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CTAC Brownbag
January 23, 2019

BEND AREA TRANSPORTATION SAFETY ACTION PLAN (TSAP)

 **KITTELSON
& ASSOCIATES**



MEETING AGENDA

- Project Overview/Purpose
- Framework Overview
- Highlights of Crash Data
- Potential Outcomes
- Integration with the TSP
- Discussion



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PROJECT PURPOSE

- Purpose
 - Develop a comprehensive safety program that systematically identifies and prioritizes safety projects and establishes a proactive approach to reducing crashes on all roadways within the City
- Oregon's Long-Term Vision
 - Create a comprehensive safety management program to achieve zero fatal and serious injury crashes by 2035



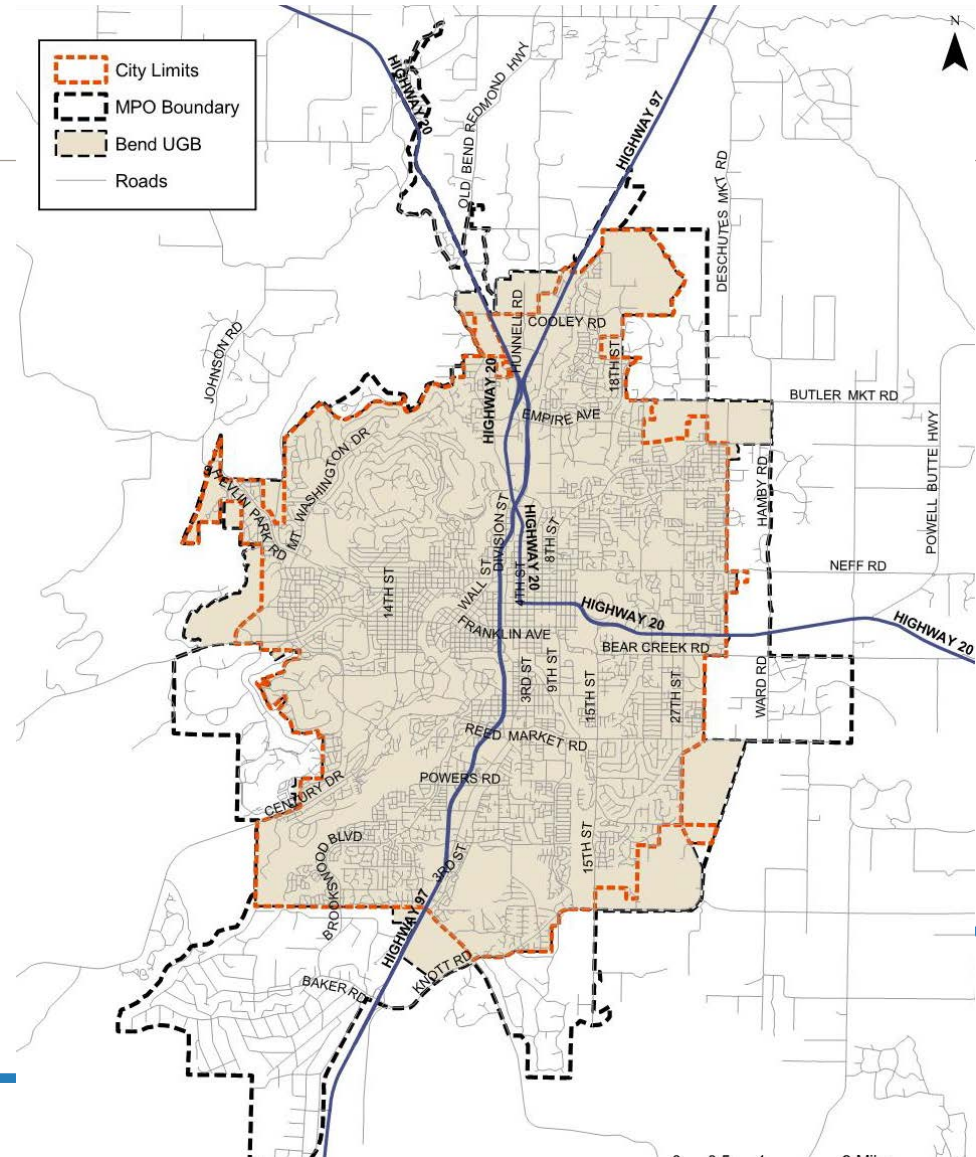
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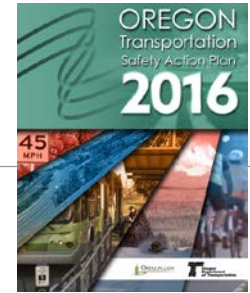
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STUDY AREA

- City's project will focus on area within the UGB
- Coordination with the Deschutes County TSAP will occur throughout the project



OREGON TSAP



- Near-Term Emphasis Areas

- Risky behaviors (impaired driving, unbelted, speeding, distracted driving)
- Infrastructure (intersection and roadway departure crashes)
- Vulnerable users (pedestrians, bicyclists, motorcyclists, and older road users)
- Improved systems (improve data, train and educate transportation and safety staff, support law enforcement and emergency responders, minimize commercial vehicle crashes)



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COMPREHENSIVE APPROACH

- Policy, planning, programming, and projects are multidisciplinary and involve “the 4Es” of safety
 - Engineering
 - Emergency Medical Services (EMS)
 - Enforcement
 - Education
- Input from stakeholders will help achieve multidisciplinary plan
 - Project Management Team (PMT)
 - MPO Technical Advisory Committee (TAC)
 - Citywide Transportation Advisory Committee (CTAC)
 - Multidisciplinary Stakeholder Group



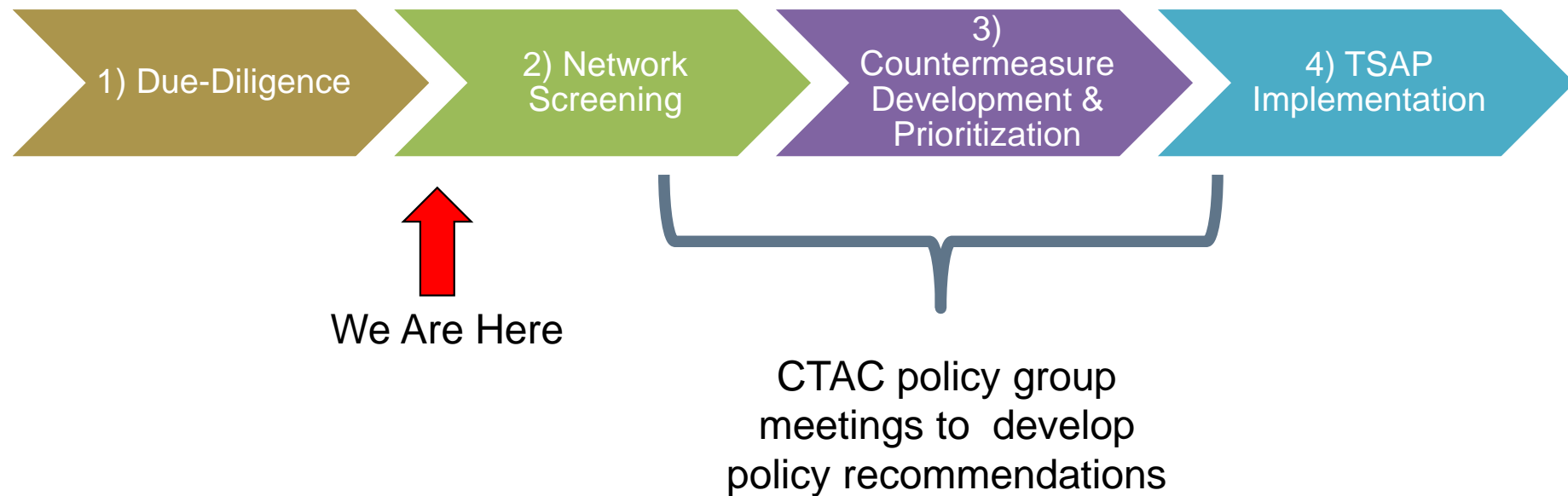
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FRAMEWORK PLAN



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HOW DOES BEND COMPARE?

- Crash data was compared to three cities:
 - Medford, Springfield, and Corvallis
- Compared to these cities:
 - Bend has the **highest percentage** of fatal/incapacitating crashes occurring in **dark conditions without street lights**, but the *lowest percentage in dark conditions with street lights*
 - Bend has the **highest percentage** of fatal/incapacitating crashes **involving alcohol or drugs**
 - Bend has the *lowest number of pedestrian and bicycle crashes*



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CRASH DATA - KEY BEND THEMES

- Crash frequency has been on an increasing trend
- Crash frequency increases in the winter, but severity does not
- Most common collision types are rear-end, turning movement, and angle
- Pedestrian and bicycle crashes are more likely to result in injury
- Crashes involving alcohol/drugs are more likely to result in injury



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CRASH DATA (2012-2016)

- Crash data includes the Bend UGB area
- Reported crashes from 2012 – 2016 are included
 - 4,500 reported crashes
 - 89% occurred within 250' of an intersection

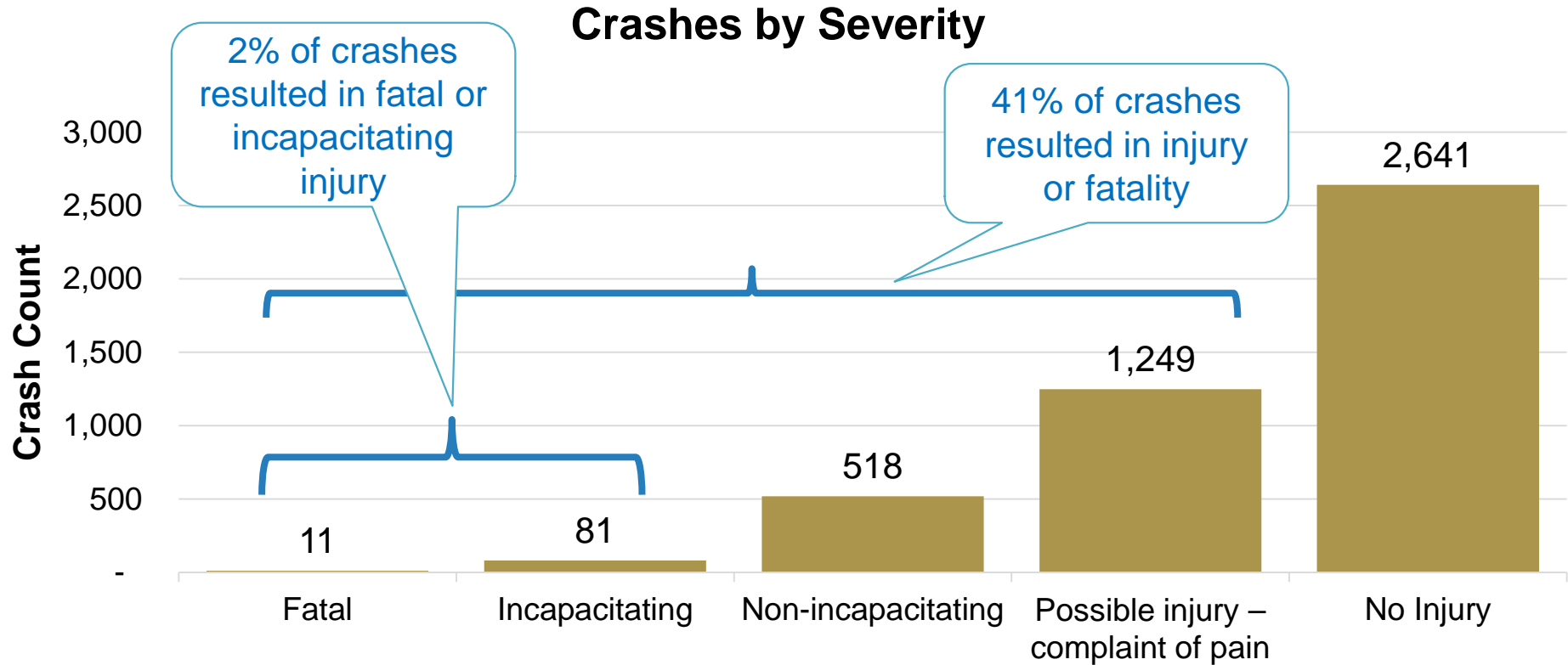


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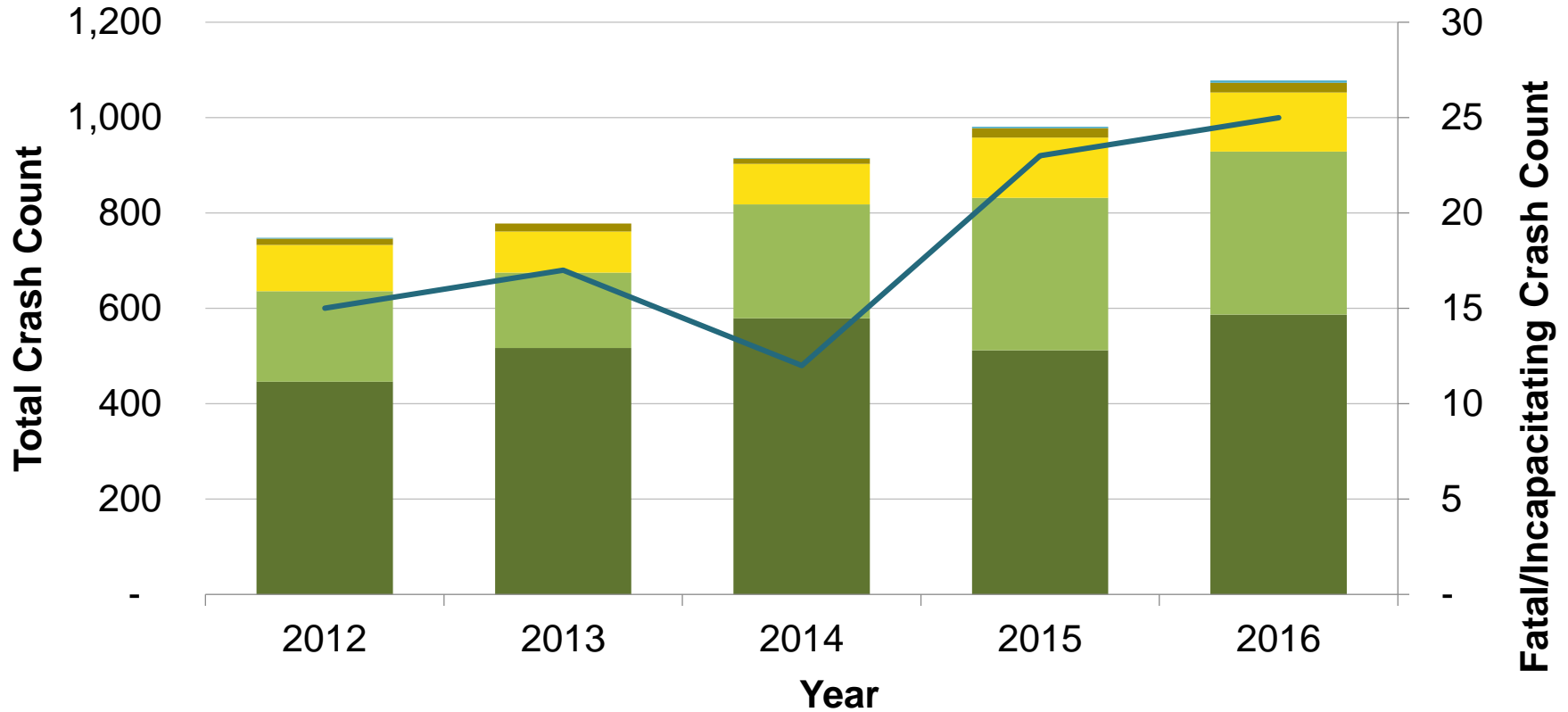


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CRASH DATA (2012-2016)

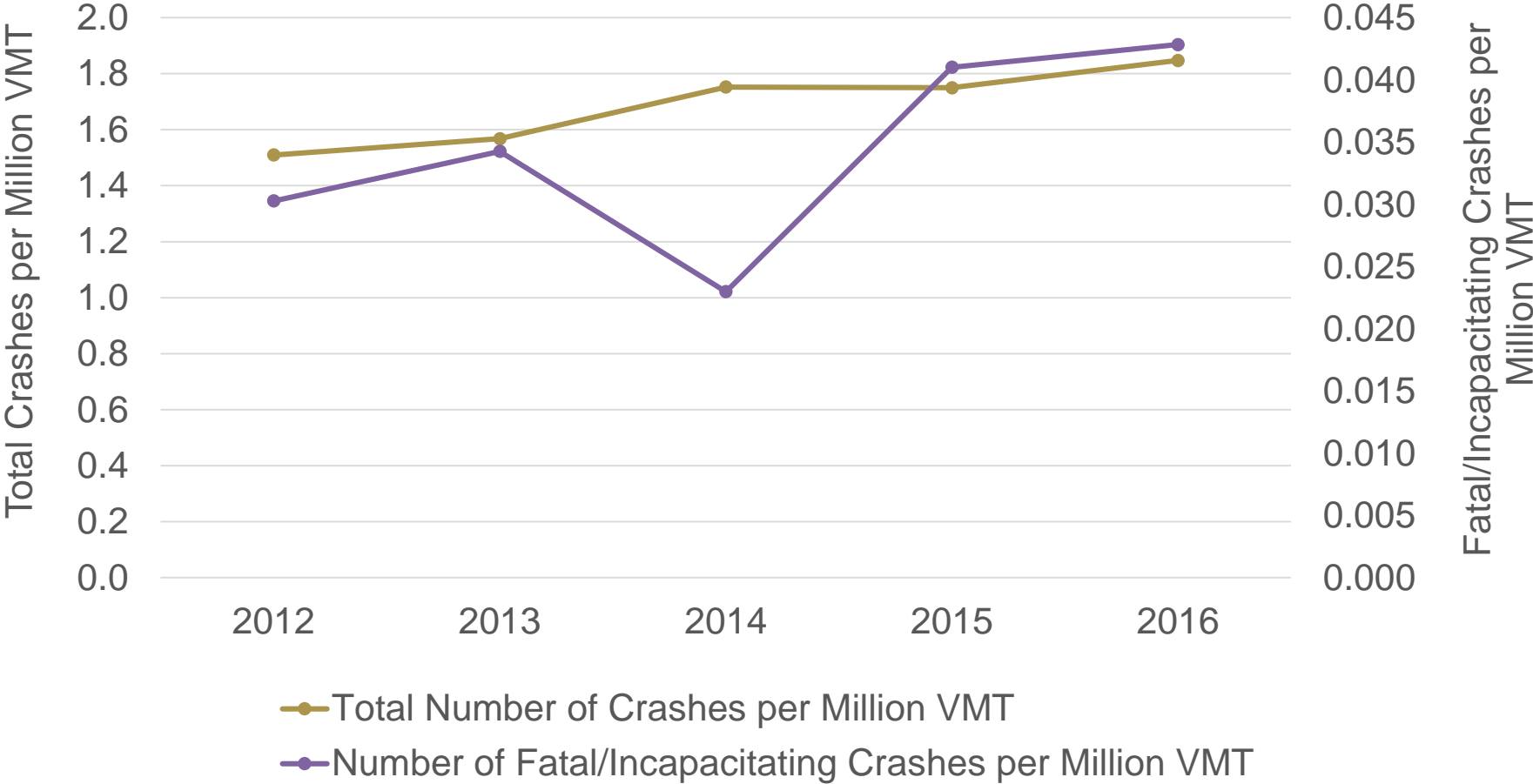


CRASH DATA (2012-2016)



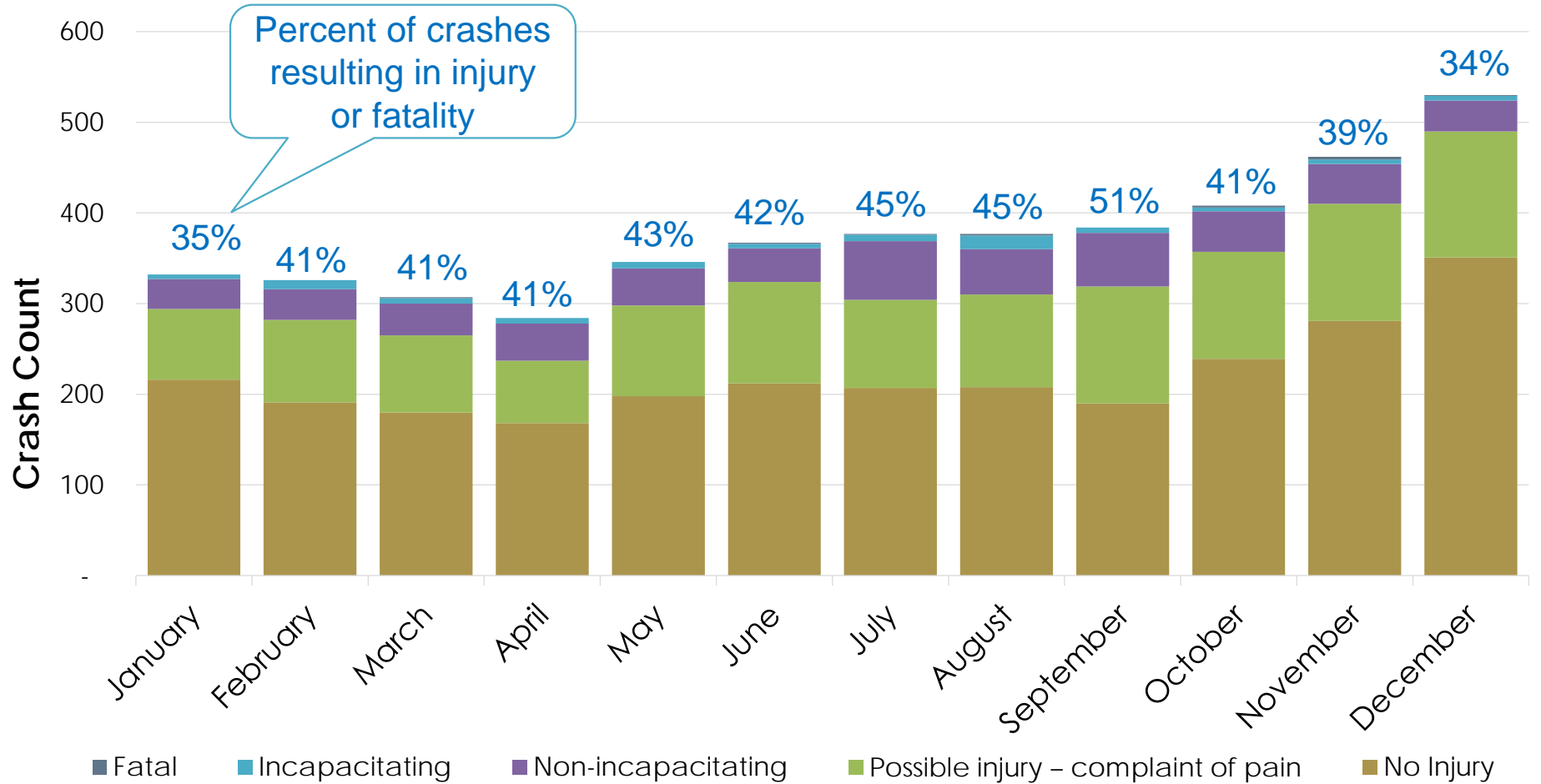
Legend: PDO (Dark Green), Injury C (Light Green), Injury B (Yellow), Injury A (Olive Green), Fatal (Light Blue), Fatal/ Incapacitating Crash Count (Blue Line)

BEND AREA CRASH RATES BY YEAR





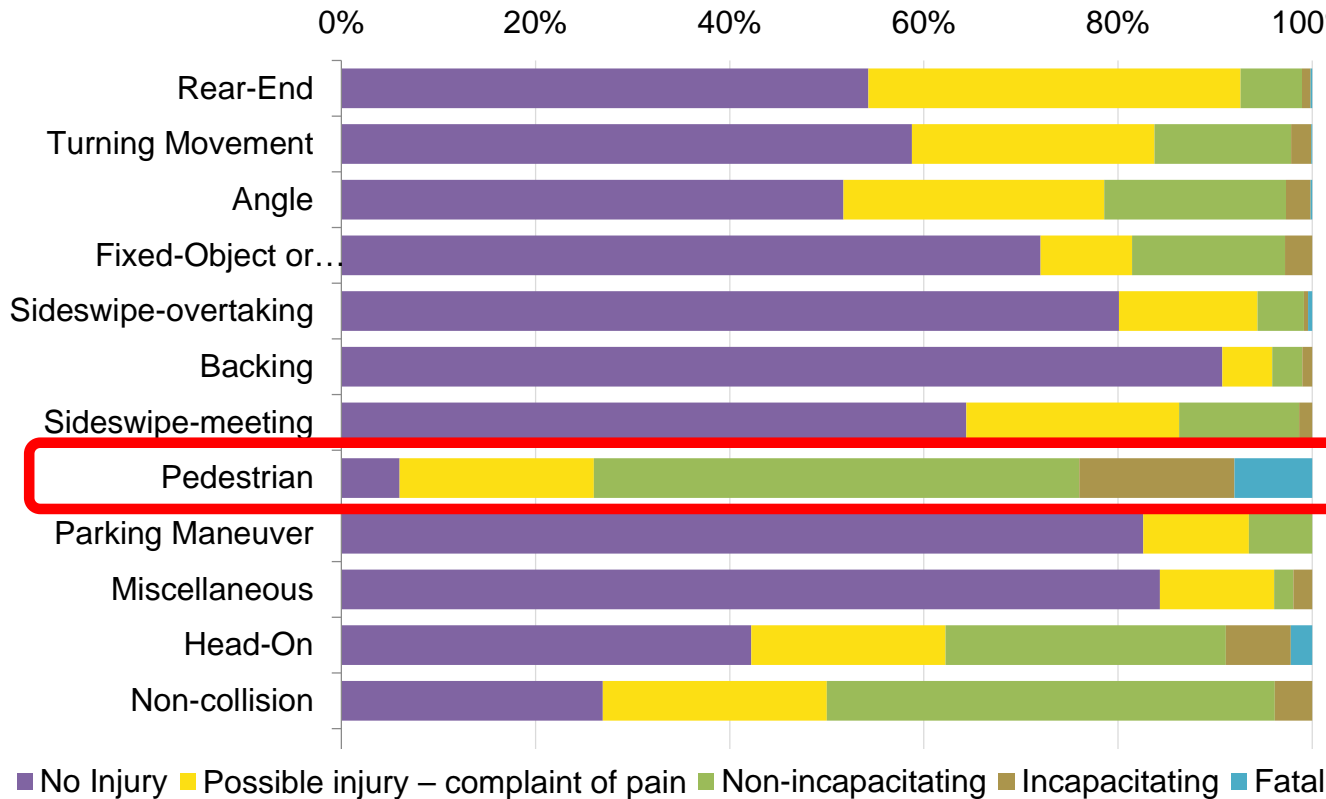
CRASH DATA (2012-2016)



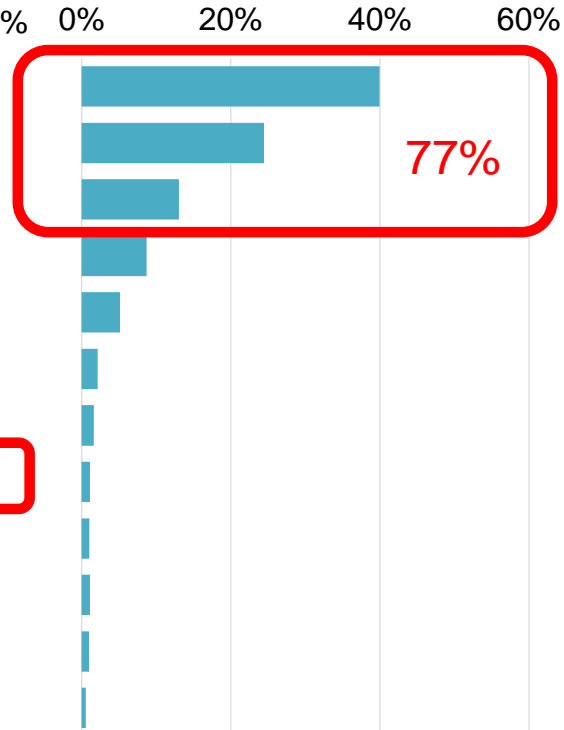


CRASH DATA (2012-2016)

Crashes by Collision Type and Severity

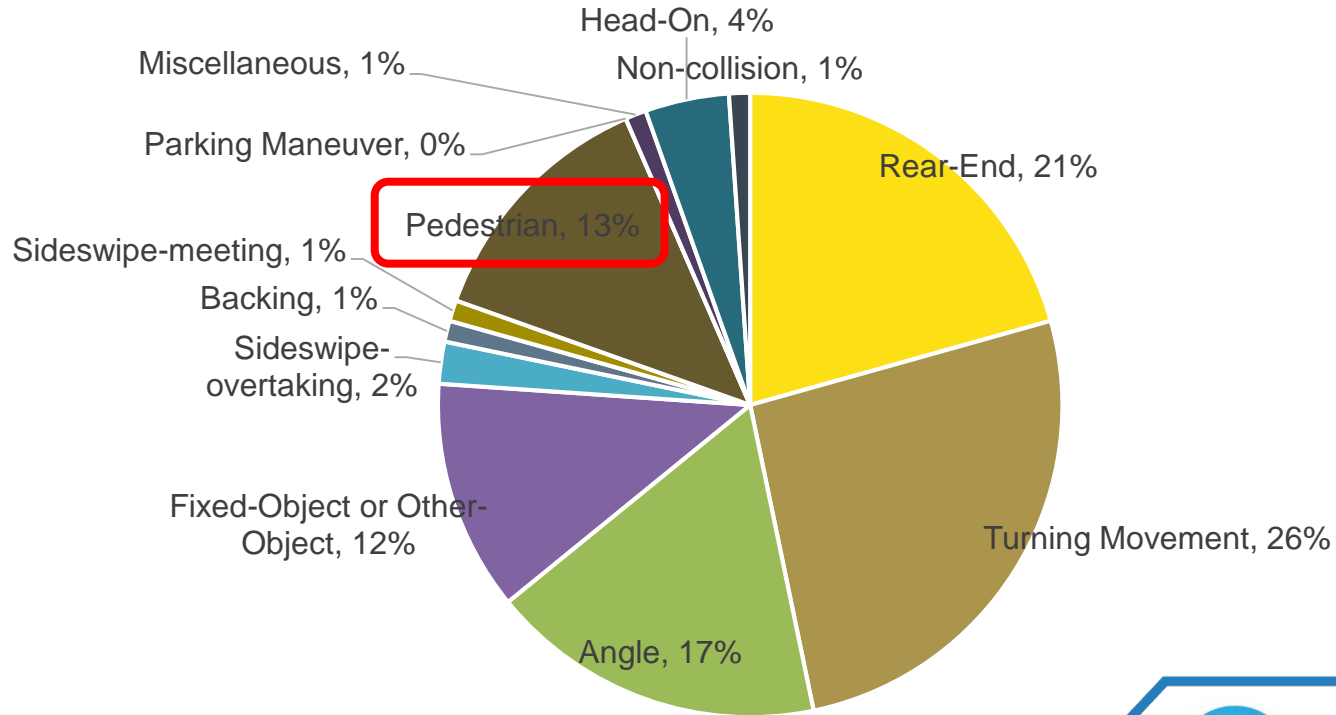


Crashes by Type Crash Share



CRASH DATA (2012-2016)

Crash Share of Fatal and Incapacitating Injury Crashes



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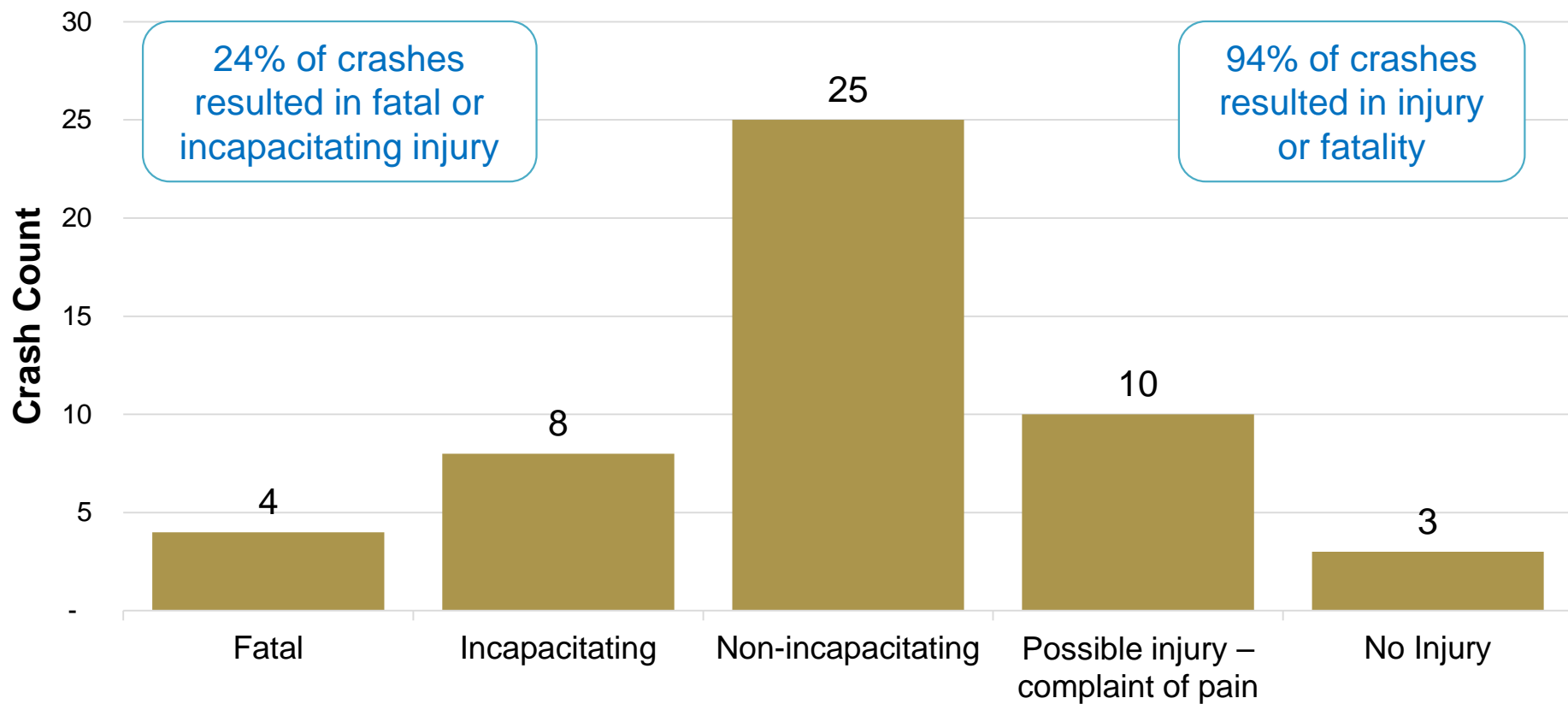


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CRASH DATA (2012-2016)

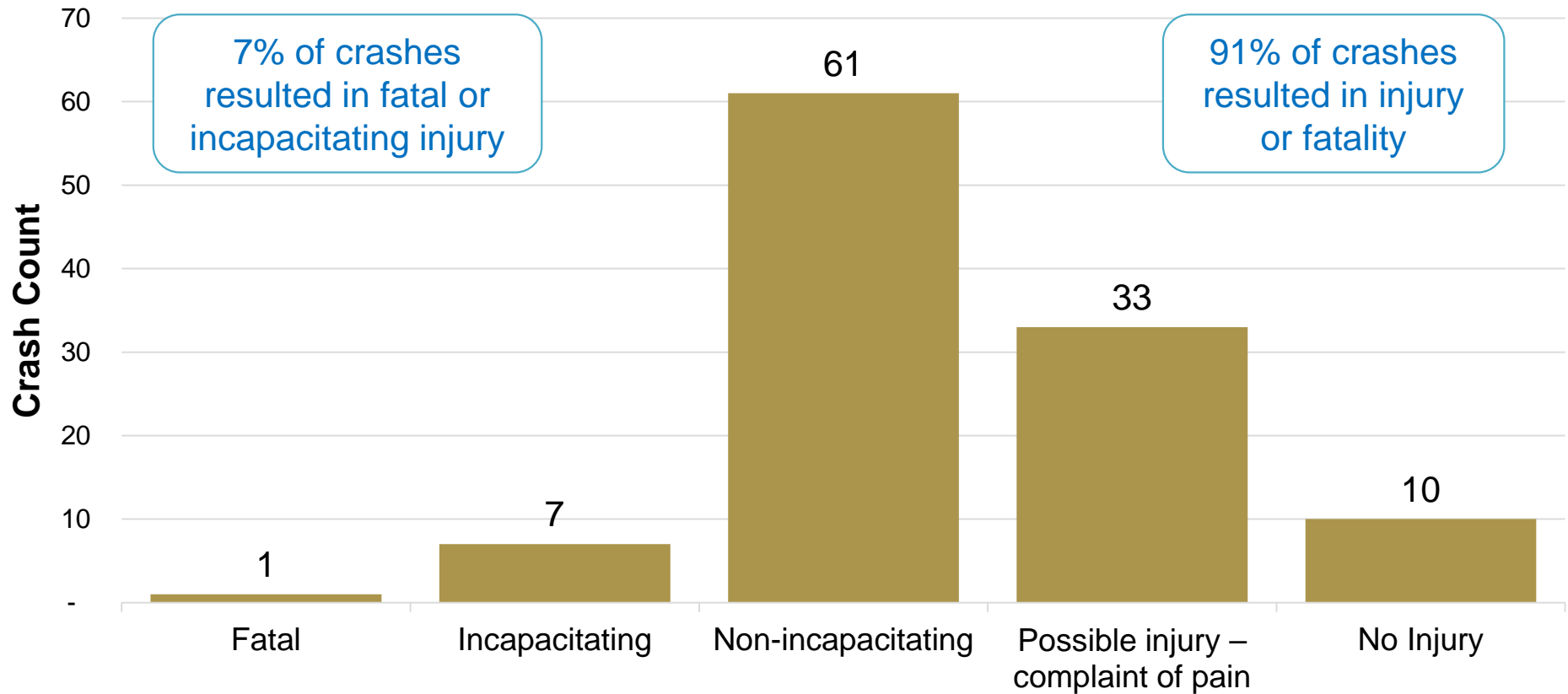
Pedestrian Crashes by Severity





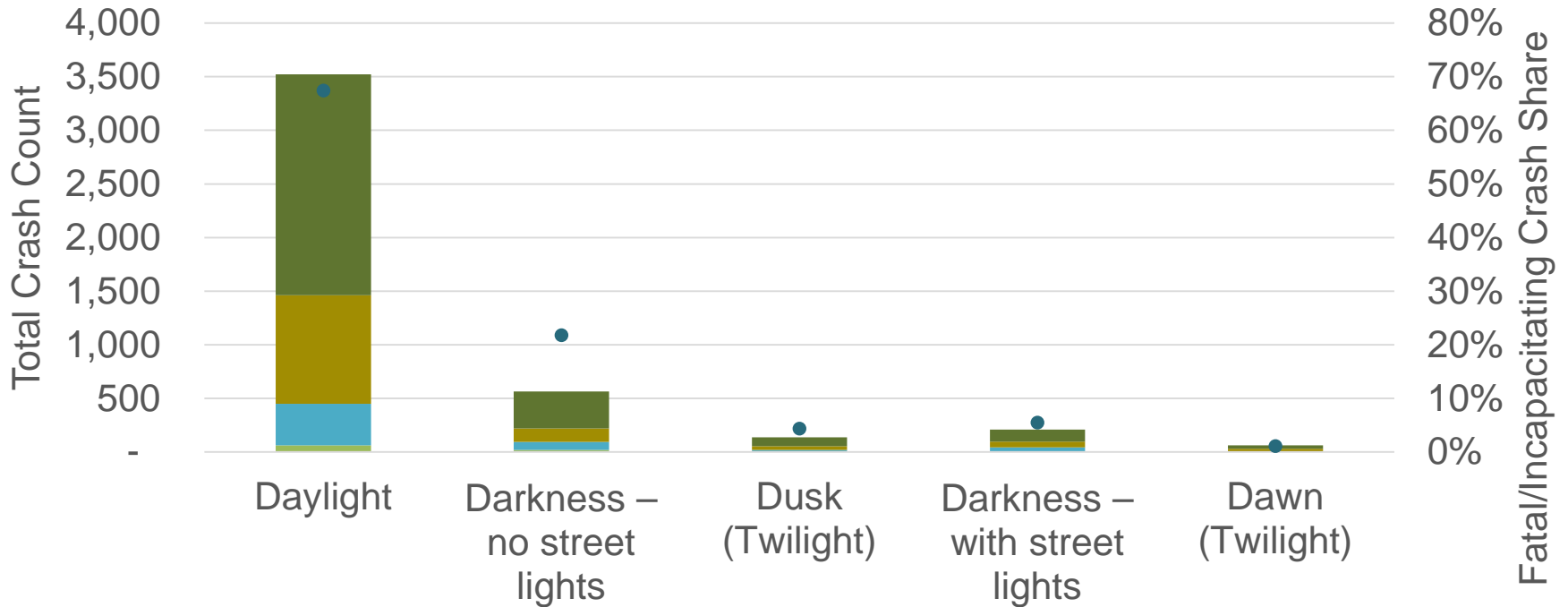
CRASH DATA (2012-2016)

Bicyclist Crashes by Severity



CRASH DATA (2012-2016)

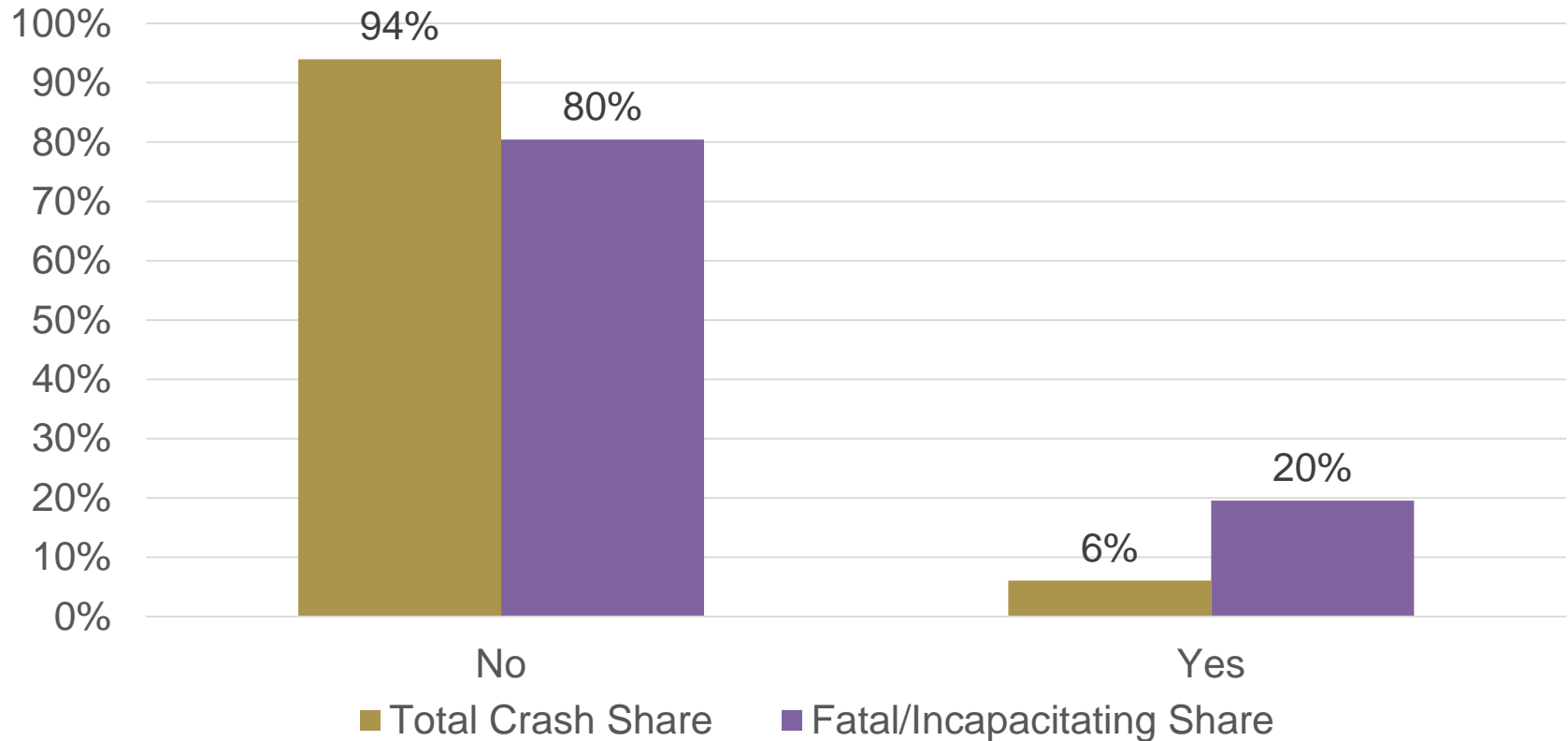
- Dark, Unlit Conditions



■ Fatal ■ Injury A ■ Injury B ■ Injury C ■ PDO ● Fatal and Incapacitating Crash Share

CRASH DATA (2012-2016)

- Alcohol or Drug Use



TSAP OUTCOMES

- 10 site-specific recommendations
- Systemic safety solutions based on crash patterns
 - Typical countermeasures
- Non-infrastructure solutions:
 - Education
 - Enforcement
 - Emergency response



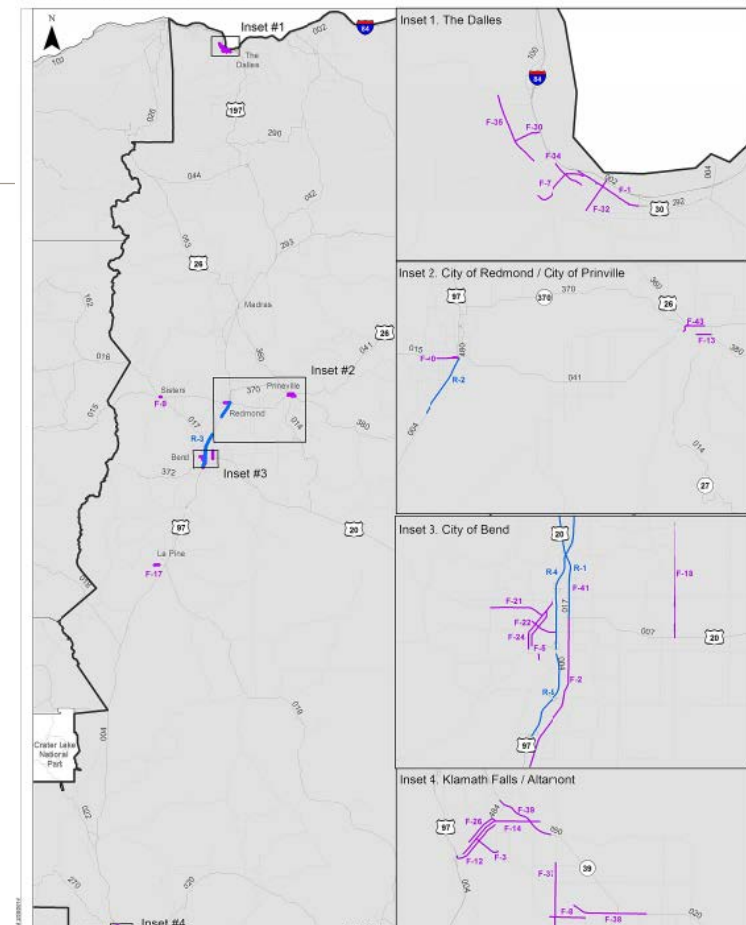
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SITE SPECIFIC RECOMMENDATIONS

- Citywide screening based on crash severity and crash type will identify top sites

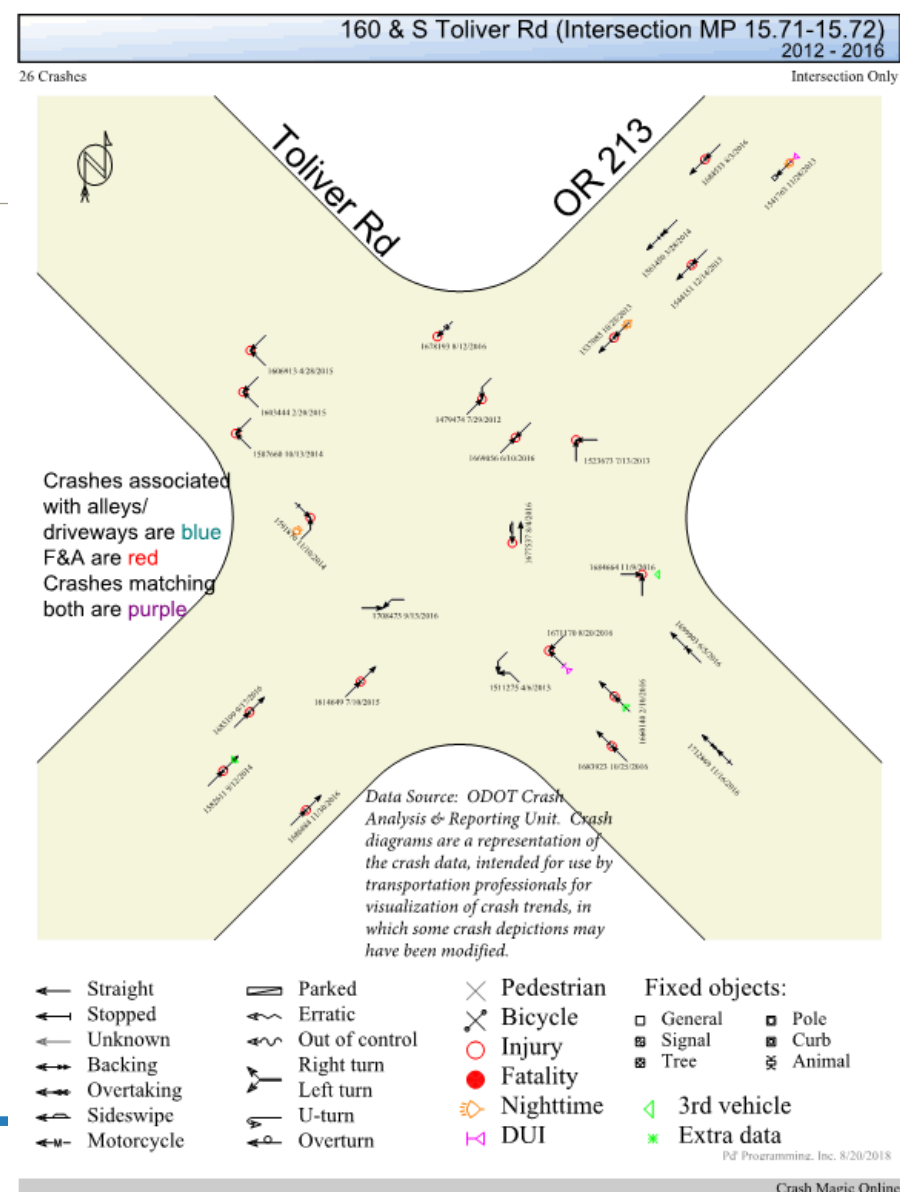


Example network screening results from 2014 ODOT Pedestrian and Bicycle Safety Implementation Plan

SITE SPECIFIC RECOMMENDATIONS

- 10 sites will be determined by further analysis

(EXAMPLE sample crash diagram)



EXAMPLE SYSTEMIC SOLUTIONS

- Systemic safety solutions
 - *Low-cost, effective solutions that can be implemented based on risk factors to reduce crash severity and frequency*



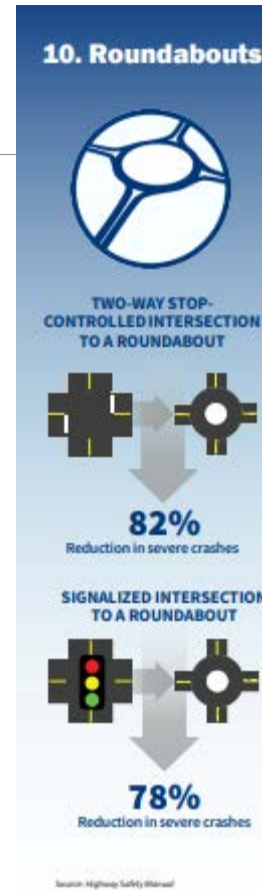
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EXAMPLE SYSTEMIC SOLUTIONS

- Example of systemic solutions:
 - Intersections
 - Pedestrian and bicycle crashes



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EXAMPLE NON-INFRASTRUCTURE OUTCOMES (CLACKAMAS COUNTY)

Action Items - Sober Driving

- Work with alcohol and marijuana retailers/servers to encourage compliance checks to deter selling to, and reward those who do not sell to, underage individuals.
- Promote the Oregon Liquor Control Commission's Responsible Vendor Program.
- Provide educational posters, social media posts, and public service announcements to inform the public about the dangers of impaired driving.
- Work in schools to educate students on the consequences of impaired driving.
- Coordinate with enforcement agencies to gain support of legislation and penalties associated with impaired driving.
- Enhance Driving Under the Influence of Intoxicants (DUII) and impaired driving enforcement.

The Clackamas County Drive to Zero team offers the Posters & Coasters Safe Driving Media Contest to high school students in the County. The contest asks students to create artwork about safe driving for a chance to win prizes and share safe driving behavior with their local community. Nearly 100 high school students entered in 2018, with the winning poster shown here:



- » Data-driven saturation patrols.
- » Drug recognition training (DRE & K9), standardized field sobriety tests training, and wet labs.
- » Assign a dedicated DUII enforcement unit.

Sober Driving - What Can You Do?

- Drive sober and alert
 - Plan your ride home or assign a designated driver before you begin drinking or using marijuana
 - Prevent others from driving when they're intoxicated
 - Know the effects of any medication you're taking, prescription or over-the-counter.
-
- Develop repeat DUII driver offender programs focused on treating the causes of DUII.
 - Provide Drug Recognition Expert (DRE) training for all county law enforcement officers.
 - Grow partnerships and support existing efforts to reduce underage drinking, underage marijuana use, and drug use through funding, educational outreach, and coalition membership.
- » Partner with substance abuse treatment programs.

EXAMPLE NON-INFRASTRUCTURE OUTCOMES (CLACKAMAS COUNTY)

Action Items - Inexperienced Drivers

- Support driver education programs, especially in rural areas that may struggle for access to programs.
- Begin safety education before young people reach driving age, as early as preschool.
 - » Partner with groups such as **Safety Towns** and school districts.
- Support family-based education to leverage parental influence.
- Continue to support peer-based marketing efforts.
- Continue outreach programs in high schools County-wide to provide driver and non-motorized mode safety education.

According to an ODOT analysis, young drivers, ages 15-20, without driver's education account for over 90% of all crashes involving drivers of this age.²



Photo Source: Clackamas County



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INTEGRATION WITH THE TSP

- **Site-specific recommendations** may lead to additional projects
- **Systemic safety solutions and Typical countermeasures** will direct policy language



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DISCUSSION

- Questions?
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