



# VDOT Highway Safety Update

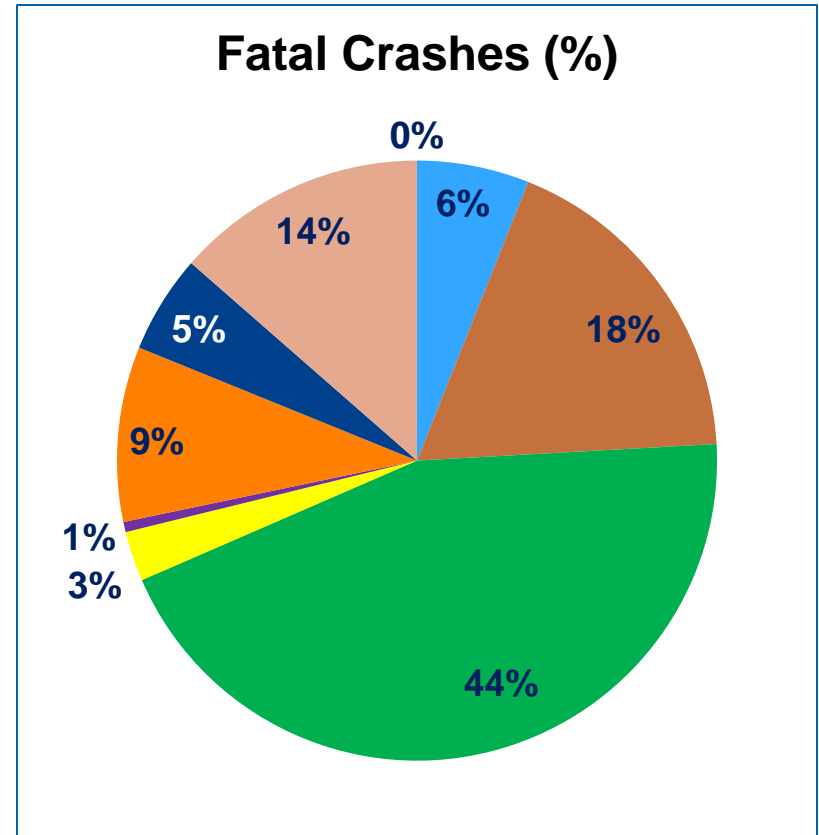
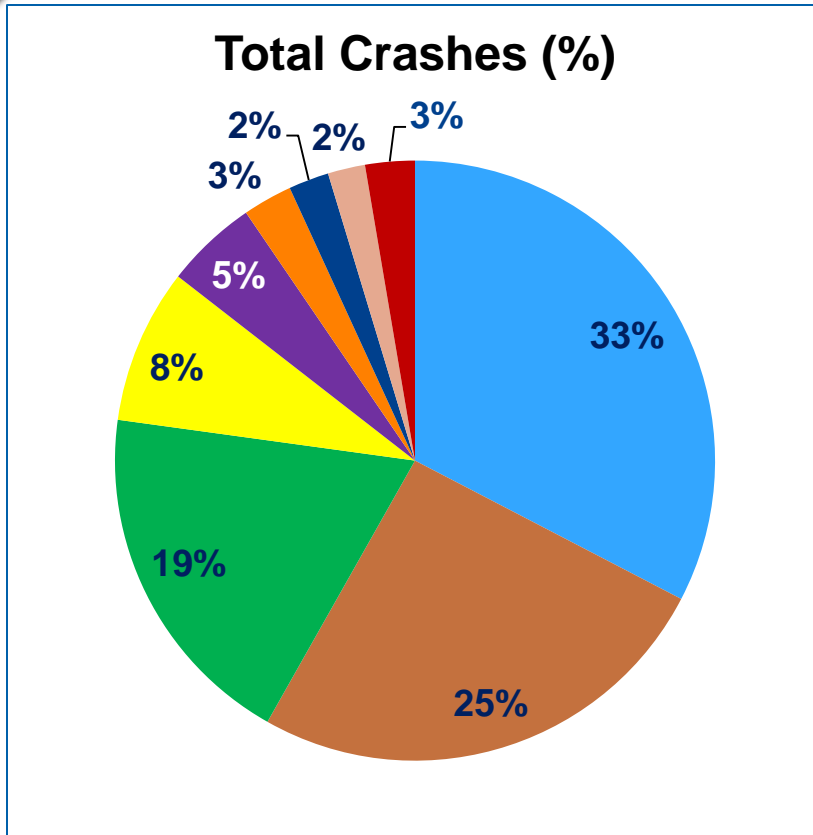
Virginia Statewide Bicycle and Pedestrian Advisory Committee  
Spring Meeting  
April 27, 2016

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Highway Safety Programs

## Rumble Strip(e) Revision Update

- Presentation at Fall 2015 BPAC Meeting
- Draft revisions delayed but underway
- Stakeholder group currently reviewing draft changes
- Next stakeholder meeting in mid May
- Anticipate finalizing changes to I&IM and Standards by Summer
- Goal of revisions is to offer more roadway departure safety countermeasures for deployment while also planning for and balancing the needs of bicyclists

# Virginia Highway Crash Types 2010-2014

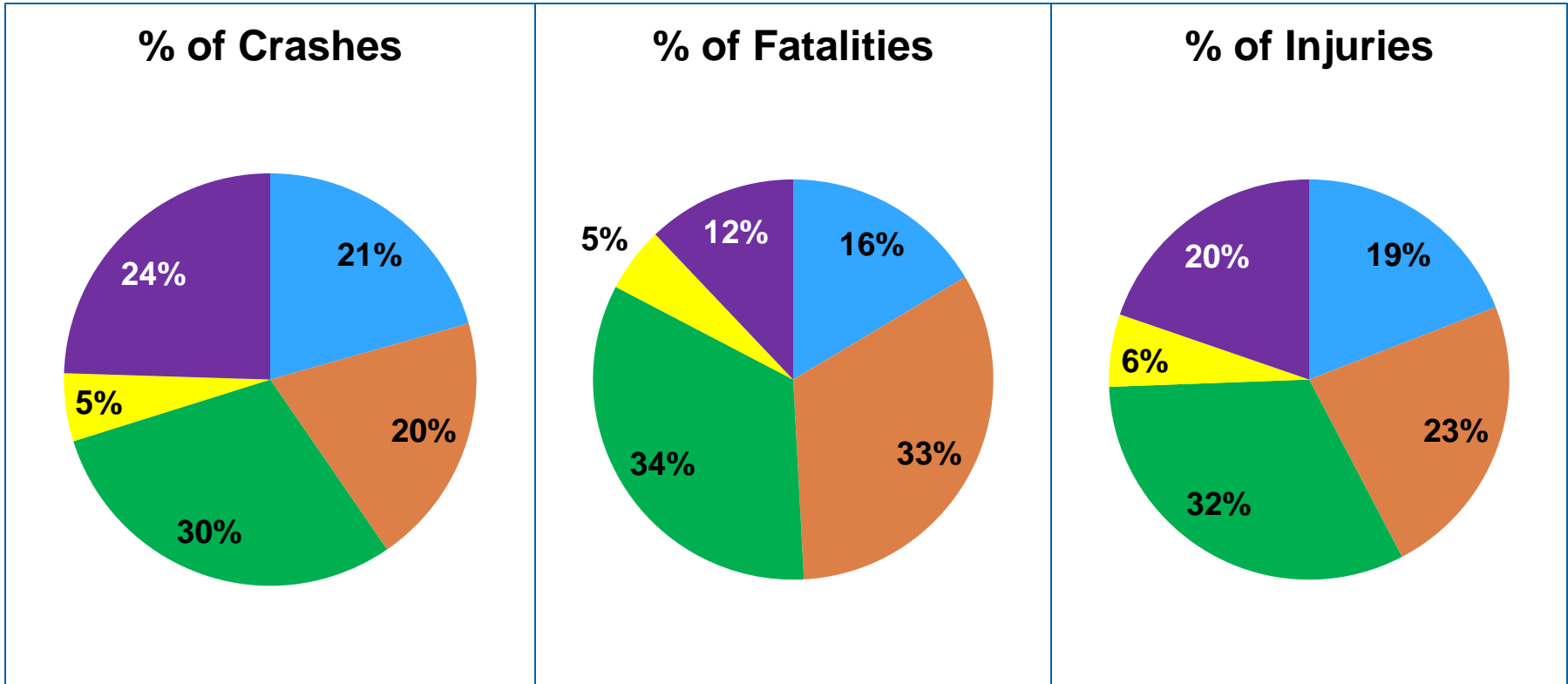


- Rear End
- Sideswipe
- Overtaken

- Angle
- Animal
- Ped/Bike

- Fixed Object Off Road
- Head On
- Others

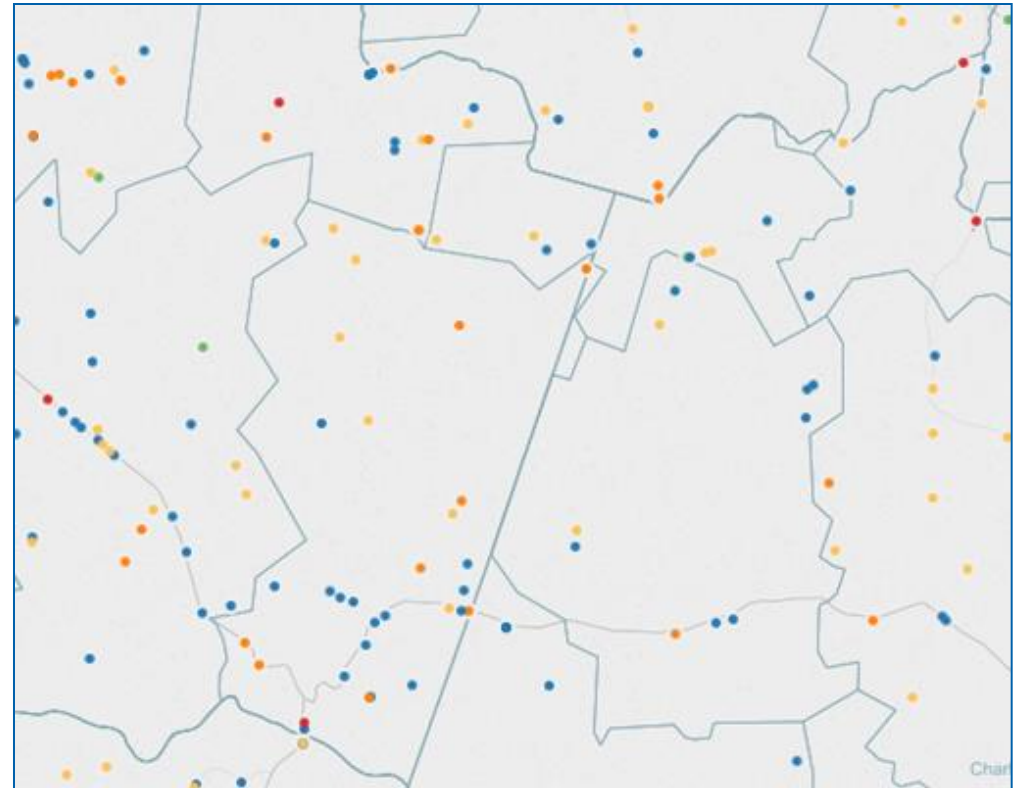
# Roadway Departure Crashes(2010-2014) By Maintenance and System



- VDOT Interstate
- VDOT Primaries
- VDOT Secondaries
- VDOT Primaries Maintained By Locality
- Other Locally-Maintained Roads

# Road Departure Crashes

- Non-Interstate Routes
  - 79% of Crashes
  - 81% of Injuries
  - 84% of Fatalities
- Serious Injuries & Fatalities are randomly dispersed across network
- Limited toolbox of roadway departure countermeasures that can be widely deployed



# Six Year Plan Roadway Departure Prevention

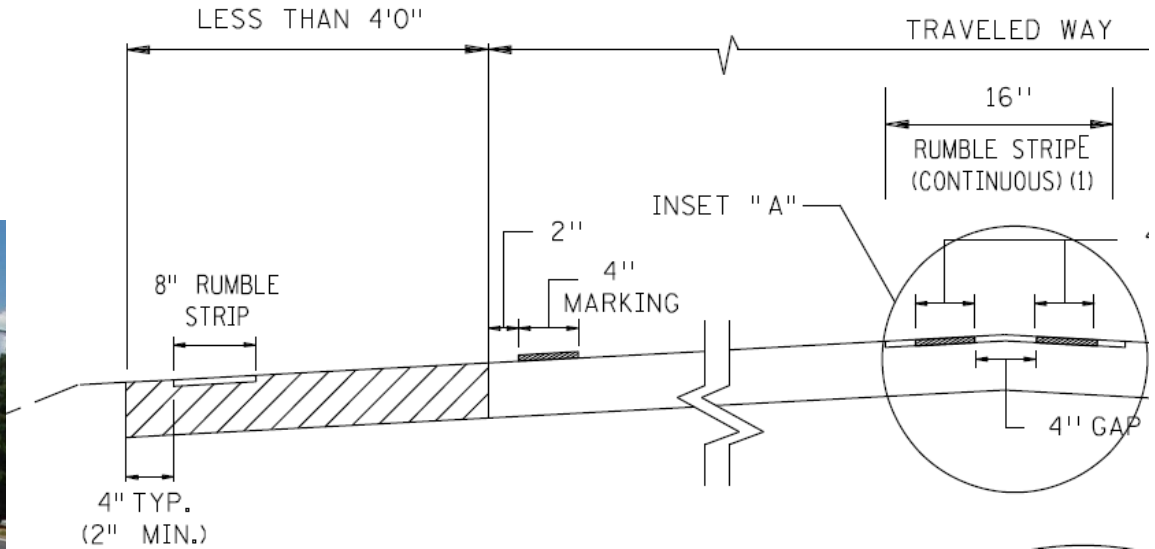


- 30-50% crash reduction



- 40-60% crash reduction
- However,
- VDOT rumble strip options limited
  - Very few rumble strips other than interstate
  - Primary and Secondary routes need more rumble strip design options

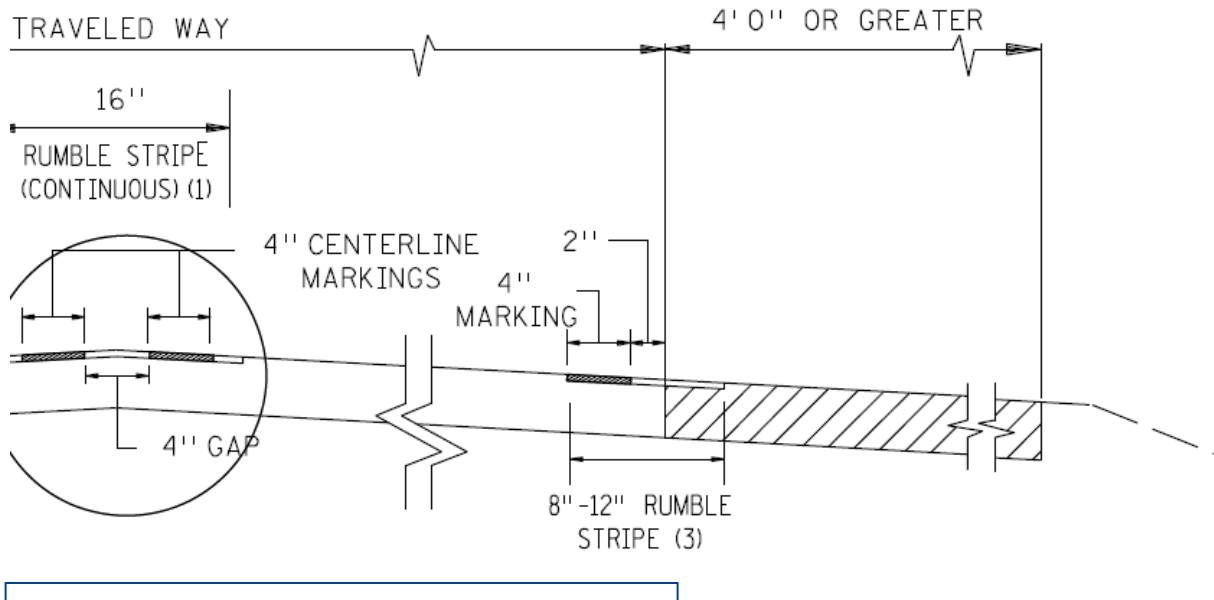
# DRAFT Rumble Strip(e) Revisions Shoulder Less Than 4 ft wide



- **Would include intermittent gaps**
- **8-9-inch wide rumble stripe placed in last foot of asphalt**
- **3/8' deep rumble**
- **Not recommended in urban area**



# DRAFT Rumble Strip(e) Revisions Shoulders Greater Than 4 ft wide



- **Would include intermittent gaps**
- **8 to 9-inch wide rumble stripe placed between travel lane and shoulder**
- **3/8' deep rumble**
- **Not recommended in urban area**



# Current Vs. Proposed – Narrow Shoulders



## Changes That Affect Cyclists

- Works from premise that cyclists should be anticipated on all non-controlled access facilities
- Makes all shoulder rumble strips/stripes intermittent except for those installed on controlled-access facilities (45 ft rumble/ 15 ft gap)
- When less than four feet of usable shoulder is available, places shoulder rumble strips on outside edge of pavement to maximize available pavement space for cyclists
- When more than four feet of usable shoulder is available, places rumble stripe between vehicular travel lane and shoulder
- Reduces the depth of the rumble grooves from 0.5 inch (current) to 0.375 inch deep on all roads except controlled-access facilities

# Questions?

## Contact Information:

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