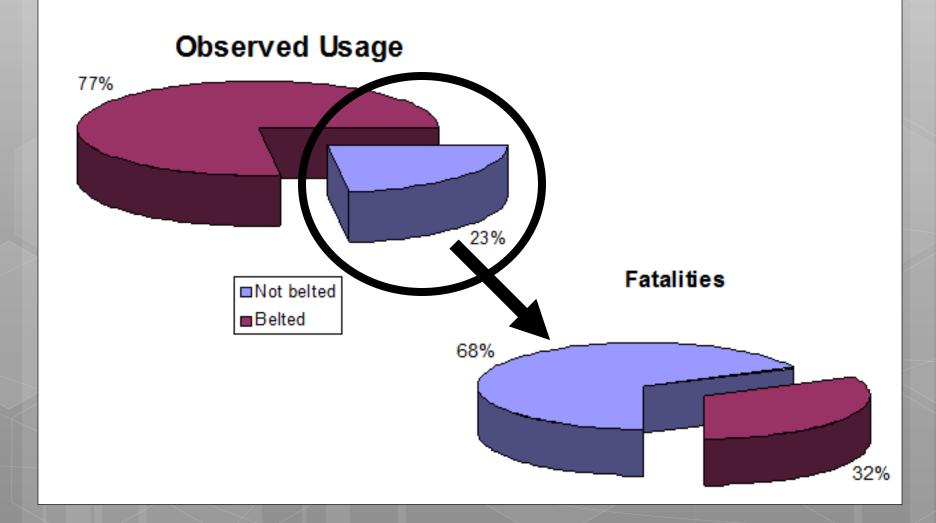
How can we make a difference?

## Behavioral Solutions

Figuring out the human element

#### Unrestrained

## Example: Missouri Unrestrained Fatalities



## Good News: Engineers can help, too

- Reduce number of mistakes
- Limit the ramifications of mistakes

# **Engineering Solutions**

Intersections

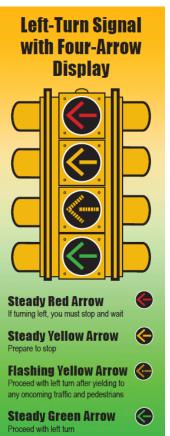
### Intersections



#### Intersections

## Signals

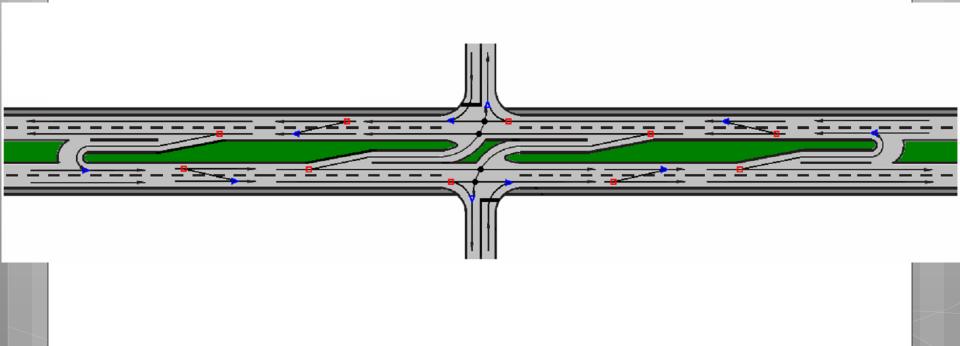






### Intersections

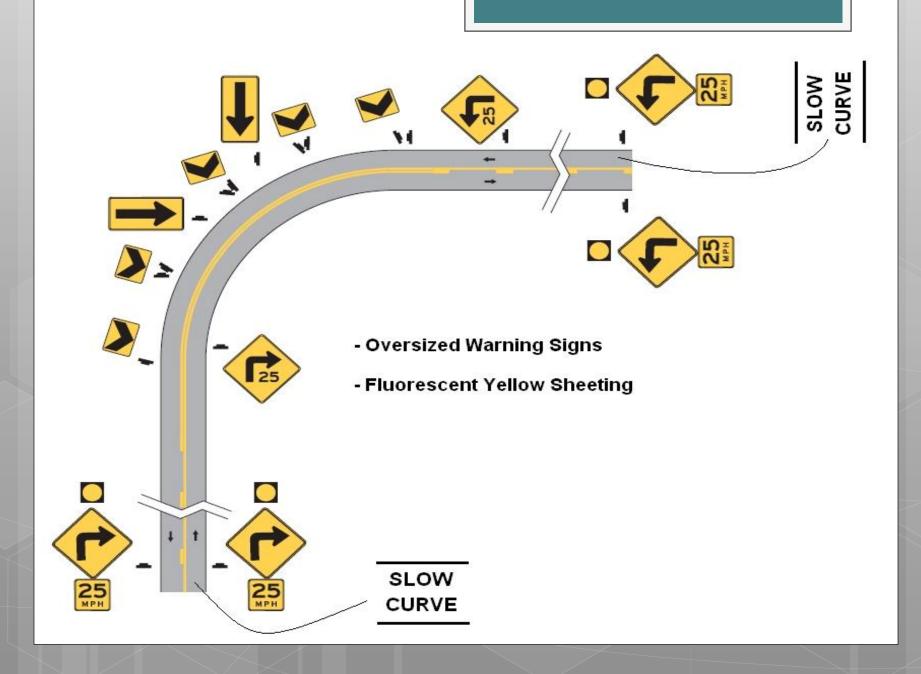
## Median U-Turns



# **Engineering Solutions**

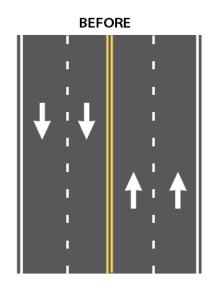
Corridors

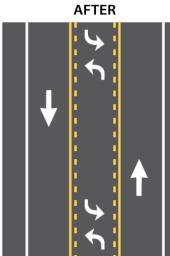
#### Run Off Road





## Road Diet





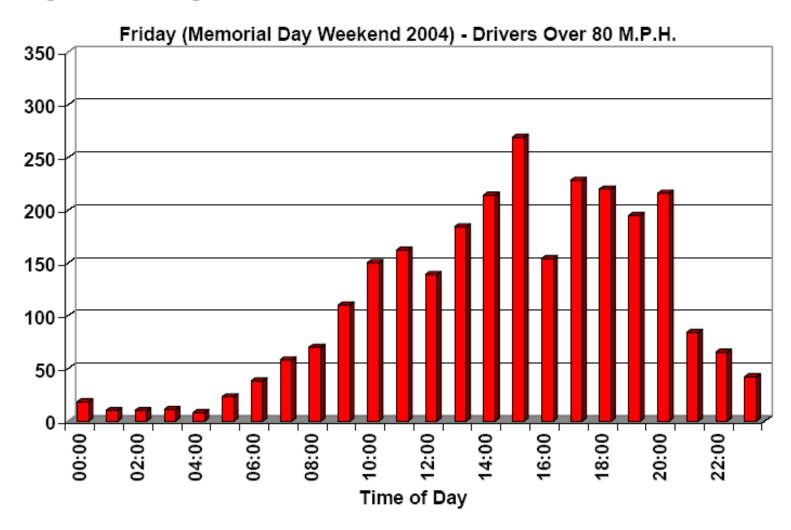




Results of Safety Improvements

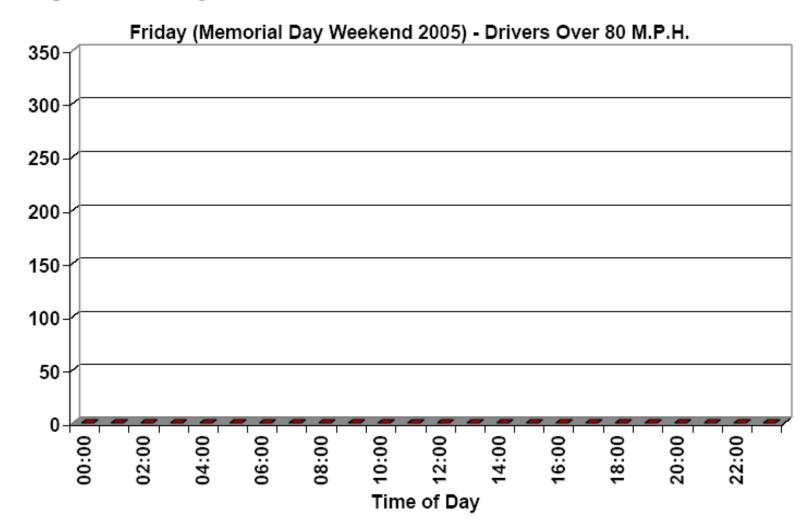
#### Aggressive

### **Engineering & Enforcement**



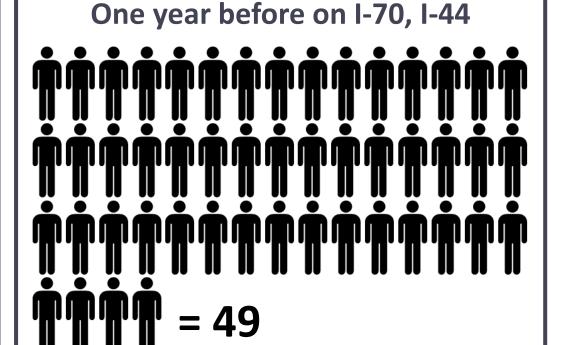
#### Aggressive

## **Engineering & Enforcement**



#### Run Off Road

#### Cable Median Barrier - Missouri



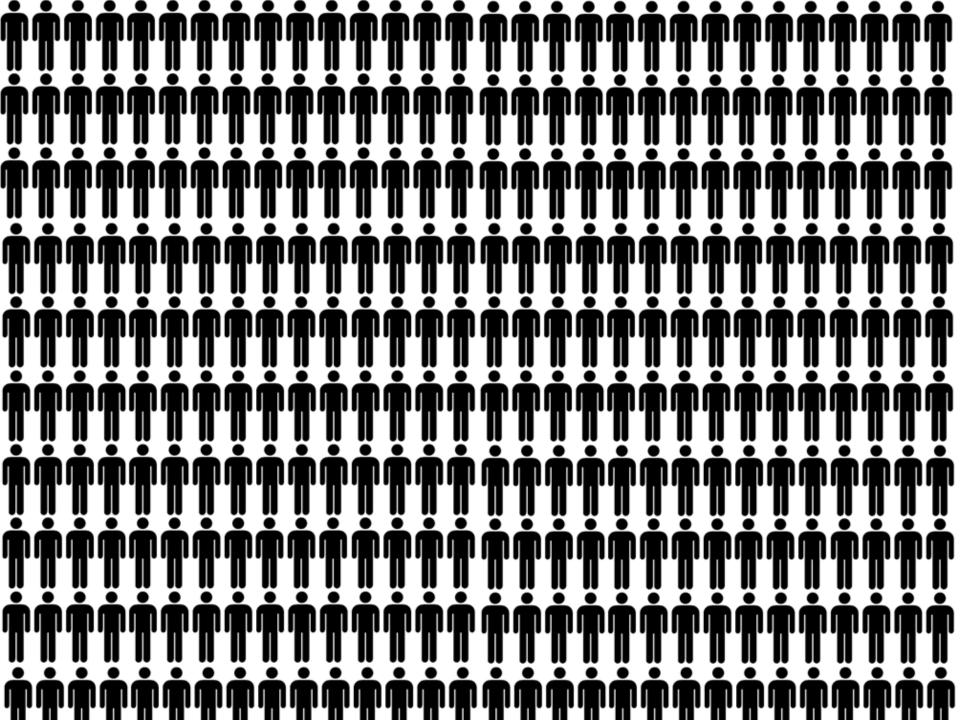
Overall Missouri fatalities

2005: 1,257

2013: 757

One year after





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
- o KEY FACT: Nearly every transportation funding source <u>can</u> 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?





U.S. Traffic Fatalities

## Roadway Safety: Worthy of Investment

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

Brian Chandler, P.E., PTOE Leidos Program Director – Transportation Safety Solutions chandlerbe@leidos.com 206.850.3480



**Ewitter** @TrafficSafety



www.linkedin.com/in/brianchandler