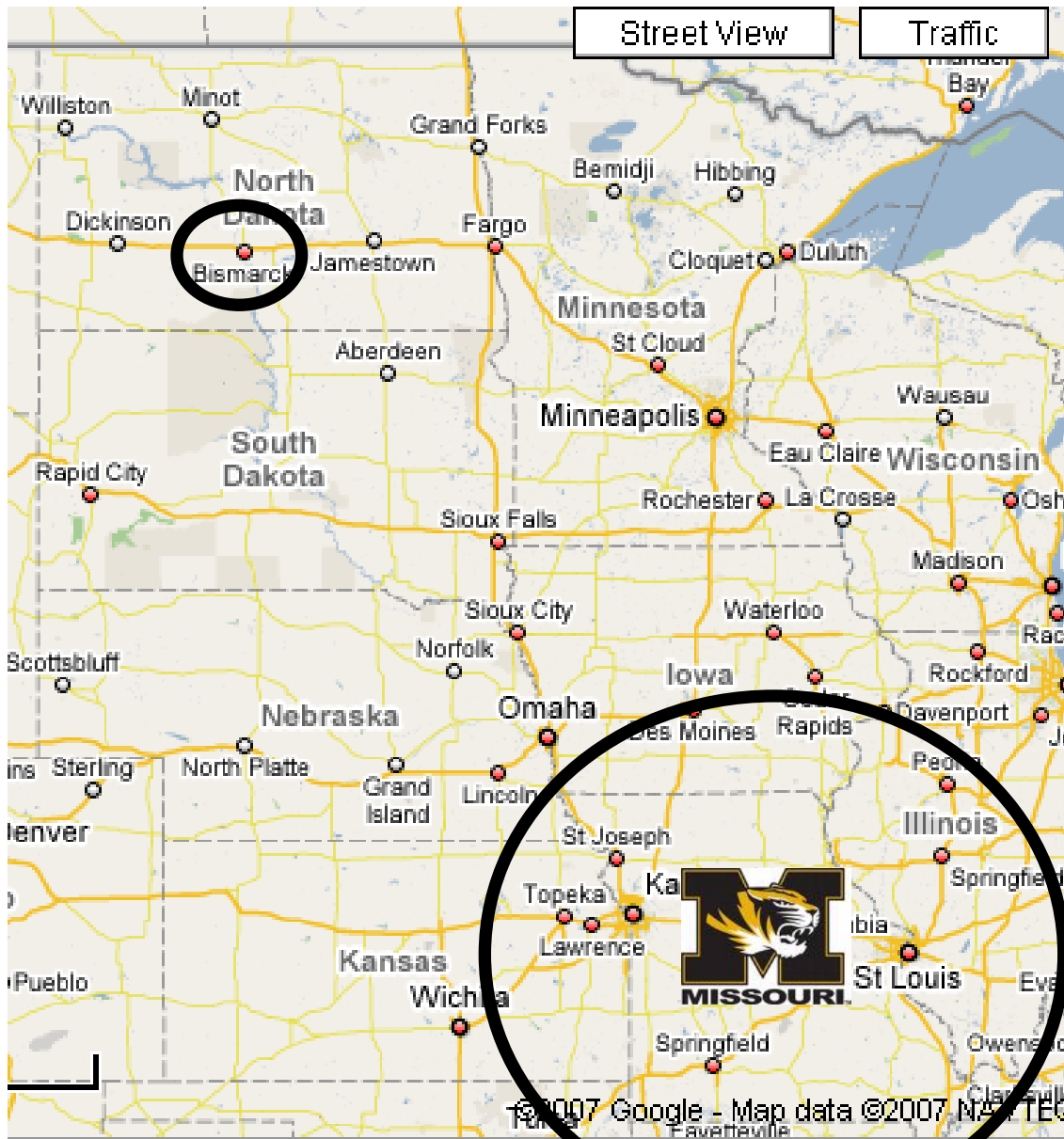


# Moving the Numbers

Missouri's System Approach to Safety

11/29/2007

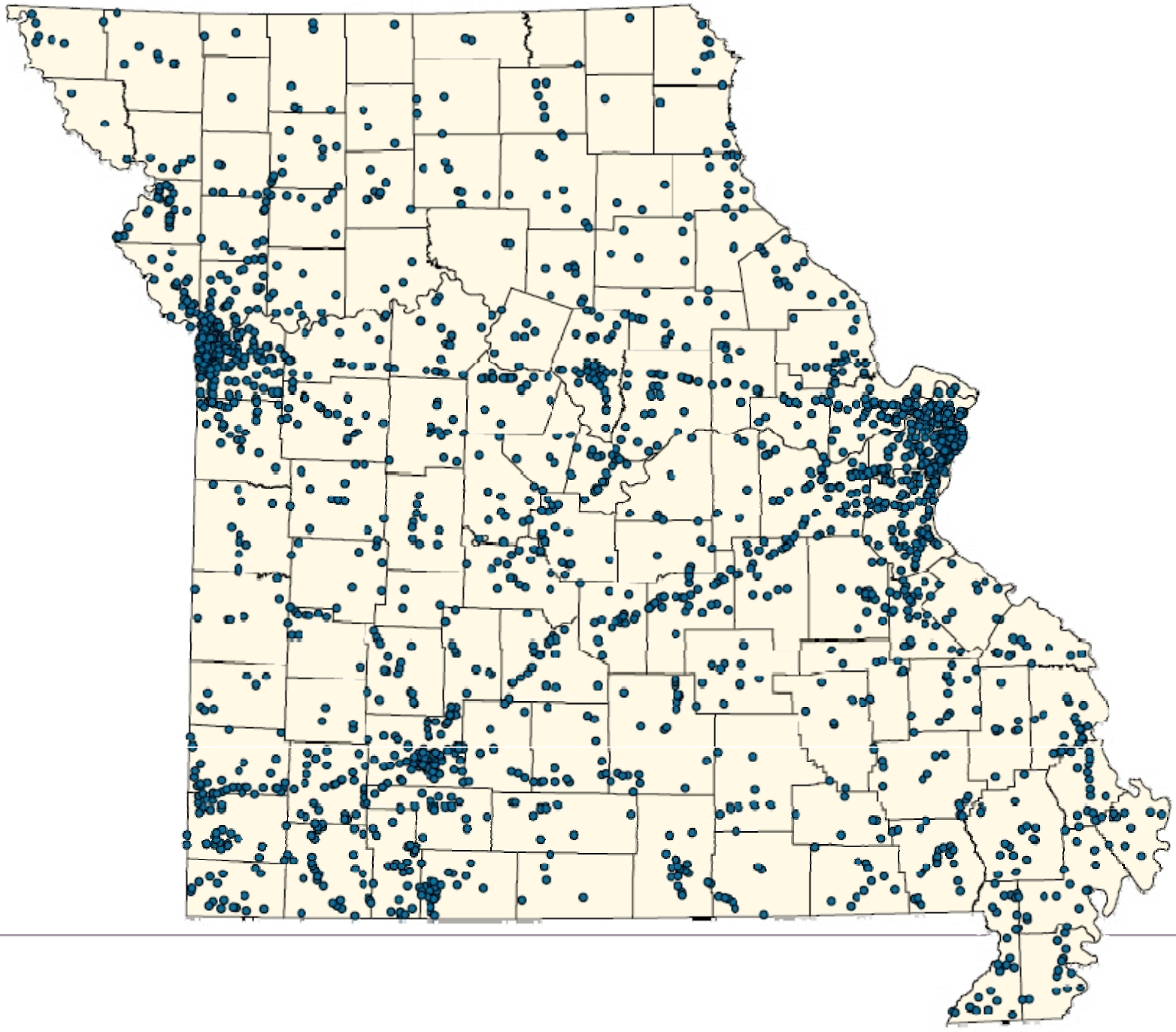
Brian Chandler, P.E., PTOE  
Traffic Safety Engineer  
Missouri DOT



#### BCS Standings

1. Missouri 11-1
2. West Virginia 10-1
3. Ohio State 11-1
4. Georgia 10-2
5. Kansas 11-1





| <b>Description</b>                    | <b>Total Fatalities</b> | <b>Description</b>   | <b>Total Disabling Injuries</b> |
|---------------------------------------|-------------------------|--|---------------------------------|
| Nonuse of Occupant Protection Devices | 1,876                   | Severely Injured in Run-Off-Road Collisions                  | 10,652                          |
|                                       |                         | Aggressive Driving Involved                                  |                                 |
|                                       |                         | • Following too close  | 1,536                           |
|                                       |                         | • Too fast for conditions                                    | 7,001                           |
|                                       |                         | • Speed exceeded limit                                       | 1,777                           |
| Killed in Run-Off-Road Crashes        | 1,685                   | TOTAL for 3 conditions                                       | 10,314                          |
| Aggressive Driving Involved           |                         |  |                                 |
| • Following too close                 | 79                      |  |                                 |
| • Too fast for conditions             | 962                     |  |                                 |
| • Speed exceeded limit                | 603                     |  |                                 |
| TOTAL for 3 conditions                | 1,644                   | Nonuse of Occupant Protection Devices                        | 8,030                           |
| Horizontal Curves Involved            | 1,249                   | Young Drivers—Less than 21 Involved                          | 7,329                           |
| Distracted/Fatigued Drivers Involved  | 884                     | Horizontal Curves Involved                                   | 7,180                           |
| Alcohol & Other Drugs Involved        | 840                     | Distracted/Fatigued Drivers Involved                         | 6,781                           |
| Young Drivers—Less than 21 Involved   | 782                     | Severely Injured in <u>Unsignalized</u> Intersection Crashes | 4,221                           |
| Killed in Head-On Crashes             | 629                     | Alcohol and Other Drugs Involved                             | 4,148                           |
| Commercial Vehicles Involved          | 555                     | Severely Injured in Collision w/ Tree                        | 2,778                           |
| Killed in Collision w/Tree            | 479                     | Severely Injured in Head-On Crashes                          | 2,675                           |
| Unlicensed Drivers Involved           | 432                     | Severely Injured in Signalized Intersection Crashes          | 2,593                           |
| Older Drivers—65-75 Involved          | 304                     | Unlicensed Drivers Involved                                  | 2,160                           |
| Older Drivers – 76 or Older Involved  | 275                     | Older Drivers – 65-75 Involved                               | 2,026                           |
| Killed in Unsignalized Intersection   |                         |  |                                 |

**Locations**

**RANDOM**

**So What?**

**Crash Types**  
**PREDICTABLE**



Missouri's  
**blueprint**  
for Safer Roadways



November 2004

1. Goal
2. Focus
3. System Solutions
4. E's



# **Essential Eight**

- 1. Primary Seat Belt Law**
- 2. Public Education**
- 3. Targeted Enforcement**
- 4. Punish Drunk Drivers**
- 5. Median Cable Barrier**
- 6. Rumble Strips**
- 7. Signs & Stripes**
- 8. Shoulders**







#### BCS Standings

1. Missouri 11-1
2. West Virginia 10-1
3. Ohio State 11-1
4. Georgia 10-2
5. Kansas 11-1





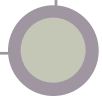
NEVER  
MADE IT INTO  
THE YEARBOOK



[www.saveM0lives.com](http://www.saveM0lives.com)

**BUCKLE UP!**

**ARRIVE ALIVE**





# Safety Engineering Solutions

System Improvements

11/29/2007



| Description  | Total Fatalities |
|--|------------------|
| Nonuse of Occupant Protection Devices  | 1,876            |
| <b>Killed in Run-Off-Road Crashes</b>  | <b>1,685</b>     |
| Aggressive Driving Involved <ul style="list-style-type: none"> <li>• Following too close</li> <li>• Too fast for conditions</li> <li>• Speed exceeded limit</li> </ul> | 79<br>962<br>603 |
| TOTAL for 3 conditions   | 1,644            |
| <b>Horizontal Curves Involved</b>  | <b>1,249</b>     |
| <b>Distracted/Fatigued Drivers Involved</b>  | <b>884</b>       |
| Alcohol & Other Drugs Involved   | 840              |
| Young Drivers—Less than 21 Involved  | 782              |
| <b>Killed in Head-On Crashes</b>   | <b>629</b>       |
| Commercial Vehicles Involved   | 555              |

# System Improvements

32,000 miles

|                | <u>Major</u> | <u>Minor</u> |
|----------------|--------------|--------------|
| Roadway Miles  | 5,000        | 27,000       |
| Miles Traveled | 80%          | 20%          |
| Fatalities     | 45%          | 55%          |





*Smoother,  
Safer,  
Sooner*

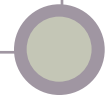




Taylor 5  
Monroe City 35  
Kansas City 212

TAYLOR 5  
MONROE CITY 35  
KANSAS CITY 212

20







**BETTER ROADS  
BRIGHTER FUTURE**

**85% of major roads will be in good condition by 2011**

**Paved  
Shoulder**

**1,000+ miles of CL+EL Rumbles**

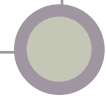
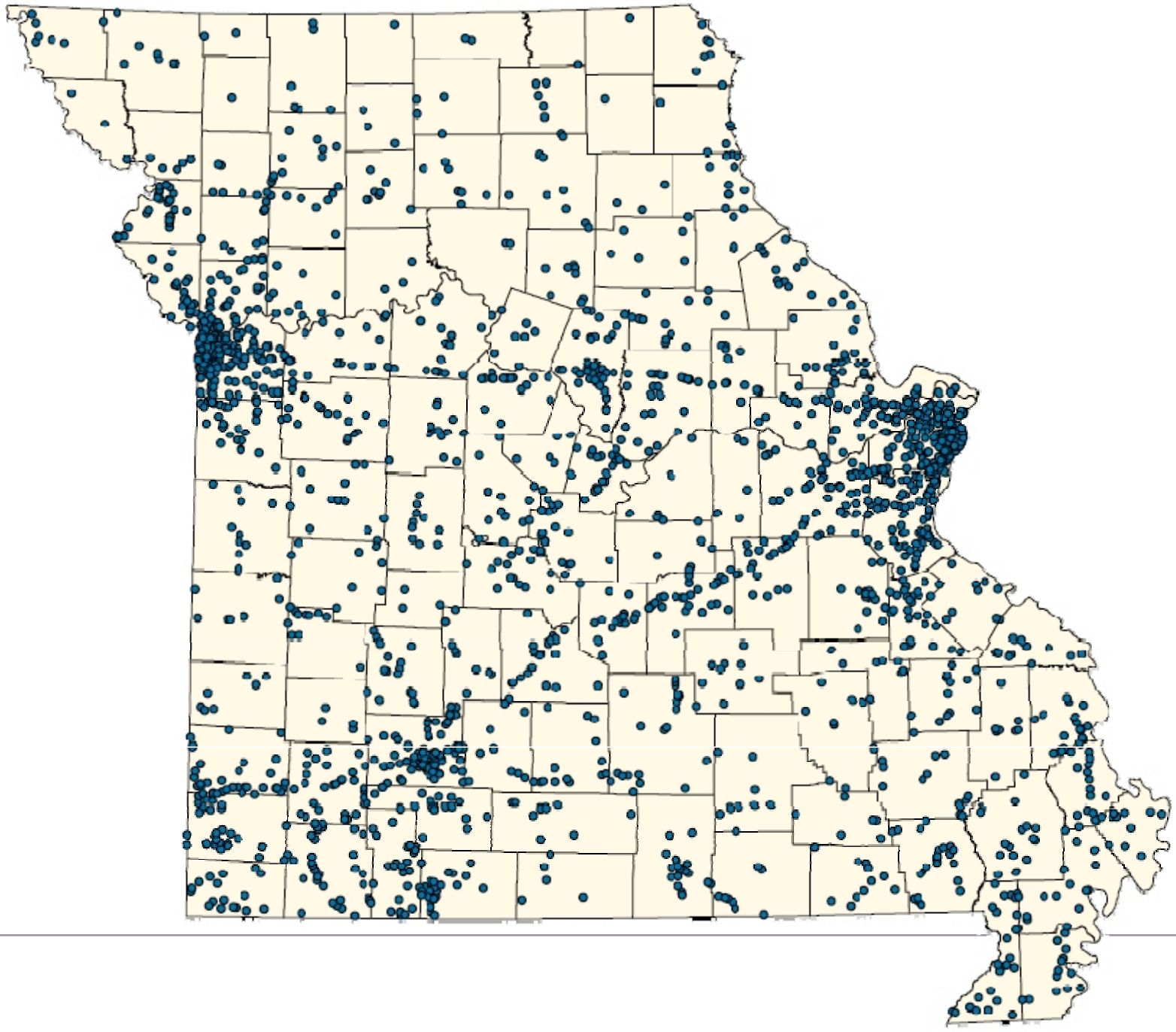


# New MoDOT Policies

- **Rumble Stripes**
- **6-inch Markings**
- **Curve Speed Plates**







# **Evaluation**

**1. Does it work?**

**2. Does it save lives?**

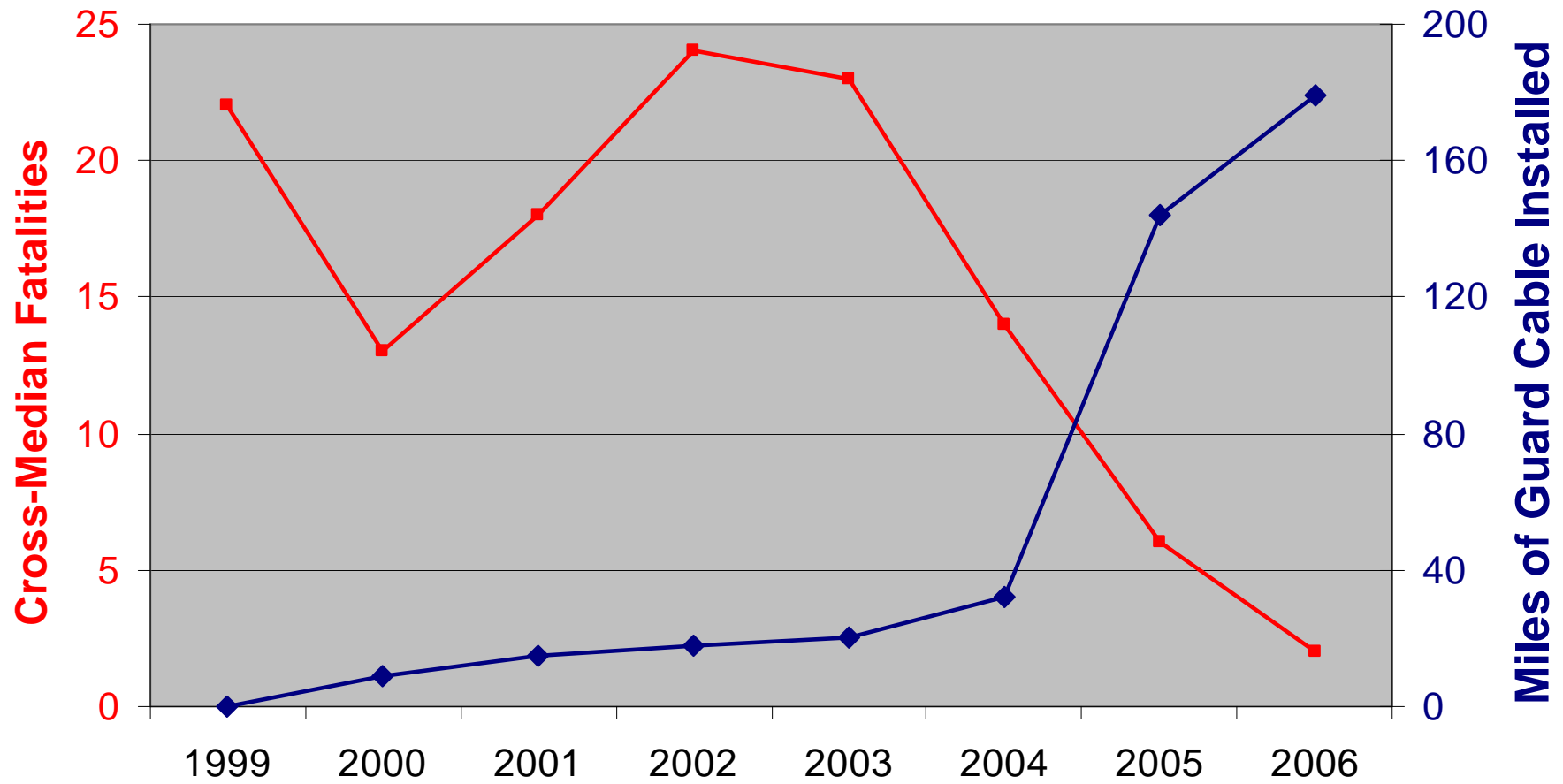


# 1. Does it work?



## 2. Does it save lives?

### I-70 Cross-Median Fatalities





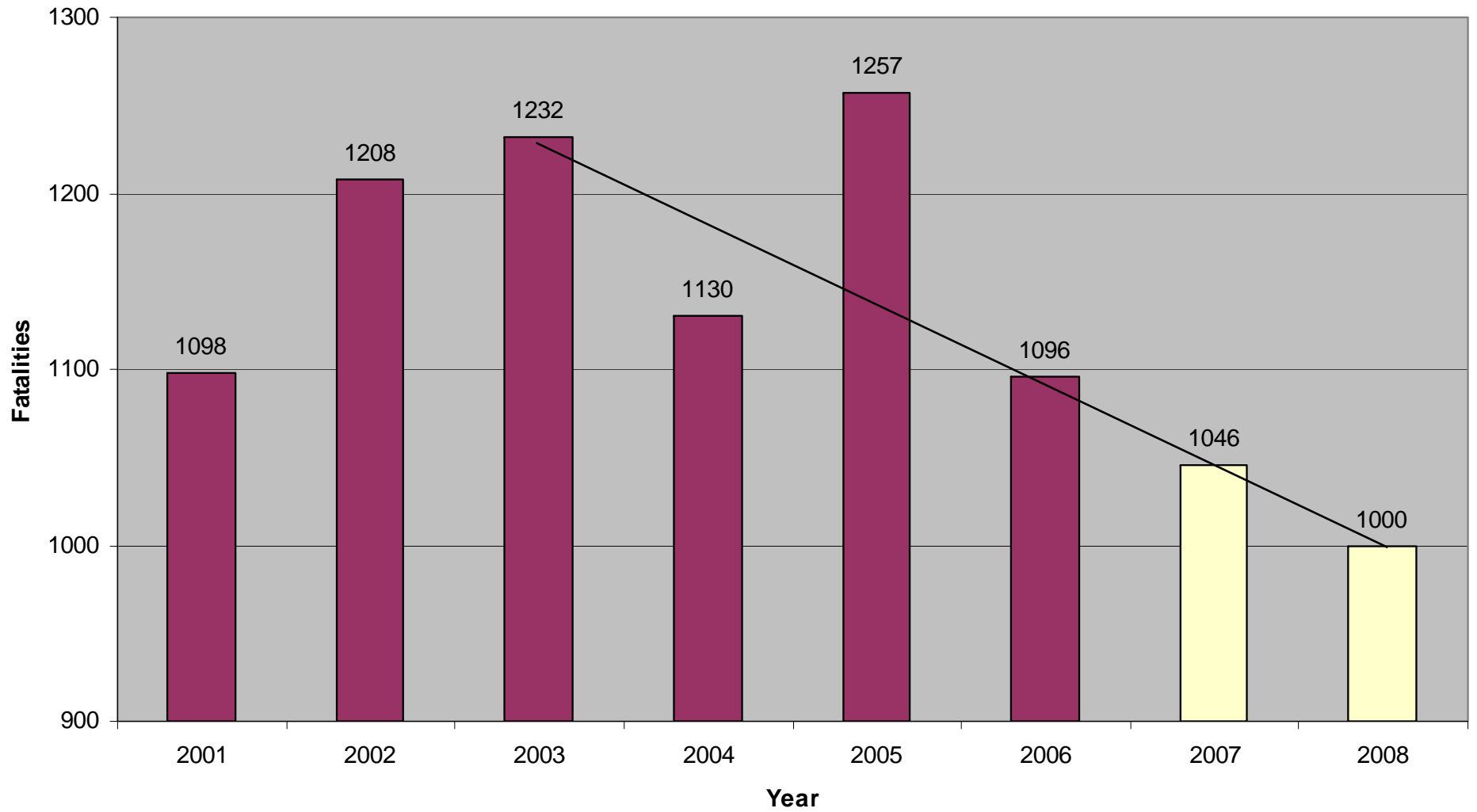
# The Big Picture

**System Improvements Saving Lives**

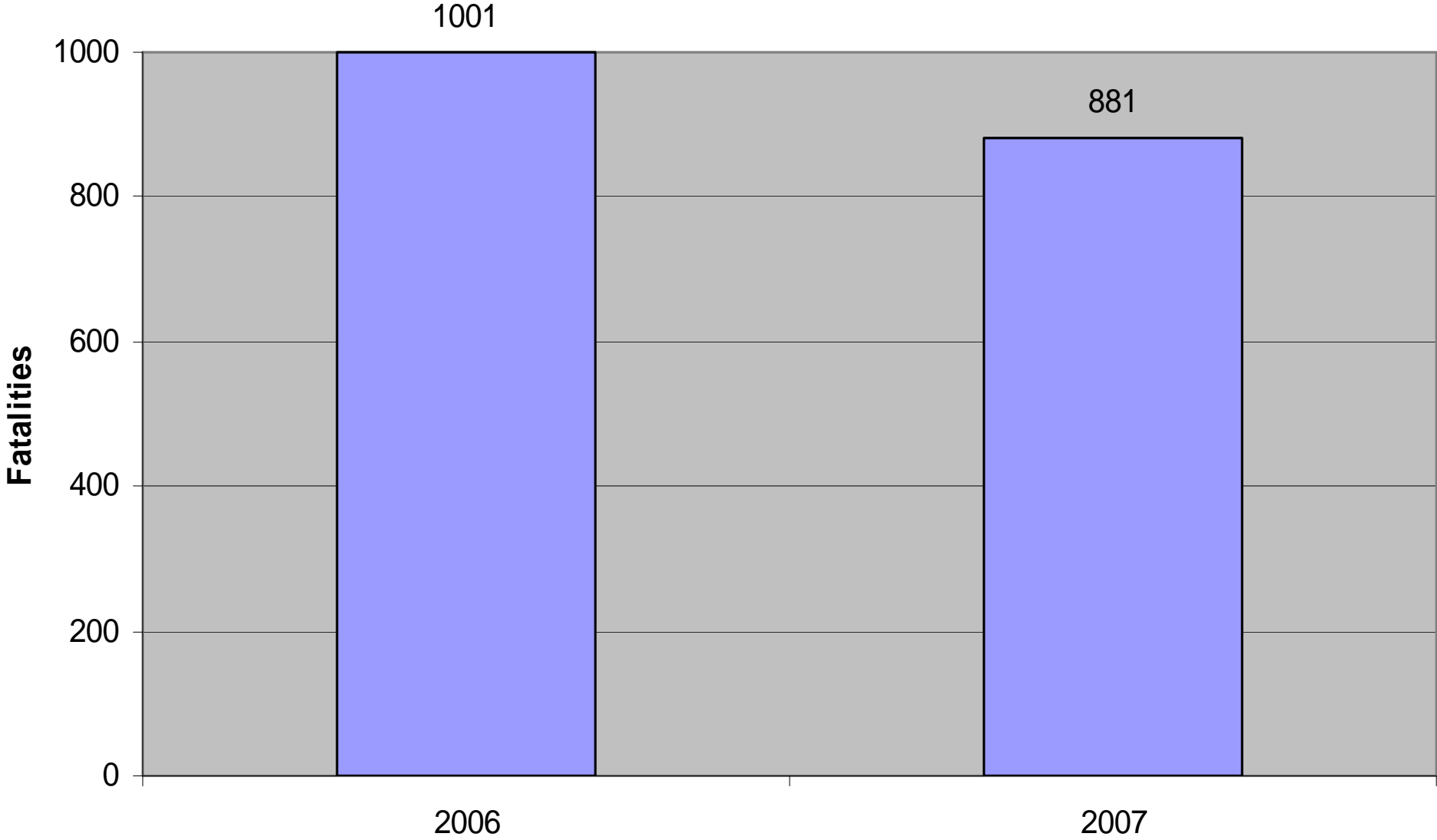
11/29/2007



# Missouri Fatalities



# Missouri Fatalities (as of Monday, November 25)



**Locations**

**RANDOM**

**Crash Types**

**PREDICTABLE**



# Questions?



11/29/2007

Brian Chandler, P.E., PTOE  
Traffic Safety Engineer  
Missouri Department of Transportation  
573-751-5678  
Brian.Chandler@modot.mo.gov