



U.S. Department
of Transportation
Federal Highway
Administration



THE SAFETY EDGE



What Is the Safety Edge?





Key Message

- **Saves Lives**
 - Drop-offs are a safety challenge
- **Low Cost**
 - Safety Edge can mitigate shoulder drop-off
- **Improves Durability**
 - Safety Edge can increase pavement edge durability



Basic Principle



Conventional Paving



Paving with Safety Edge



The Safety Edge: Purpose and Need

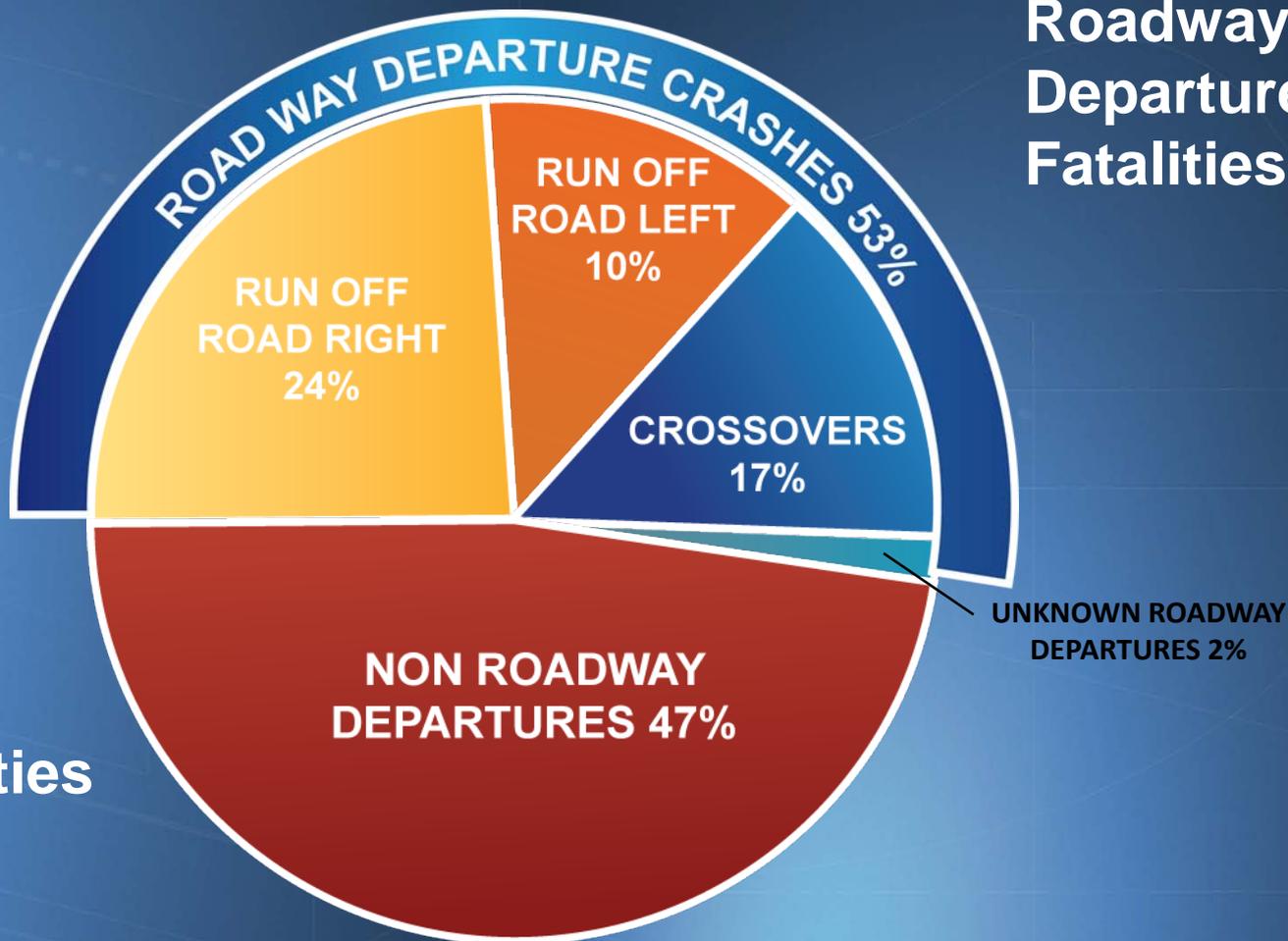


Safety Edge Installation: Iowa



2009 Fatal Crashes (Based on FARS)

**18,087 U.S.
Roadway
Departure
Fatalities**



33,808

U.S. Fatalities



1 ROR Fatality Every 29 minutes

50 people will die in a roadway departure crash
in the United States today.



How many
related to drop-offs ?



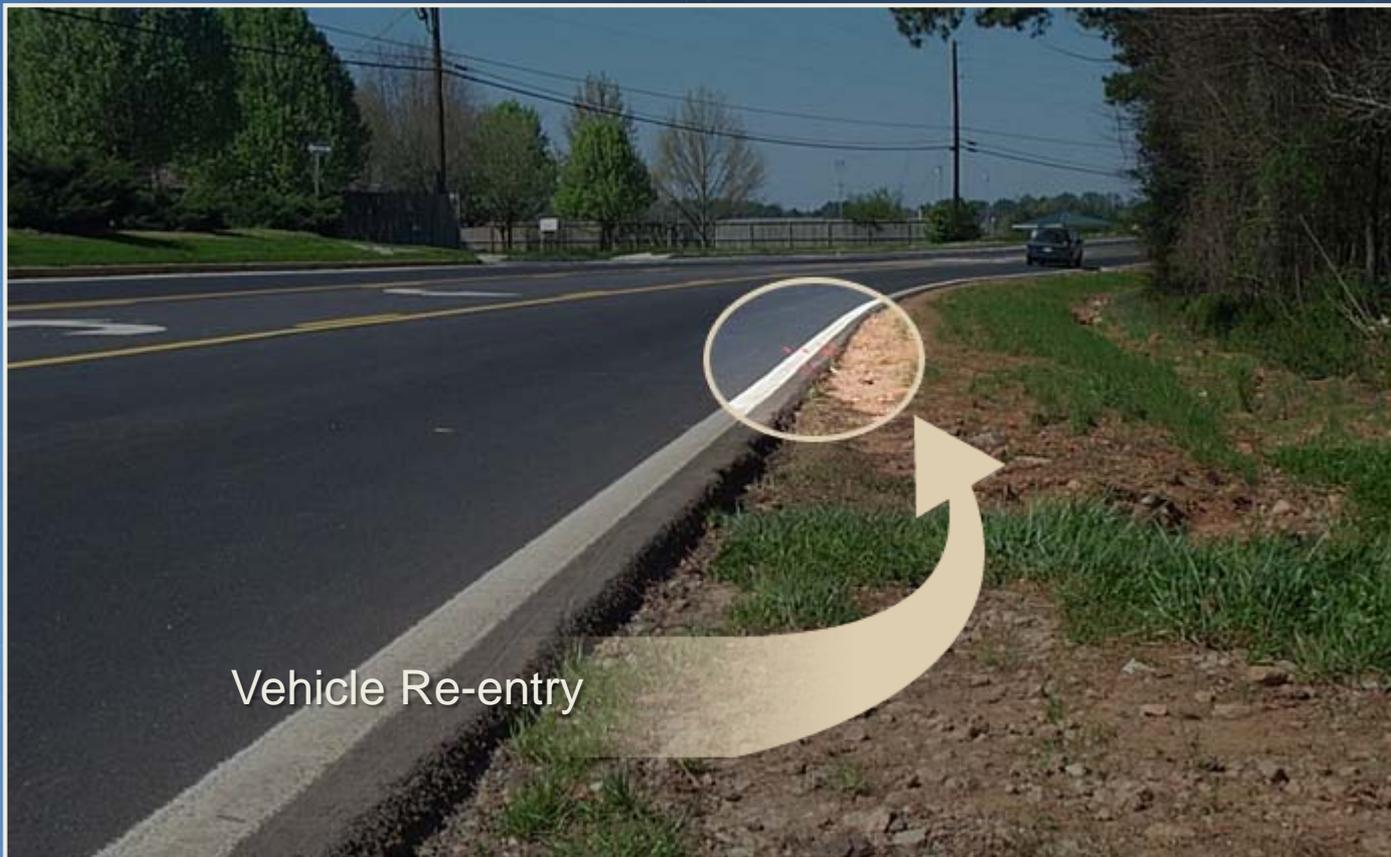
2006 AAA Drop-Off Study

(On rural paved roads with unpaved shoulders)

- Drop-off crashes were 17.7% of ROR crashes in Iowa
- Drop-off crashes were 24.5% of ROR crashes in Missouri
- Drop-off crashes in Iowa were four times as likely to be fatal as all rural crashes and twice as likely to be fatal as other rural ROR crashes
- Drop-off crashes in Missouri were twice as likely to be fatal as all rural crashes on similar roads

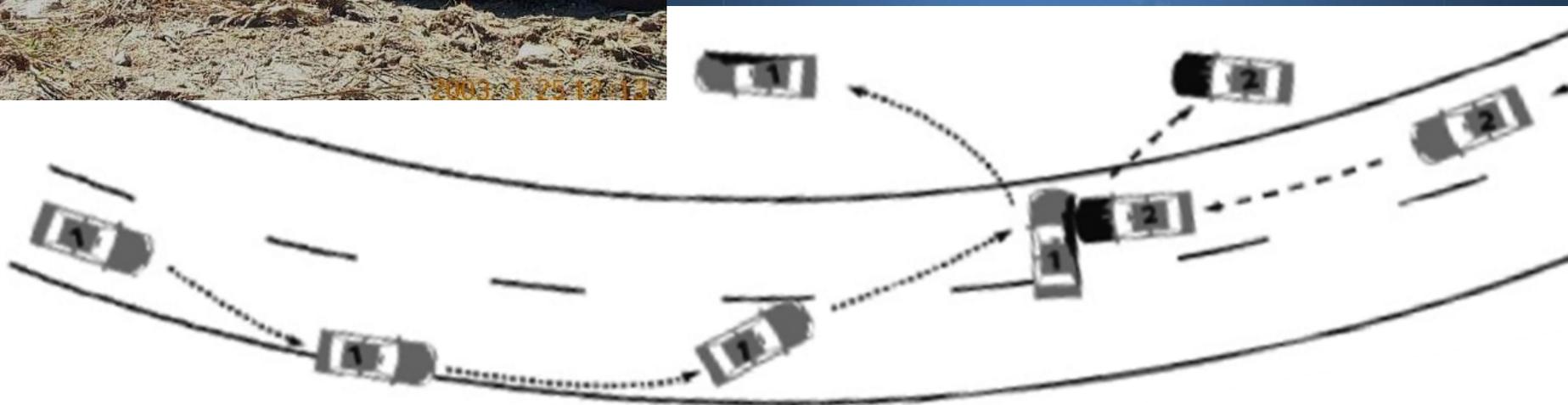


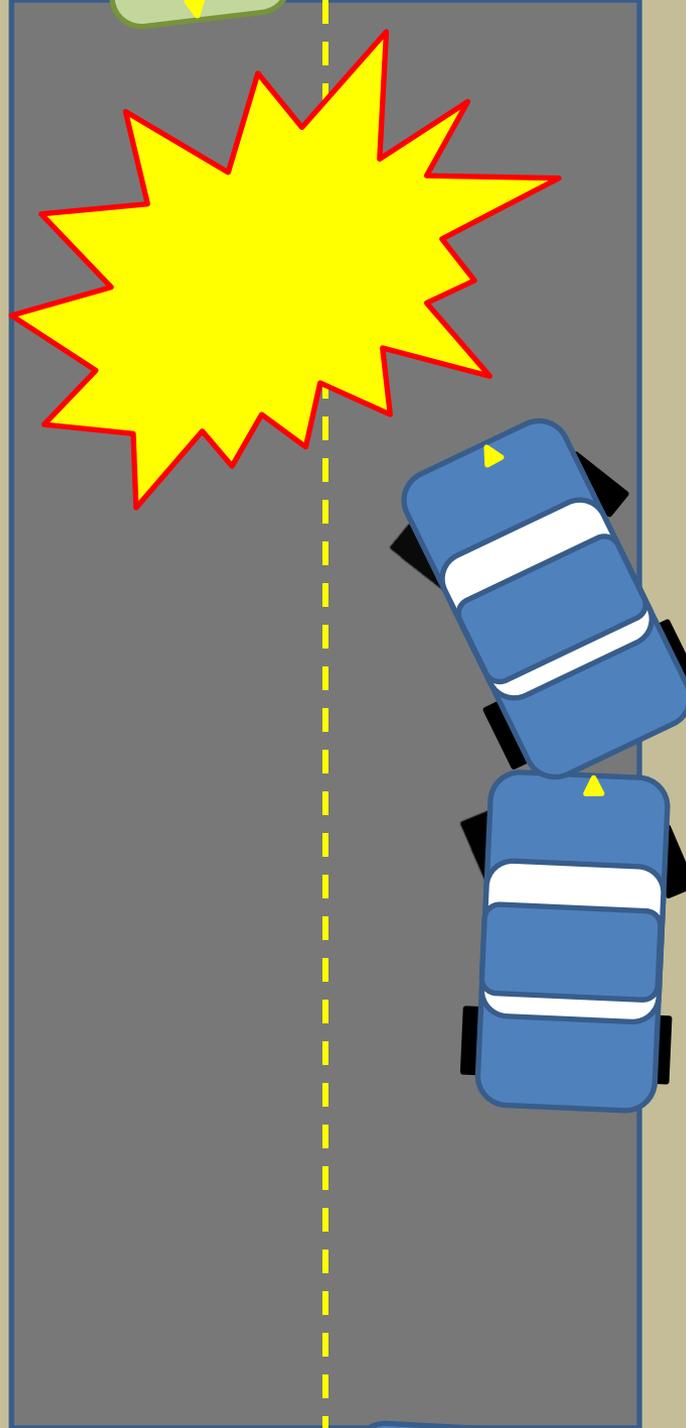
Are Drop-Offs a Problem?





Typical Drop-Off Crash with Tire Scrubbing





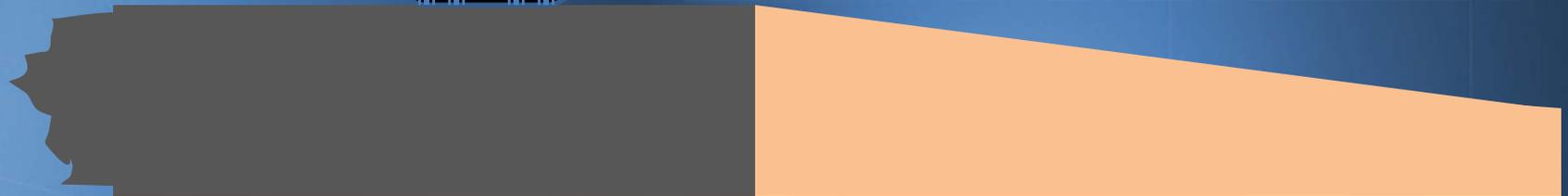
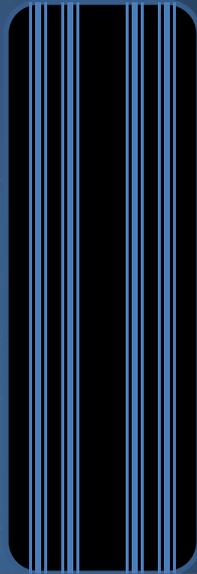
Driver crosses
over into
oncoming traffic

Driver
Overcompensates
Steering

Right tires leave
edge of
pavement

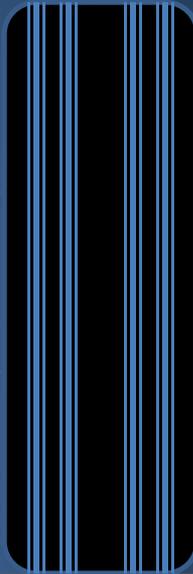


Without a Safety Edge





With Safety Edge





The Safety Edge: The Practical Solution





Approach to Reducing Roadway Departure Crashes

- Low-Cost Solutions
- Highly-Effective Countermeasures
- Systematic Application





Edge Durability



Maine Non-Safety Edge Control Section



Edge Durability

Condition After **6** Years of Service



Without Safety Edge



With Safety Edge

Safety Edge Installation: Georgia



Key Message

- ✓ Saves Lives
- ✓ Low Cost
- ✓ Improves Durability





Afternoon Session(s)

- Construction Details
- Hardware
- Safety Details
- Demonstration Projects
- Open Discussion
- Implementation Strategies



Safety Edge Installation: Alabama



Every Day Counts

Innovation Initiative

Contact Information

For training or more information on this Every Day Counts Initiative, please contact your local FHWA Division Office.

To learn more about EDC, visit:

<http://www.fhwa.dot.gov/everydaycounts>