



CITY OF BEND



BEND MPO
Metropolitan Planning Organization

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



BEND MPO
Metropolitan Planning Organization



CITY OF BEND



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



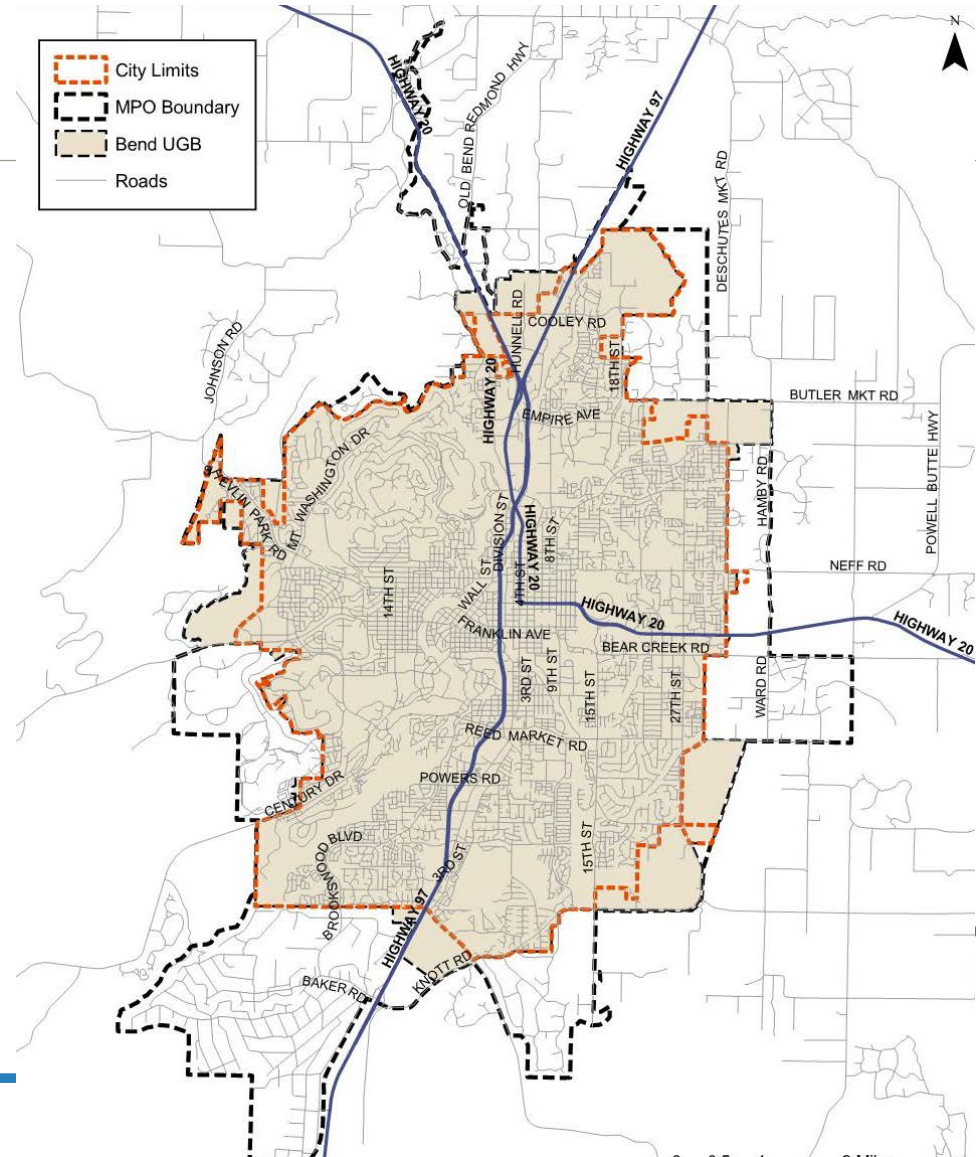
BEND MPO
Metropolitan Planning Organization



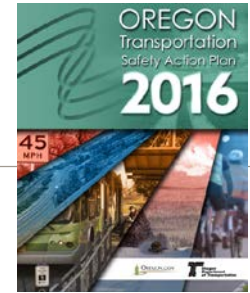
CITY OF BEND

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)



BEND MPO
Metropolitan Planning Organization



CITY OF BEND

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



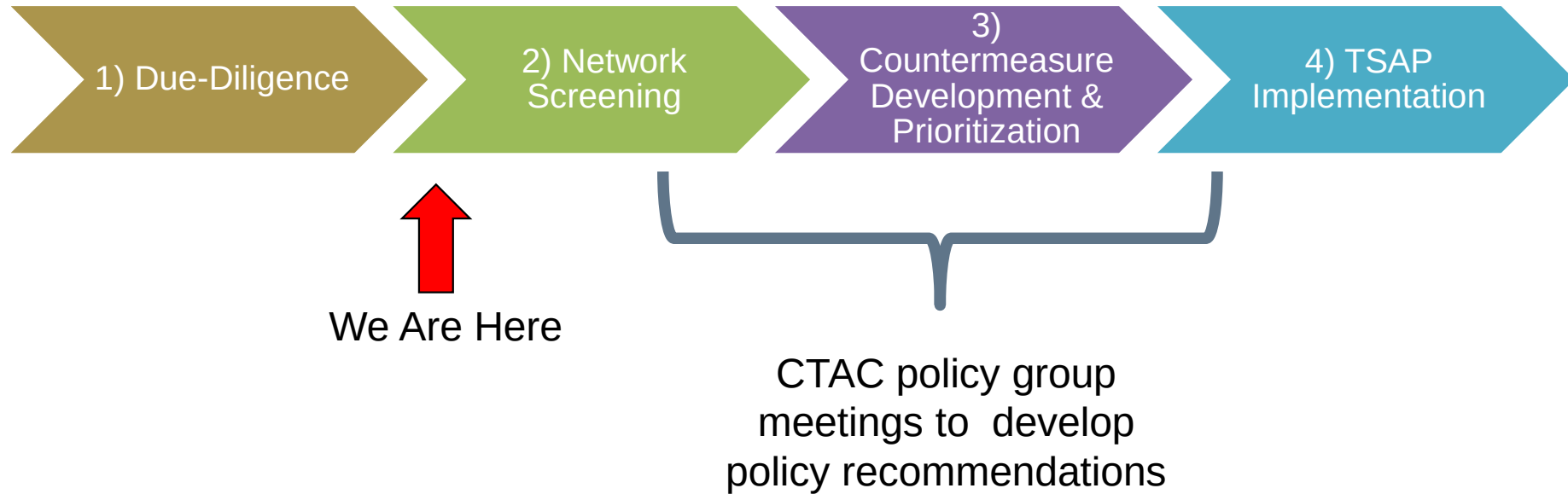
BEND MPO
Metropolitan Planning Organization



CITY OF BEND



FRAMEWORK PLAN



BEND MPO
Metropolitan Planning Organization



CITY OF BEND

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*



BEND MPO
Metropolitan Planning Organization



CITY OF BEND

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



BEND MPO
Metropolitan Planning Organization



CITY OF BEND



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



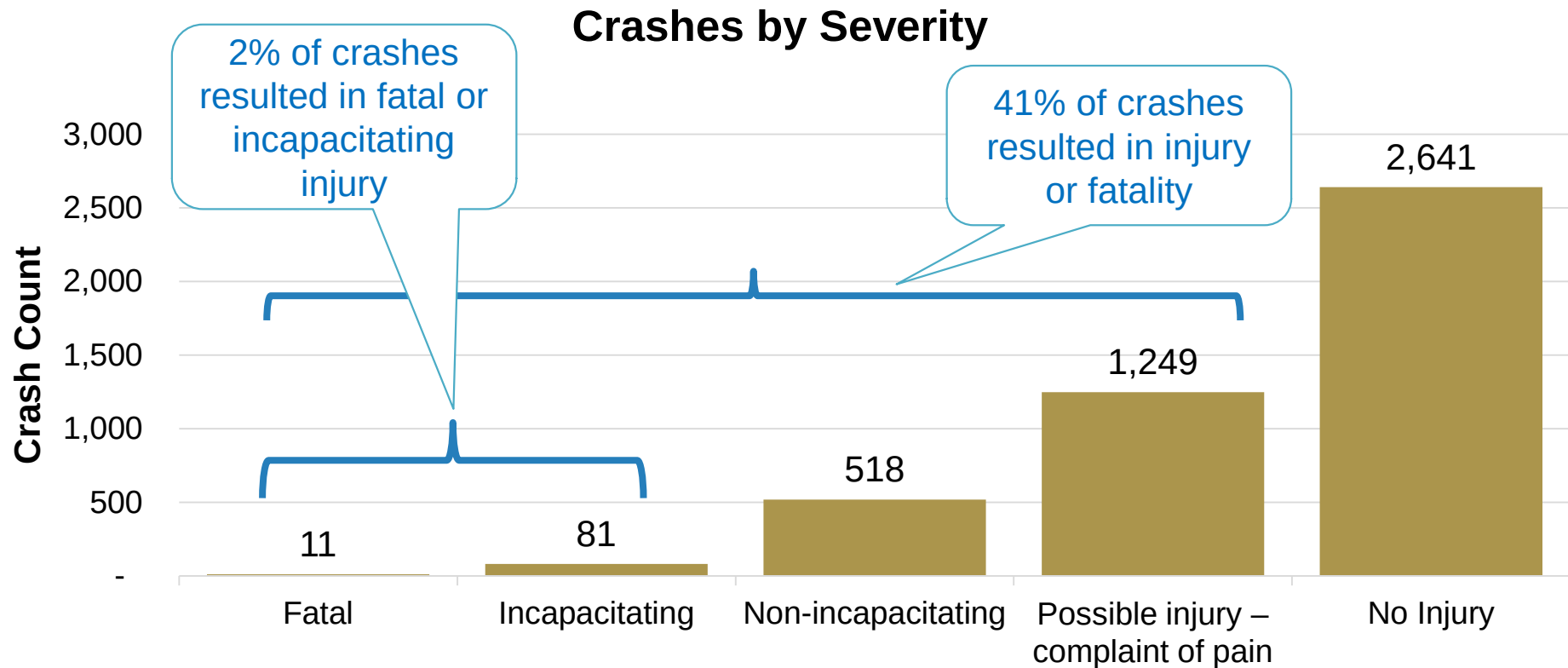
BEND MPO
Metropolitan Planning Organization



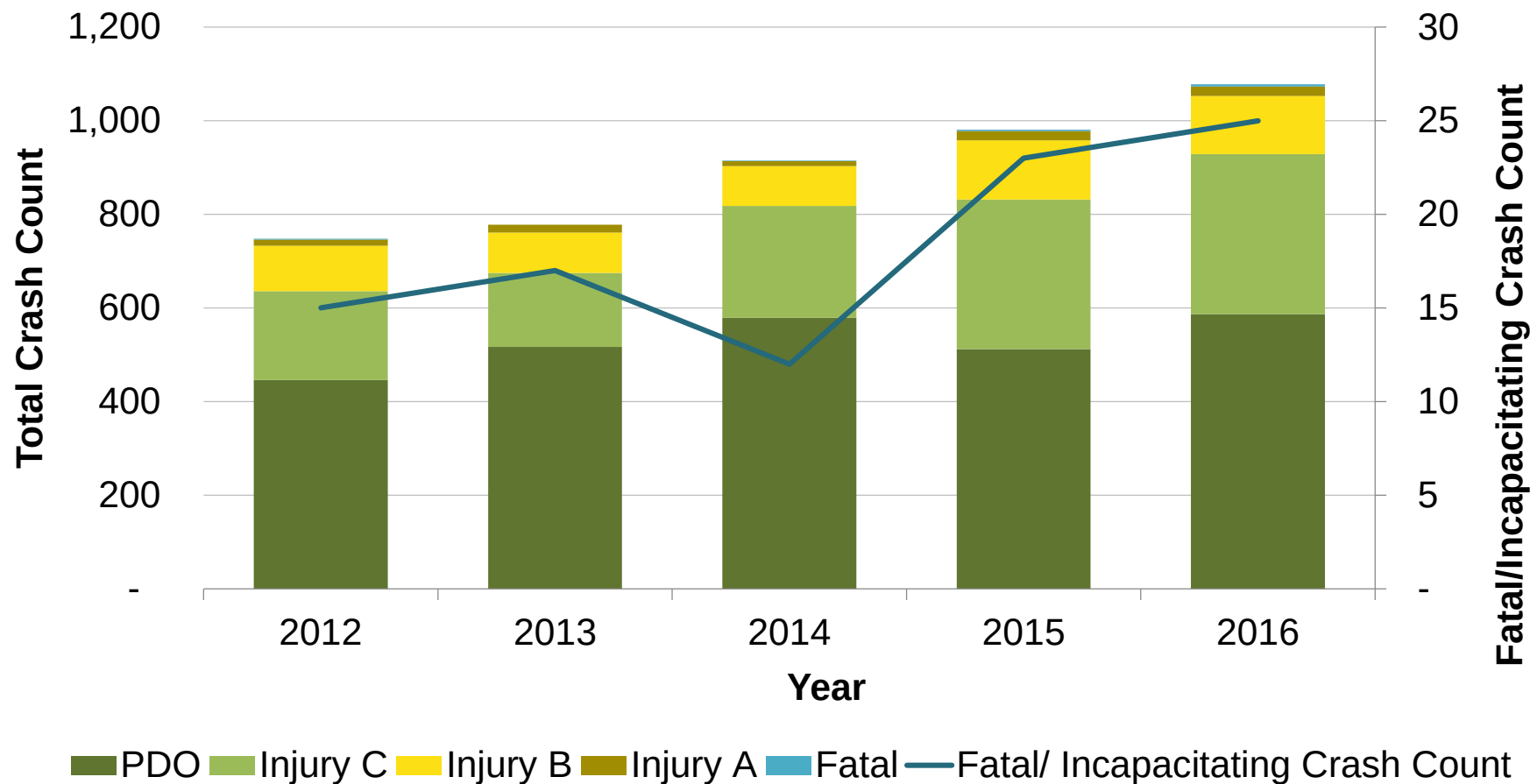
CITY OF BEND



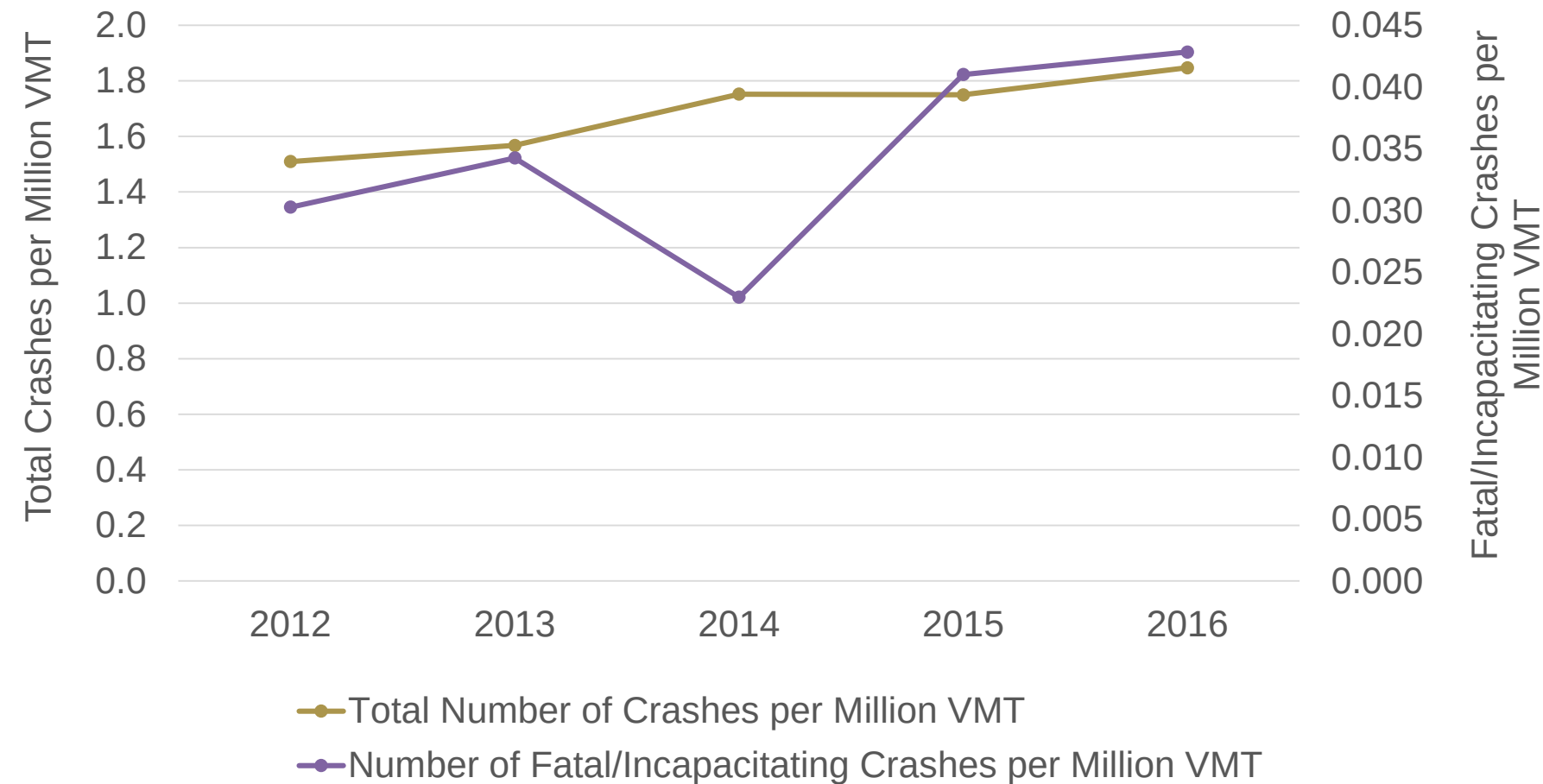
CRASH DATA (2012-2016)



CRASH DATA (2012-2016)

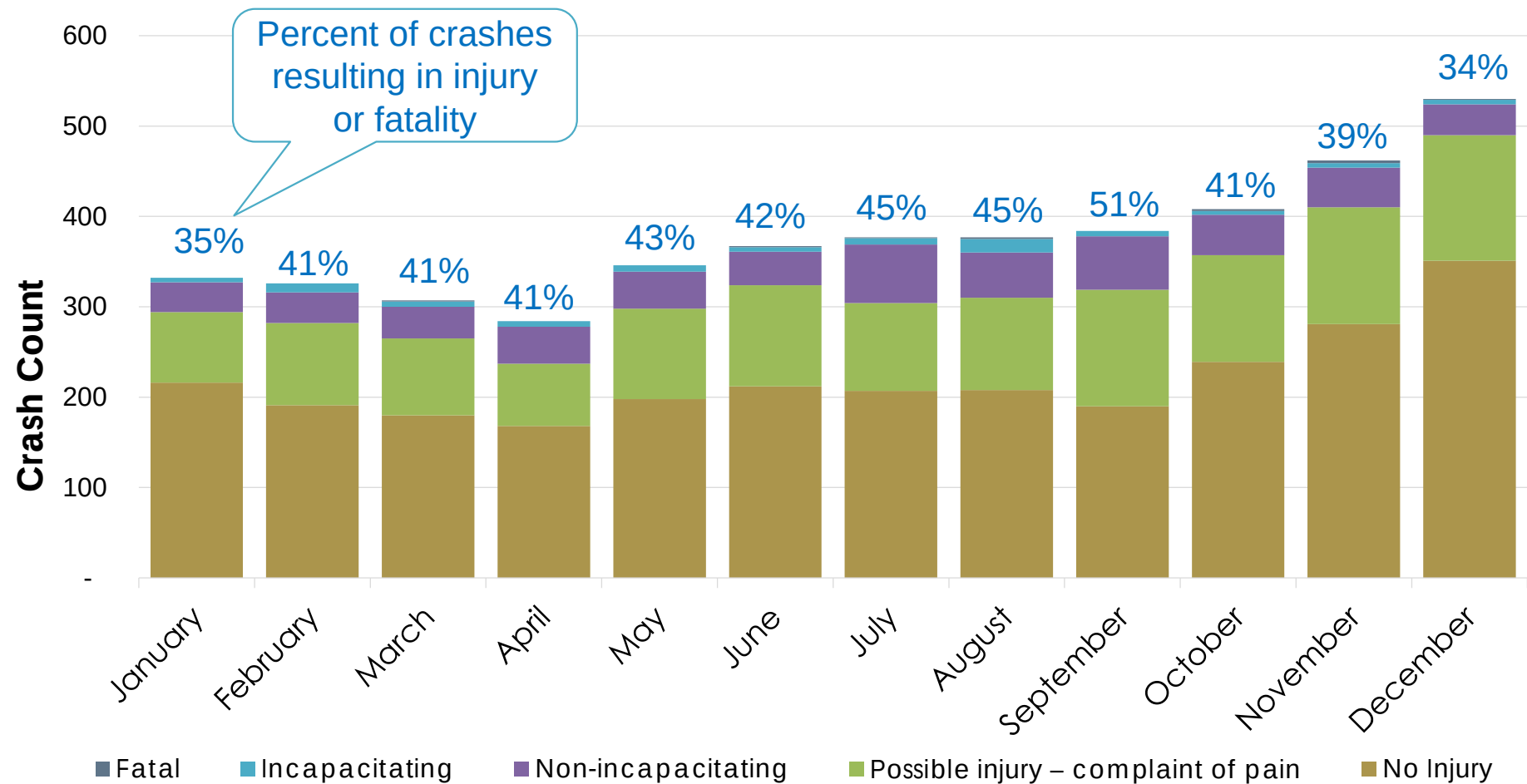


BEND AREA CRASH RATES BY YEAR



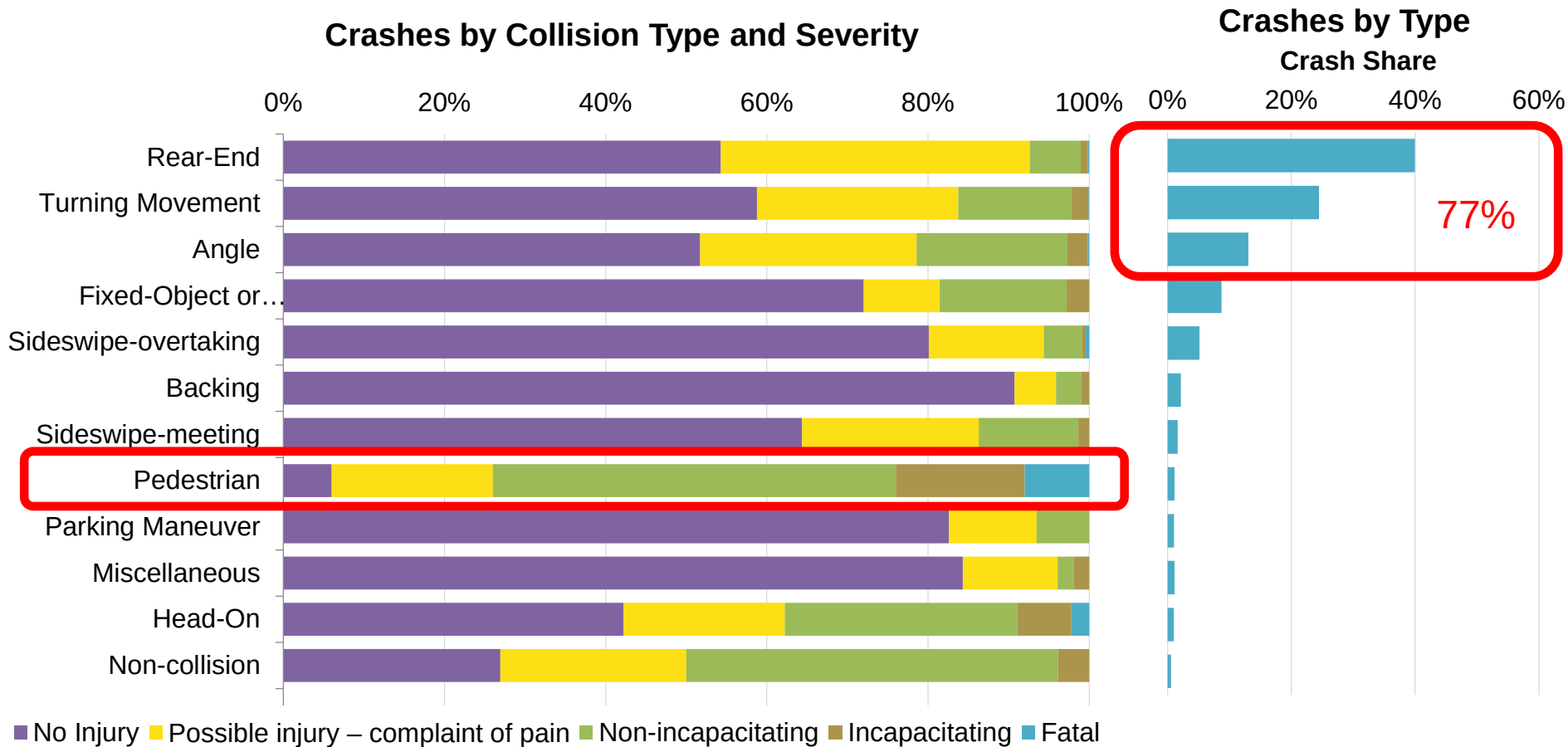


CRASH DATA (2012-2016)

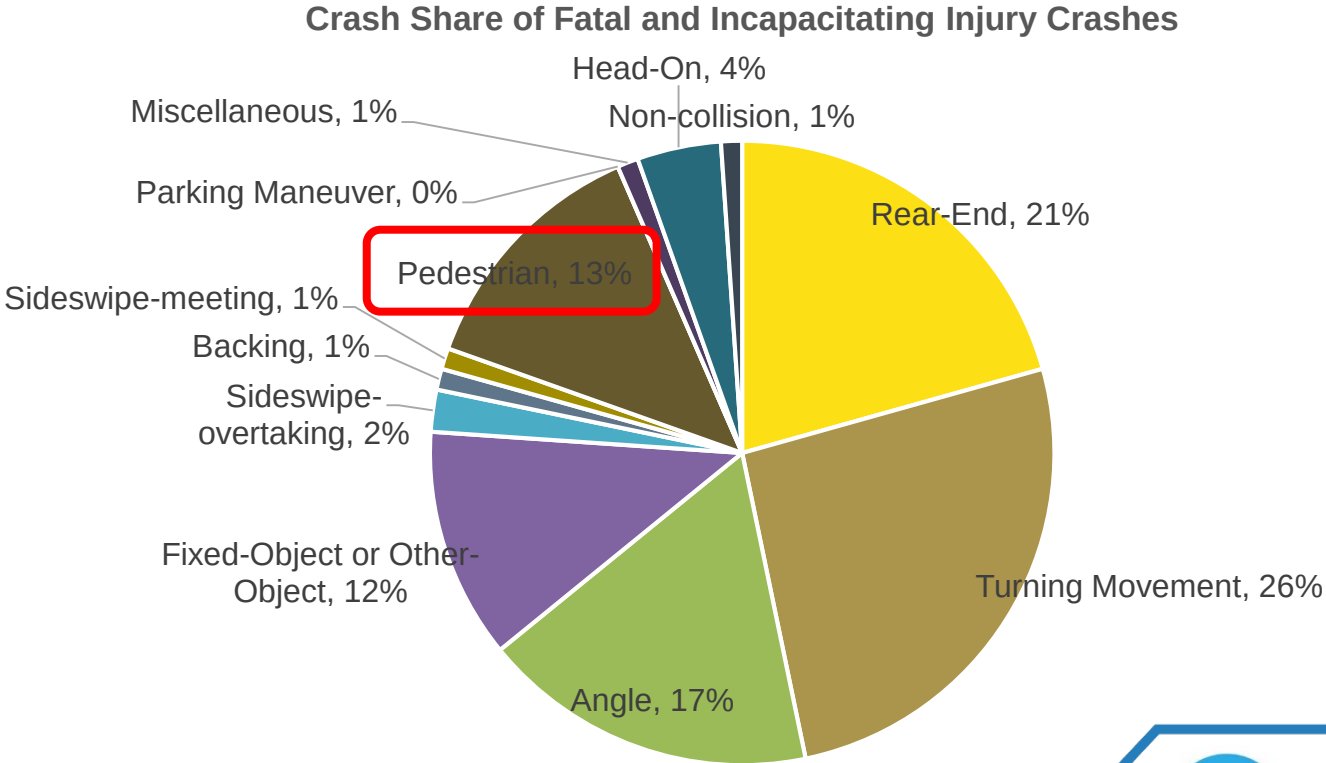




CRASH DATA (2012-2016)



CRASH DATA (2012-2016)



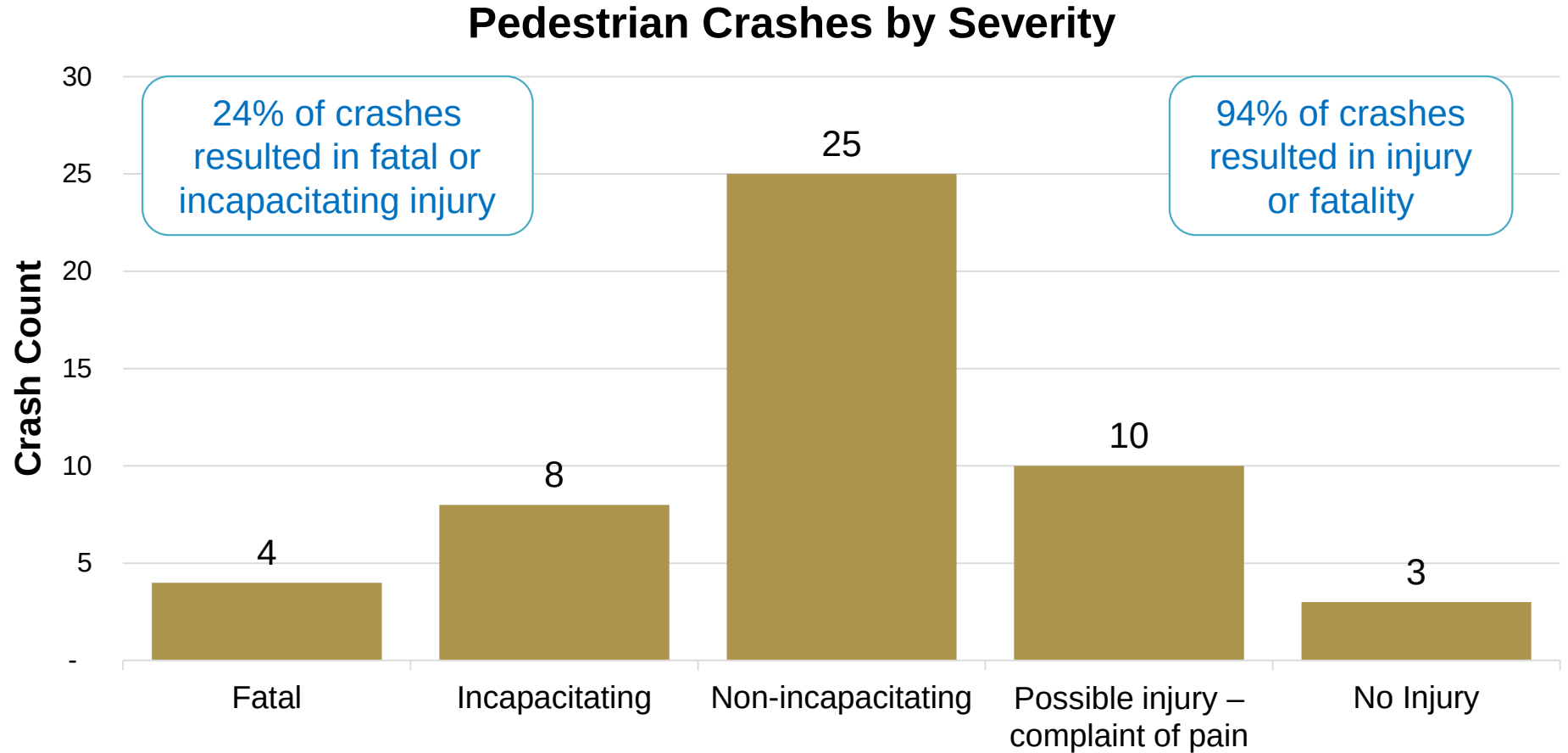
BEND MPO
Metropolitan Planning Organization



CITY OF BEND



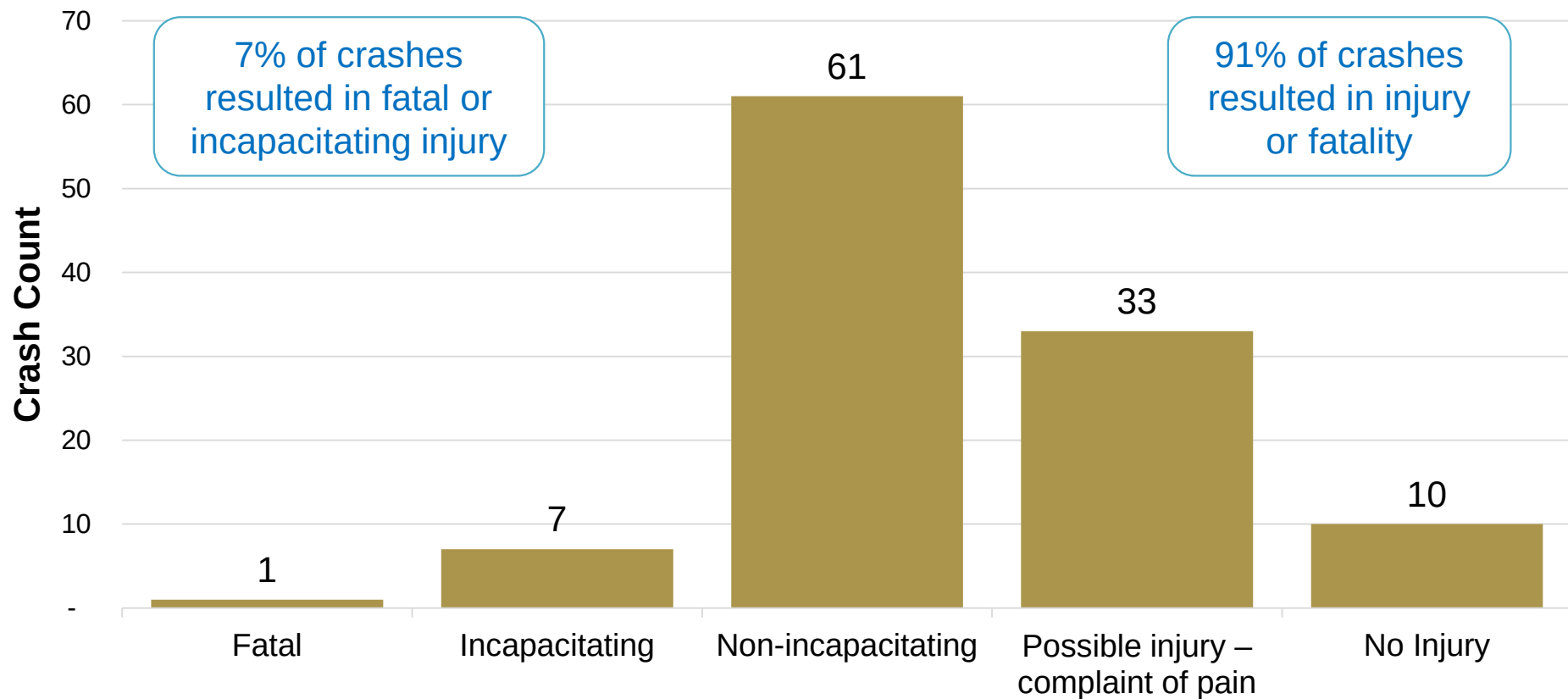
CRASH DATA (2012-2016)





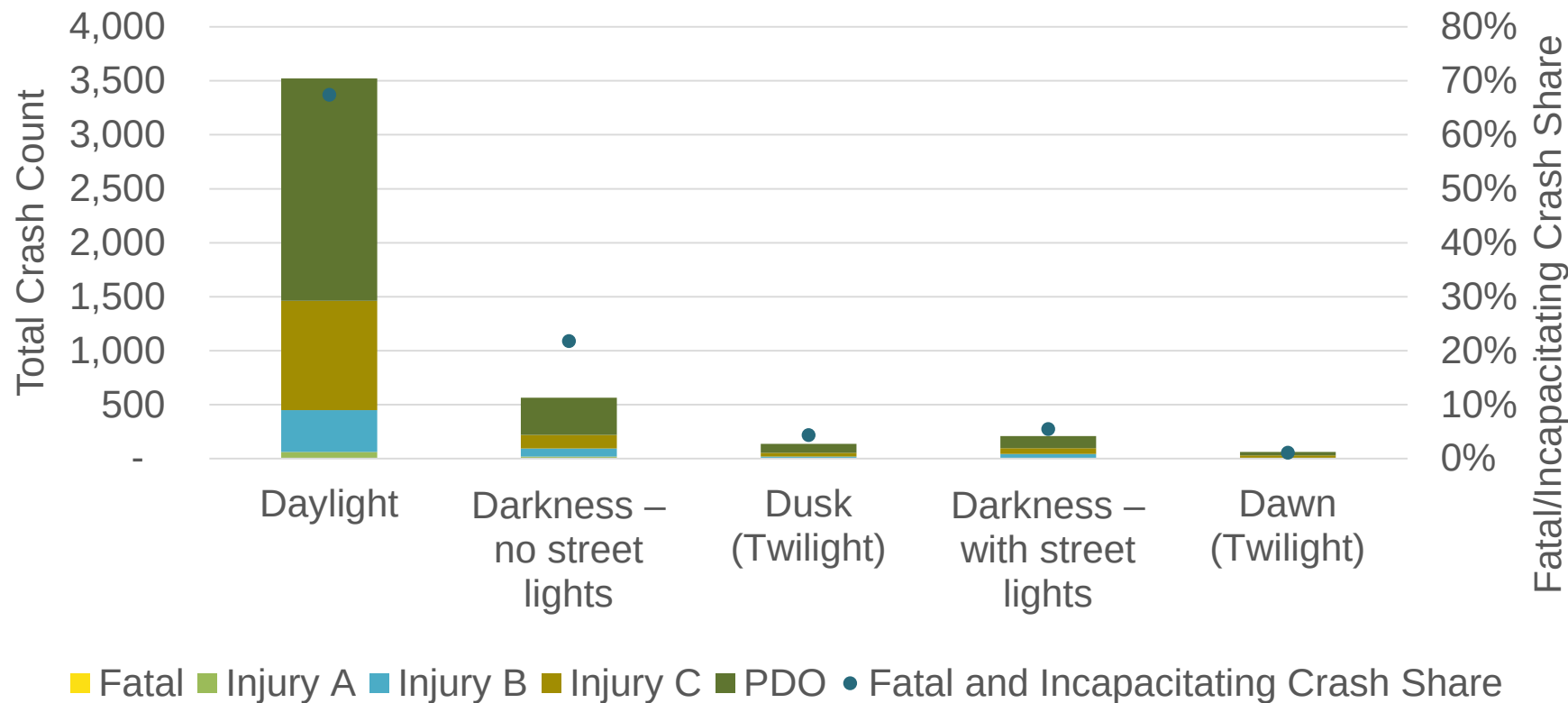
CRASH DATA (2012-2016)

Bicyclist Crashes by Severity



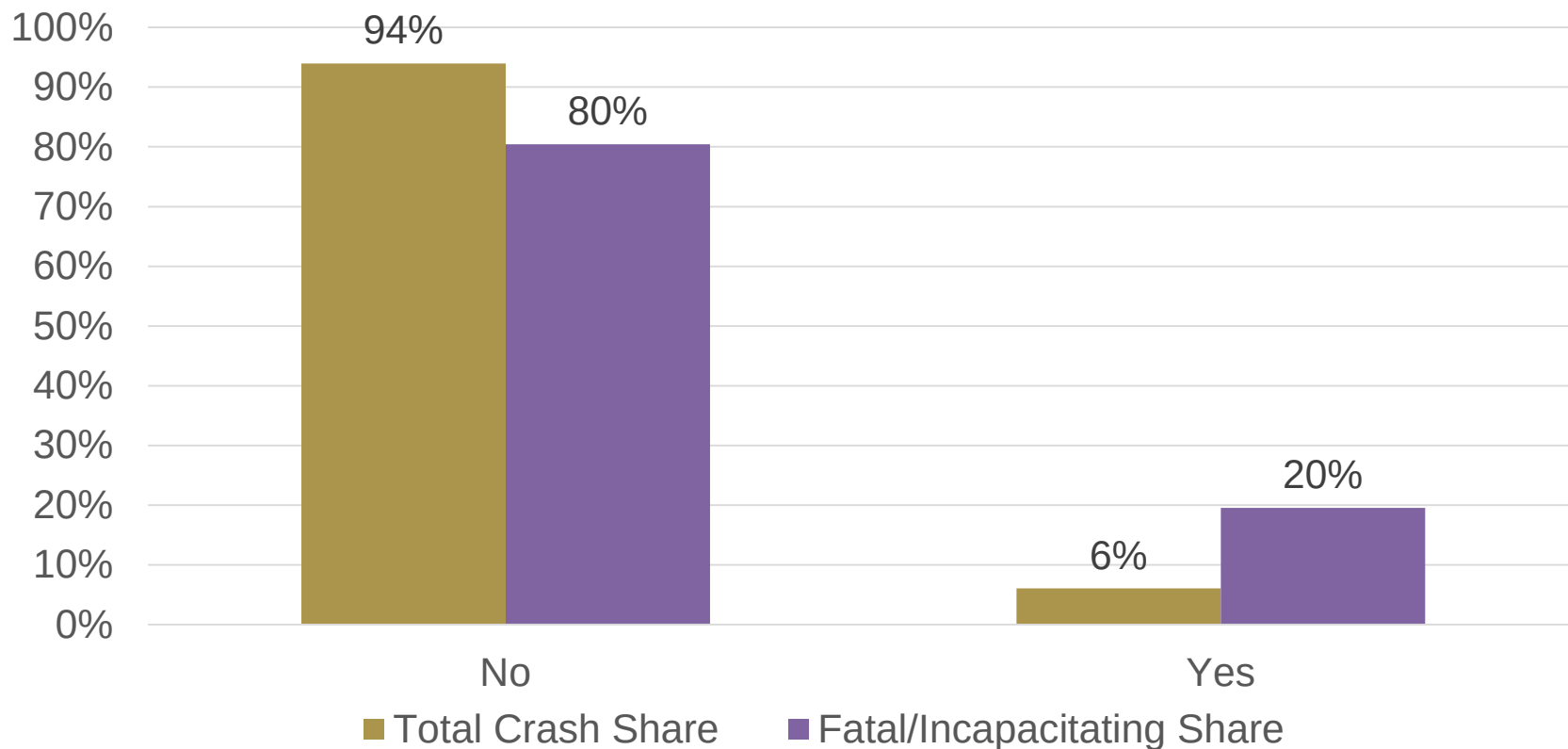
CRASH DATA (2012-2016)

- Dark, Unlit Conditions



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



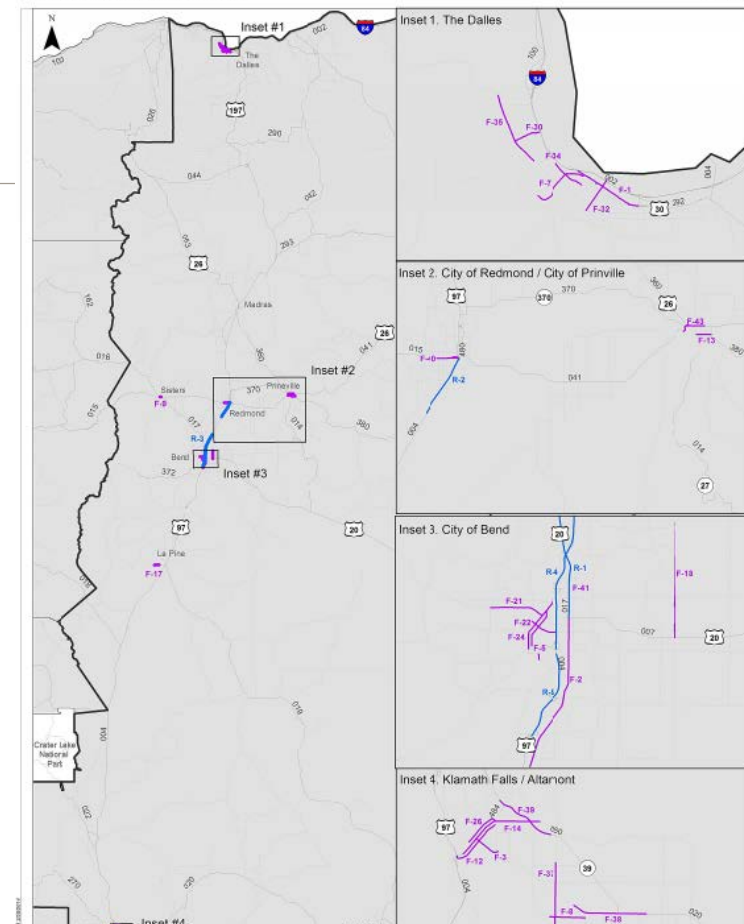
BEND MPO
Metropolitan Planning Organization



CITY OF BEND

SITE SPECIFIC RECOMMENDATIONS

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

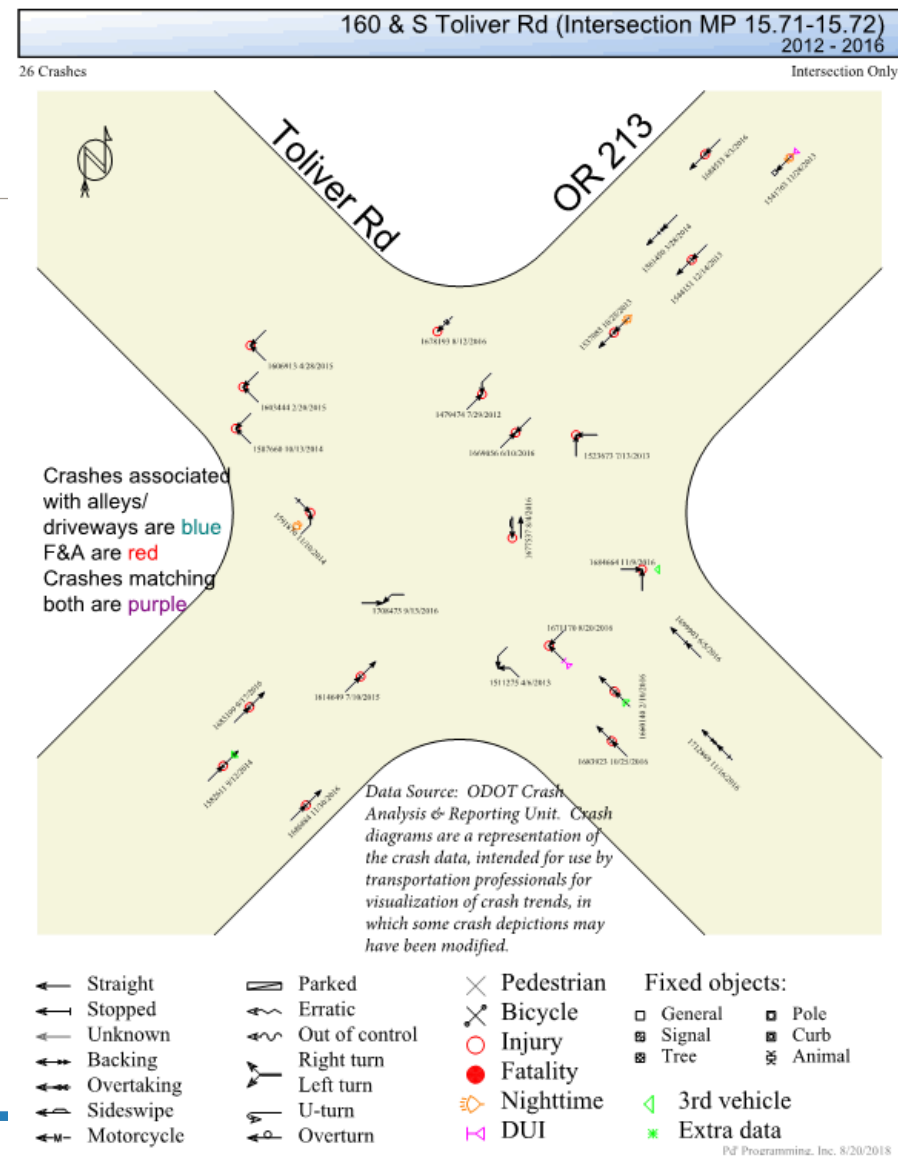


Example network screening results from 2014 ODOT Pedestrian and Bicycle Safety Implementation Plan

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*



BEND MPO
Metropolitan Planning Organization

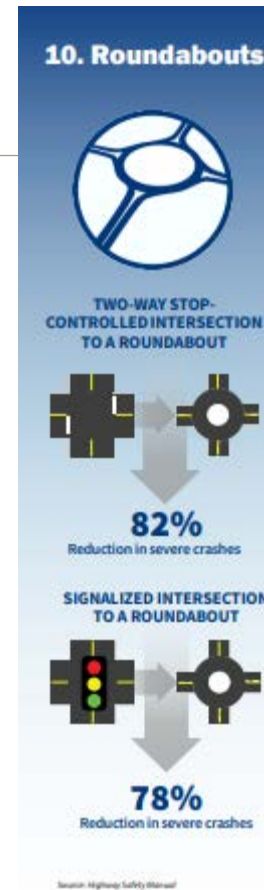


CITY OF BEND



EXAMPLE SYSTEMIC SOLUTIONS

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



BEND MPO
Metropolitan Planning Organization



CITY OF BEND

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 (DUI) 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 DUI 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 DUI driver offender programs focused on treating the causes of DUI.
 - 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



BEND MPO
Metropolitan Planning Organization



CITY OF BEND



INTEGRATION WITH THE TSP

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



BEND MPO
Metropolitan Planning Organization



CITY OF BEND



DISCUSSION

- Questions?
 - Ashleigh Ludwig (aludwig@kittelerson.com)
 - Brian Ray (bray@Kittelerson.com)
 - Tyler Deke (tdeke@bendoregon.gov)



BEND MPO
Metropolitan Planning Organization



CITY OF BEND