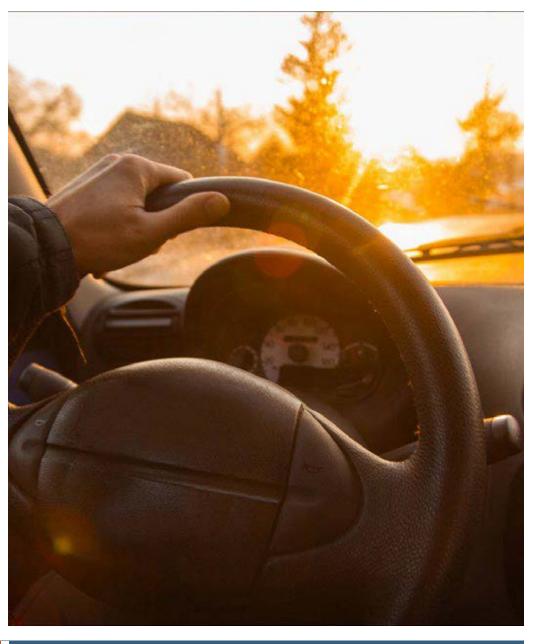


SAFETY PERFORMANCE MEASURES UPDATE



July 2022

Bend MPO Safety Performance Measures

FEDERAL LEGISLATION REQUIREMENT

MAP-21 established a performance-based planning framework intended to improve transparency and hold state transportation departments, transit agencies and metropolitan planning organizations (MPOs) accountable for the effectiveness of their transportation planning and investment choices. The objective of the new framework was to ensure States and MPOs invest federal resources in projects that collectively will make progress toward the achievement of the national goals identified in MAP-21 and the current legislation adopted in 2021. Federal performance management as a key action is emphasized in this national policy.

"Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through [§1203; 23 USC 150(a)]".

National Roadway Safety Goal

To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

Timeline for Roadway Safety Target-Setting

Table 1 National Roadway Safety Goal Timeline

Measure	Oregon Department of Transportation (ODOT) Action	MPO Adoption Date	MPO Plan or Program with Performance Measures	Target Date for Review & Action Planned
Roadway Safety	ODOT initial adoption • 10/14/16 ODOT Safety Action Plan • 9/9/21	October 2018, update in Metropolitan Transportation Plan (MTP) 9/2019	Bend Transportation Safety Action Plan, 2021-2024 MTIP, 2040 MTP	2022-2023 target setting with ODOT

Safety Performance Measures

FEDERAL LEGISLATION REQUIREMENT

The Federal Highway Administration (FHWA) Highway Safety Improvement Program (HSIP) final rule (23 CFR Part 490) requires States to set targets for five safety performance measures (PM's) by August 31, 2017. MPOs must establish safety targets by agreeing to plan and program projects that contribute toward the accomplishment of the State targets, or establish their own targets within 180 days of the State doing so.

Bend MPO Adopted Safety PM's on February 20, 2018

- Bend MPO adopted ODOT's safety performance targets as established in the 2016
 Oregon Transportation Safety Plan via Bend MPO Resolution 2018-02. This report is
 the first review of the next 5-year cycle of updated crash data. In the following tables
 and figures, the rates and targets are shown for crashes within the Bend MPO
 boundary: number of fatalities, fatality rate, number of serious injuries, rate of serious
 injuries, and number of non-motorized crashes.
 - (1) Number of Fatalities,
 - (2) Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT),
 - (3) Number of Serious Injuries,
 - (4) Rate of Serious Injuries per 100 million VMT, and
 - (5) Number of Non-Motorized Fatalities and Non-motorized Serious Injuries

HOW ARE WE DOING?

Any fatality or injury is not progress toward the goal of safer transportation systems. Table 2 shows the summary of Oregon statewide crash baseline and first-year targets. The state safety targets and rates were updated in the <u>Oregon Transportation Safety Action Plan</u> adopted in September 2021. The federal rules also requires MPOs to establish performance targets. Bend MPO adopted the state-established targets in October 2018 and in the adoption of the Bend Metropolitan Transportation Plan in September of 2019. Table 3 shows Oregon statewide and Bend MPO crash data and rates as available through 2020 from crashes reported to ODOT. Twenty-twenty (2020) is the most current data available for crashes statewide from the ODOT Crash Analysis and Reporting Unit. Bend MPO will continue to work closely with ODOT and FHWA to coordinate these safety data and targets.

Table 2 Oregon Statewide Roadway Safety Targets

Oregon Targets (5-year total)	Fatalities	Fatality Rate per 100 Million VMT	Serious Injuries	Serious Injury Rate Per 100 Million VMT	Non- motorized fatalities and serious injuries
2018 Initial Targets (2014- 2018	350	0.89	1,461	4.33	234
2021 Baseline Crash Targets (2014-2018)	448	1.48	1,739	5.03	257
2022 First Year Targets (2015- 2019)	444	1.46	1,722	4.98	254

Table 2 statewide target rates were updated in the latest <u>Oregon Transportation Safety Action Plan</u> adopted in September 2021. 2018 Initial targets can be referenced in the <u>FHWA Performance</u> <u>Management Areas, Measures, and Targets for Oregon DOT</u> adopted 8/16/2018.

Table 3 Bend MPO Reported Crash Data and Rates

Reported Crash Data (5- year rolling average)	Average Fatalities per year		lity rate per Million VMT			ous injury rate 00 Million	Non-motorist fatalities and serious injuries
Oregon Statewide							
Statewide Data and Rates (2015-2019)	475.0	×	2.58	1820.8	×	11.58	260.0
Statewide Data and Rates (2016-2020)	488.0	×	2.60	1708.0	×	10.29	258.8
Bend MPO							
Bend MPO Data and Rates (2015-2019)	4.8	×	1 <i>.77</i>	23.8	⊘	4.01	4.4
Bend MPO Data and Rates (2016-2020)	4.8	×	1.84	23.0	⊘	3.81	4.0

Table 3 details for icons: Red x indicates measure not met, Green check mark indicates met target. Target rates are shown in Table 2.

MPO REPORTING REQUIREMENT

The Bend MPO supports ODOT's safety performance targets as established. To view the ODOT targets see www.oregon.gov/ODOT/PerformMang. Bend MPO will work with ODOT to review and verify our safety performance measures annually. Each graph shows reported data and Bend

MPO progress toward meeting ODOTs Roadway safety targets for the following three categories through 2035.

- 1. Zero by 2035 (Blue line) shows the trend if using a straight calculation of 5 year rolling averages.
- 2. 3% per year (Yellow line) shows the trend of 3% reduction each year.
- S-Curve (Red line) shows a flat rate in the near timeframe and a sharper decrease in later years.

A map of crash locations for fatalities, serious injury, and non-motorist crashes in the Bend MPO region are provided in Figure 1-3. Figure 3, Non-motorist crash map includes all injury levels. These maps used ODOT crash data from 2016-2020.

Table 4 Bend MPO Fatalities by Year

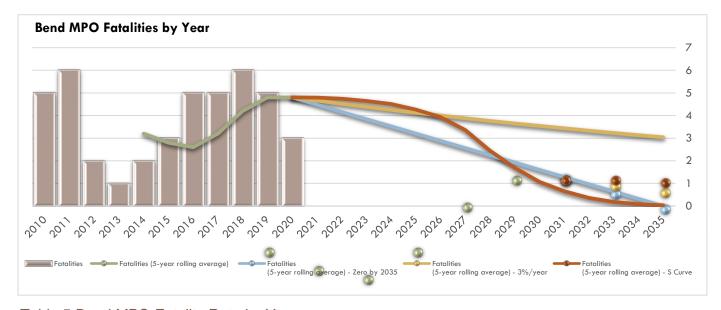
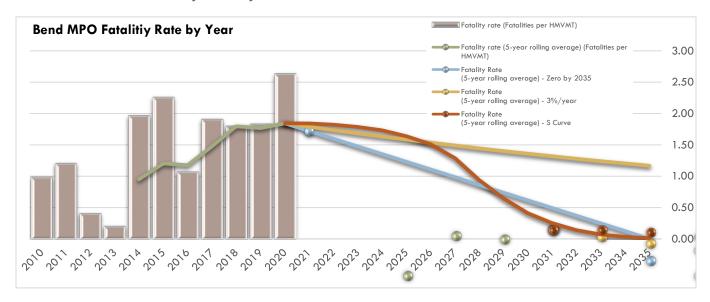


Table 5 Bend MPO Fatality Rate by Year



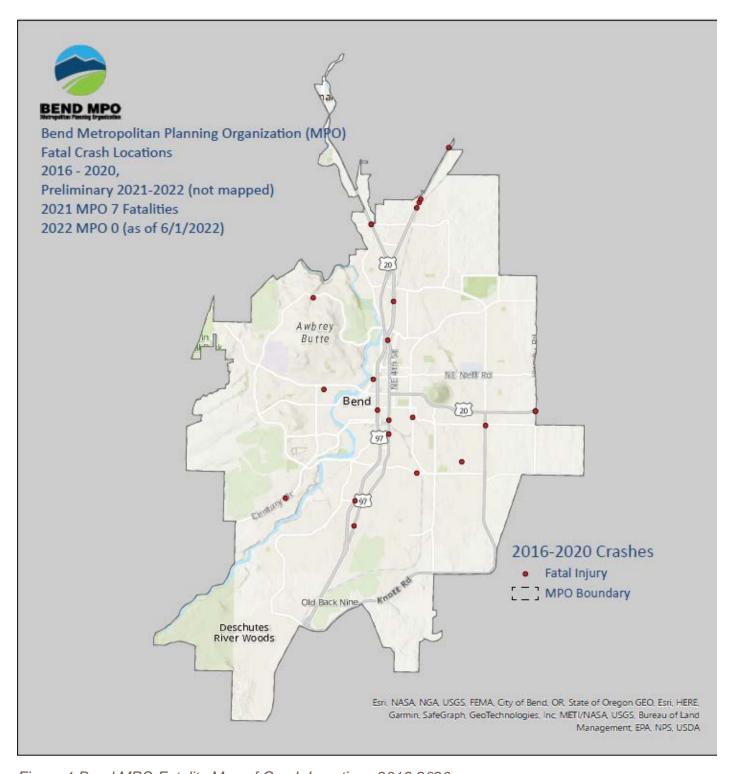


Figure 1 Bend MPO Fatality Map of Crash Locations 2016-2020

Performance Measures

Table 6 Bend MPO Serious Injuries by Year

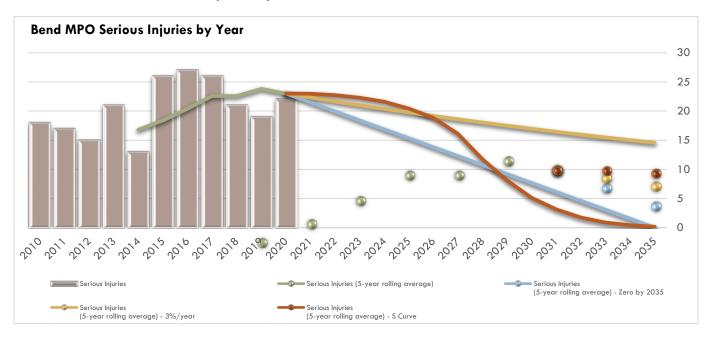
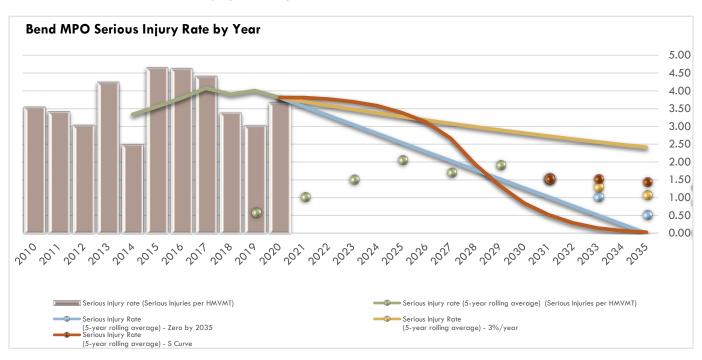


Table 7 Bend MPO Serious Injury Rate by Year



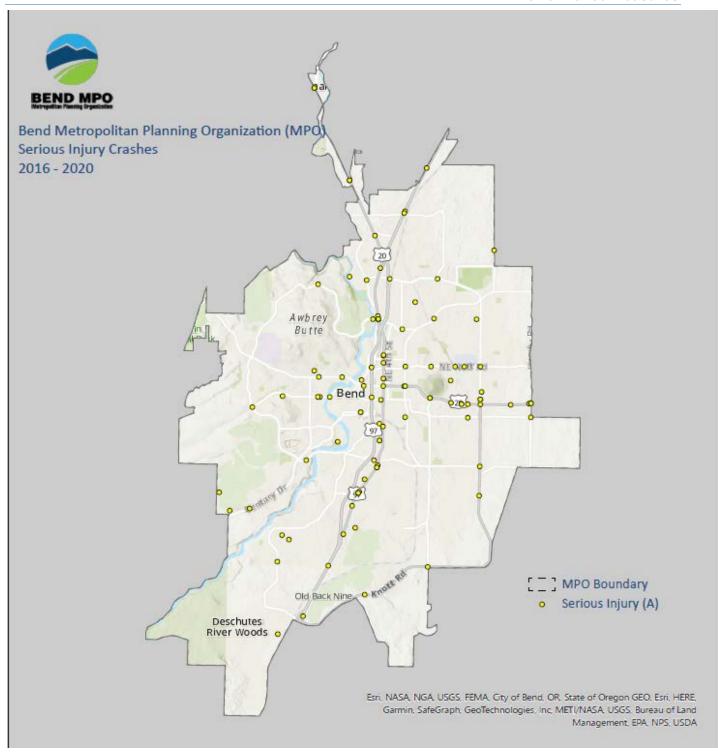
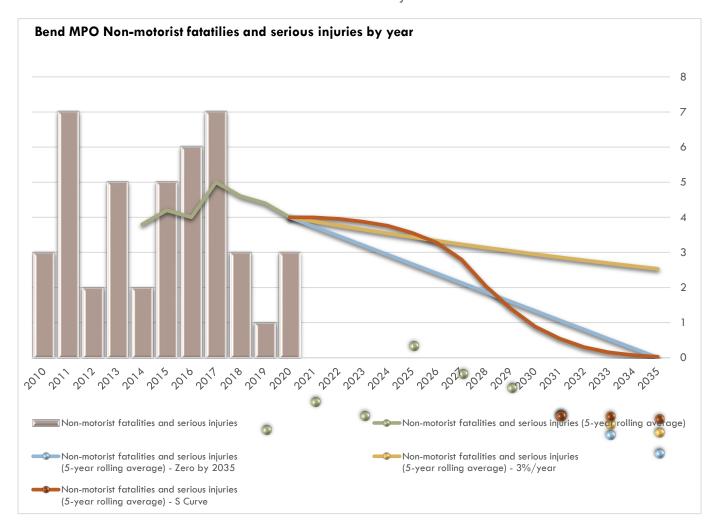


Figure 2 Bend MPO Serious Injury Map of Crash Locations 2016-2020

Table 8 Bend MPO Non-motorist fatalities and serious injuries



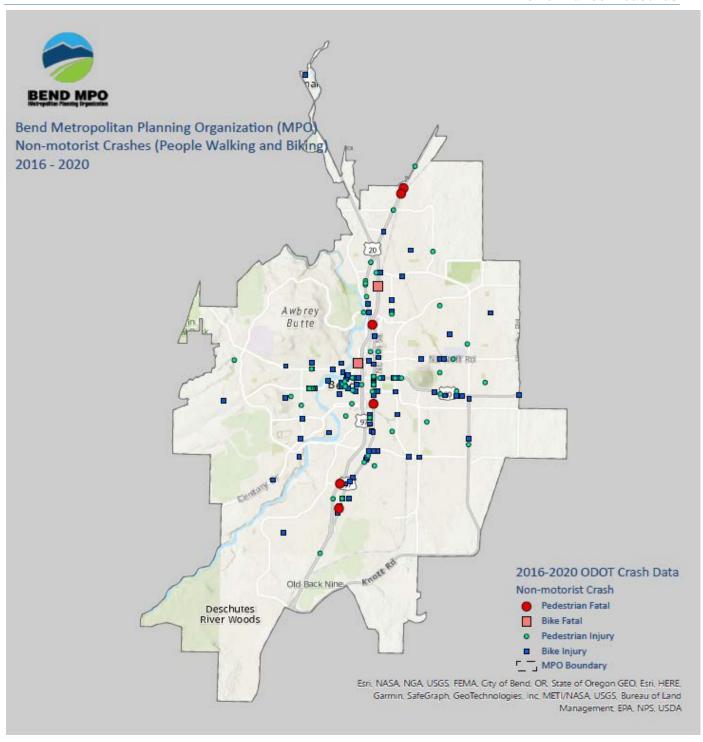


Figure 3 Bend MPO Non-motorist Crash Locations, all injury levels shown, 2016-2020

EMPHASIS AREAS AND NEXT STEPS



Figure 4 Infomational message regarding 2020 Fatal crashes in Deschutes Count. These four emphasis areas (Slow down, Drive sober, Buckle up, and Pay attention) were shared in the public campaign. In 2020, two-thirds of fatal crashes (20) were due to one or more of these behaviours; Speeding, Impairment; Seat belt usage and/of; Distracted driving.

Bend MPO will be working on these emphasis areas and action items to continue safety efforts as shown in the region's Transportation Safety Action Plans. In 2022-2023, Bend MPO will expand data efforts to include more data resources for Central Oregon such as Table 9 to show total Deschutes County crashes and fatalities by year. Table 10 to show Vehicle Miles of Travelled (VMT) in Deschutes County. VMT is the sum of distances traveled by all motor vehicles in a specified system of roadways for a given period of time. VMT is used for crash rates referenced in this report. Visit www.centraloregonsafetravel.org for details plans and actions regarding roadway safety.

Table 9 Deschutes County total crashes and fatalities by year

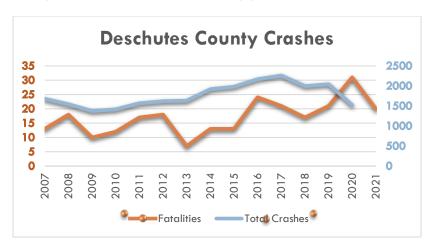


Table 9 includes Deschutes County crashes (blue line) and fatalities (brown line) by year. 2021 Fatality data is preliminary.

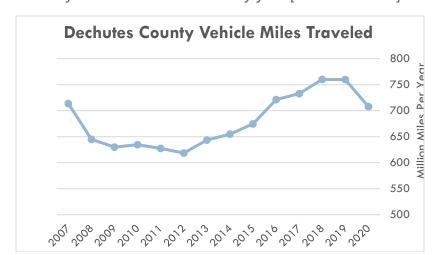


Table 10 Deschutes County Vehicle Miles Traveled by year [Source: ODOT]

MONITORING PROGRESS

Bend MPO will continually monitor progress on the performance of transportation programs and measures with annual reporting of the roadway safety performance measures as data becomes available. The latest crash data is typically 18-20 months behind the current date to verify and confirm crash data with ODOT Crash Analysis and Reporting Unit. More on ODOT crash data can be found at: www.oregon.gov/odot/data/pages/crash.aspx