

# Agenda

## Bend Transportation Safety Action Plan (TSAP) Project Advisory Committee (PAC)

January 23, 2026  
Hybrid Meeting

**Location**

Boardroom (City Hall)  
710 NW Wall, Bend, Oregon

**Zoom webinar**

Webinar ID: 810 4713 4672  
Passcode: bendmpo  
Phone: 1-888-788-0099

**YouTube livestream**

10:00 a.m. Bend TSAP PAC Meeting

Start Time	Item	Information	Presenters
10:00	1. Call to Order & Introductions	<p><b>Meeting Purpose</b></p> <p>Introduce Bend TSAP PAC to the project and its goals, approach, and timeline; review existing plans and goals; review the public engagement process; discuss PAC transportation safety concerns in the BMPO; and discuss project next steps.</p> <ul style="list-style-type: none"> <li>• Provide name and affiliation</li> <li>• Identify desired outcomes for the TSAP update</li> </ul>	Tyler Deke, BMPO
10:10	2. Hybrid Meeting Guidelines		Tyler Deke
10:12	3. Public Comment		Tyler Deke

Start Time	Item	Information	Presenters
10:15	4. Bend TSAP Update	<p><b>Background</b>  The project team will lead a discussion on the following items.</p> <ul style="list-style-type: none"> <li>• Project Overview <ul style="list-style-type: none"> <li>a) What is the TSAP?</li> <li>b) Background</li> <li>c) Purpose</li> <li>d) Approach</li> <li>e) Timeline</li> </ul> </li> <li>• PAC Roles and Responsibilities</li> <li>• Existing Plan and Policies Review</li> <li>• Public Engagement Overview</li> <li>• PAC member transportation safety concerns</li> <li>• Next Steps</li> </ul> <p><b>Attachments/Links</b>  Attachment A: Tech Memo #1 – Regulations and Plans Review.  Attachment B: Tech Memo #2 – Safety Analysis Framework.  Attachment C: Public Engagement Plan.  Link to <a href="#">2019 Bend Transportation Safety Action Plan</a>.</p> <p><b>Action Requested</b>  None. Information item.</p>	Miranda Barrus, Kittelson & Associates (KAI)  Matt Kittelson, KAI  Andrea Napoli, BMPO  Tyler Deke
11:15	5. Central Oregon Intergovernmental Council (COIC) TSAP Implementation Grant Update	<p><b>Background</b>  The Bend and Deschutes County TSAPs identify behavioral issues (e.g., intoxicated driving, aggressive driving) as contributors to crashes. COIC is receiving grant funding to develop and implement education and outreach to promote safe behaviors. Staff will provide an overview of work completed to date and focus areas for outreach and engagement.</p> <p><b>Attachments/Links</b>  None.</p> <p><b>Action Requested</b>  None. Information item.</p>	Megan Tuck, COIC
11:25	6. Public Comment		Tyler Deke

Start Time	Item	Information	Presenters
11:28	7. Next Bend TSAP PAC Meeting	The next meeting of the Bend TSAP PAC is scheduled for April 7, 2026, at 10:00 a.m.	Tyler Deke
11:30	8. Adjourn		Tyler Deke



#### **Language Assistance Services & Accommodation Information for People with Disabilities**

You can obtain this information in alternate formats such as Braille, electronic format, etc. Free language assistance services are also available. Please contact Kelli Kennedy at [kkennedy@bendoregon.gov](mailto:kkennedy@bendoregon.gov) or 541-693-2122. Relay Users Dial 7-1-1.



#### **Servicios de asistencia lingüística e información sobre alojamiento para personas con discapacidad**

Puede obtener esta información en formatos alternativos como Braille, formato electrónico, etc. También disponemos de servicios gratuitos de asistencia lingüística. Póngase en contacto con Kelli Kennedy en [kkennedy@bendoregon.gov](mailto:kkennedy@bendoregon.gov) o 541-693-2122. Los usuarios del servicio de retransmisión deben marcar el 7-1-1.



# MEMO

**To: Bend TSAP PAC**

**From: Andrea Napoli, BMPO Senior Planner and Tyler Deke, BMPO Manager**

**Date: 1/15/2026**

**Re: Bend Transportation Safety Action Plan (TSAP) Update –  
Regulations and Plans Review**

---

## Introduction

This memo contains a review of existing regulations, guidance, plans, goals, and policies to guide development of the Bend Transportation Safety Action Plan (TSAP) in accordance with federal, state, and local transportation safety objectives. Core information relevant to the TSAP has been summarized from the following:

- US Department of Transportation (USDOT) safety planning regulations
- Requirements of the Safe Streets and Roads for All (SS4A) Grant Program
- Oregon transportation planning rules
- Oregon TSAP goals, policies, and strategies
- Safety goals and objectives contained in the
  - 2019 Bend TSAP
  - Draft 2026 Deschutes County TSAP
  - Bend Metropolitan Planning Organization (BMPO) Metropolitan Transportation Plan (MTP)
  - City of Bend Transportation System Plan (TSP)
- Status of the high crash locations identified in the 2019 Bend TSAP

# Federal Regulations and Guidance

Federal transportation safety planning regulations include the requirement that states must develop a Strategic Highway Safety Plan (SHSP) to address crashes involving serious injuries and fatalities on all public roads.

According to the current transportation legislation, an SHSP must:

- Incorporate input from a range of partners from diverse disciplines
- Address all roadway users on all public roads
- Be data driven
- Include measurable objectives and identify how progress will be evaluated

The Oregon TSAP is the state's SHSP and contains the performance measures (PMs) listed below. Targets have been established for each measure and must be monitored and reported annually.

- Number of roadway fatalities and fatality rate (fatalities/100 million vehicle miles traveled [VMT])
- Number of roadway serious injuries and serious injury rate (serious injuries/100 million VMT)
- Combined nonmotorized (bicyclist and pedestrian) fatalities/serious injuries
- High-Risk Rural Roads special rule (two-year fatality rate on rural collectors/local roads)
- Fatalities/serious injuries of aging drivers/pedestrians over two-year period (age > 65 years)

MPOs are not federally required to have an SHSP but are required to have PMs and targets, which must be coordinated and consistent with those of the state. Local governments are not federally required to establish PMs or develop an SHSP; however, the Bend TSP contains safety PMs and targets (see Local Goals, Policies, and Projects, below). To reach state and federal safety goals, the Oregon Department of Transportation (ODOT) relies on partnerships with local jurisdictions.

In 2023, the BMPO adopted the roadway safety PMs and targets listed in Table 1. The targets are applicable to all public roads in the **BMPO area** and must be reported to ODOT annually.

Table 1 shows the PMs and targets for the following goal:

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

**TABLE 1: BMPO FEDERAL SAFETY PMs AND TARGETS**

Performance Measure	2021 Baseline/ Actuals	2024 Targets
1. Number (#) of fatalities	5	5
2. Rate of fatalities per 100 million VMT <sup>1</sup>	0.77	0.77
3. Number (#) of serious injuries	36	25
4. Rate of serious injuries per 100 million VMT <sup>2</sup>	5.53	4.00
5. Number (#) of non-motorized fatalities and non-motorized serious injuries	9	5

# Safe Streets and Roads for All (SS4A) Grant Program

The update of the Bend TSAP is funded by the federal SS4A Grant Program. The latest SS4A program was established by the current federal transportation legislation with \$5 billion in funding over fiscal years 2022-2026. The goal of the program is to prevent roadway deaths and serious injuries through planning, demonstration, and implementation grants. A TSAP may be funded with a planning grant, demonstration activities identified in a TSAP may be funded with a demonstration grant, and implementation grants fund projects and strategies identified in a qualifying TSAP.

The components of a qualifying TSAP that must be included in the Bend TSAP Update are summarized in Table 1.

**TABLE 2: SS4A TSAP COMPONENTS**

Component	Description
Leadership Commitment and Goal Setting	Official public commitment (e.g., resolution, policy, ordinance) by a high-ranking official and/or government body (e.g., City Council) to an eventual goal of zero roadway fatalities and serious injuries. Commitment must either include a target date for achieving zero roadway fatalities and serious injuries and/or an ambitious percentage

<sup>1</sup> Fatality rate/100,000 population: .005% in 2021.

<sup>2</sup> Serious injury rate/100,000 population: .036% in 2021.

Component	Description
	reduction of roadway fatalities and serious injuries by a specific date with an eventual goal of eliminating them.
Planning Structure	A committee, task force, implementation group, or similar body charged with oversight of the TSAP development, implementation, and monitoring.
Safety Analysis	Analysis of existing conditions and historical trends that provide a baseline level of fatal and serious injury crashes across a jurisdiction, locality, Tribe, or region, without regard to road ownership. Includes analysis of crash locations, severities, types, and contributing factors by relevant road users (e.g., motorists, pedestrians, transit users). Analysis of systemic and specific safety needs is also performed, as needed (e.g., high-risk road features, specific safety needs of relevant road users, public health approaches, analysis of the built environment, demographics, and structural issues). Analysis should include a geospatial identification of higher-risk locations (a High-Injury Network or equivalent).
Engagement and Collaboration	Robust engagement with the public and relevant stakeholders, including the private sector and community groups, that allows for both community representation and feedback. Information received from engagement and collaboration is analyzed and incorporated into the TSAP. Plans and processes are coordinated and aligned with governmental plans and planning processes to the extent practicable.
Equity Considerations	Plan development conducts inclusive and representative processes. Underserved communities are identified through data and other analyses in collaboration with appropriate partners. Analysis includes both population characteristics and initial equity impact assessments of the proposed projects and strategies.
Policy and Process Changes	Assessment of current policies, plans, guidelines, and/or standards (e.g., manuals) to identify opportunities to improve how processes prioritize transportation safety. The TSAP discusses implementation through the adoption of revised or new policies, guidelines, and/or standards, as appropriate.
Strategy and Project Selections	Identification of a comprehensive set of projects and strategies – shaped by data, the best available evidence and noteworthy practices, and stakeholder input and equity considerations – that will address the safety problems described in the TSAP. These strategies and

Component	Description
	<p>countermeasures focus on a Safe System Approach (described later in this memorandum) and effective interventions and consider multidisciplinary activities. To the extent practicable, data limitations are identified and mitigated.</p> <p>Once identified, the projects and strategies are prioritized in a list that provides time ranges for when the strategies and countermeasures will be deployed (e.g., short-range, mid-range, and long-range timeframes). The list should include specific projects and strategies, or descriptions of programs of projects and strategies, and explain prioritization criteria used. The list should contain interventions focused on infrastructural, behavioral, and/or operational safety.</p>
Progress and Transparency	<p>Documentation of the method to measure progress over time after a TSAP is developed or updated, including outcome data. A means to ensure ongoing transparency is established with residents and other relevant stakeholders. The approach must include, at a minimum, publicly available and accessible annual reporting on progress toward reducing roadway facilities and serious injuries (e.g., posting the TSAP online).</p>

## Implementation Grants

SS4A implementation grants use a set of five (5) selection criteria, which the Bend TSAP Update should consider. These are listed below, in order of importance.

1. Safety Impact
2. Equity, Engagement, and Collaboration
3. Effective Practices and Strategies
4. Other USDOT Strategic Goals
5. Supplemental Planning and Demonstration Activities<sup>3</sup>

More information can be found in the most current SS4A Notice of Funding Opportunity.

---

<sup>3</sup> Criterion #5 only applies if the applicant requests such funding in its grant application, and other considerations not listed also may apply, such as project readiness.

# State Rules and Objectives

The State of Oregon's Transportation Planning Rule<sup>4</sup> requires ODOT, counties, and cities to have a TSP, which is a plan made up of multimodal, mode, topic, and facility plans (including TSAPs). TSPs also identify facilities and services to meet state and local transportation needs. Local TSPs must be consistent with the state TSP, meaning that the update to the Bend TSAP must be consistent with Oregon's TSP as well as its modal and topic plans, including the Oregon TSAP.

## Oregon TSAP

The Oregon TSAP, updated in 2019, establishes a strategic foundation for including behavioral and engineering safety approaches in statewide planning, programming, and policy decisions. It aims for zero fatalities and serious injuries on Oregon roadways by 2035. As mentioned previously, there is no requirement that local jurisdictions develop their own TSAP; however, the Oregon TSAP states that city and regional agencies (among others) "will need to commit to implement plans, policies, and programs to save lives and prevent injuries." Additionally, ODOT is required to collaborate with local governments on plans and activities for safety, and local agencies are allowed to participate in highway safety programs<sup>5</sup>.

### Goals, Policies, and Strategies

The 2019 Oregon TSAP goals, policies, and strategies focus on changing safety culture as well as planning, designing, operating, and maintaining a transportation system that eliminates fatalities and serious injuries. The plan has six (6) goal areas, which are:

1. Improving Safety Culture
2. Improving Infrastructure
3. Facilitating Health and Livable Communities
4. Using Best Available Technologies
5. Communicating and Collaborating
6. Investing Strategically

Equitable transportation safety for all users and modes is also emphasized in the Oregon TSAP. Oregon's goals, policies, and strategies could be implemented at all levels of government to help the state achieve its long-term safety vision.

### Emphasis Area Actions

---

<sup>4</sup> Contained in Goal 12: Transportation, of the statewide land use planning goals.

<sup>5</sup> The Oregon TSAP is currently undergoing an update with expected completion in fall 2026.

Actions for reducing fatalities and serious injuries are provided as Emphasis Area Actions in the 2019 Oregon TSAP. These include:

- **Risky Behaviors** – Includes various actions for minimizing impaired, unbelted, speeding, and distracted driving crashes.
- **Infrastructure** – Includes actions for minimizing intersection and roadway departure crashes.
- **Vulnerable Users** – Includes various actions for minimizing pedestrian, bicycle, motorcycle, and aging road user crashes with a focus on low-income communities and communities that have been historically excluded.
- **Improved Systems** – Includes various actions to improve data, train/educate transportation and safety staff, support law enforcement and emergency responders, and minimize crashes.

## Implementation

The 2019 Oregon TSAP includes the following guidance on implementation at the state level and through local partners:

- Evaluate local spot-specific and systemic safety needs
- Develop plans and programs to address needs
- Collaborate with state, MPOs, and stakeholder partners to educate the public about county transportation safety-related behavior issues
- Integrate safety programming, planning, and policy into local planning
- Develop coalitions with enforcement and [Emergency Medical Services] providers to target and improve specific community needs

## Other ODOT Plans

Other ODOT plans include safety goals and policies. Relevant plans are listed below.

- **ODOT 2024-2028 Strategic Action Plan**
- **Oregon Highway Plan**
- **Oregon Bicycle and Pedestrian Plan**
- **Oregon Transportation Options Plan**
- **US97 Bend Parkway Plan**
- **US97/Baker Road Interchange Area Management Plan**
- **US20 Bend Facility Plan: 3rd Street to Powell Butte Highway**
- **US97/Revere Avenue Urban Design Verification**

# Local Goals, Policies, and Projects

Both the City of Bend and the BMPO have identified transportation safety goals, policies, and projects in their transportation plans, which will be brought into the update to the Bend TSAP.

## BMPO Metropolitan Transportation Plan (MTP)

The 2045 BMPO MTP established Goal 2: Ensure Safety for All Users, which includes the below policy language.

The MPO will support activities that:

- Reduce serious injuries and fatalities
- Maximize safe routes within and between neighborhoods and throughout the community for all users
- Design and build facilities and routes that maximize safety for all road users with an emphasis on bicyclists, pedestrians, and other road users
- Ensure safe speeds

## City of Bend Transportation System Plan (TSP)

The 2020 Bend TSP contains the following safety-related goals, goal objectives, and policies and actions:

### Goal 2: Ensure Safety for All Users

- Reduce serious injuries and fatalities
- Maximize safe routes within and between neighborhoods and throughout the community for all users
- Design and build facilities and routes that maximize safety for pedestrians and cyclists
- Ensure safe speeds

## Safety policy and actions (1-47):

1. The City will balance safety, connectivity, and travel time reliability for all modes of transportation in design and construction of transportation projects, and in transportation program implementation.

### **Actions**

- Adopt and implement the 2019 [Bend TSAP], including mapping identified crash emphasis areas.
- Amend the Bend Development Code to include safety mitigation as part of development review.

2. The City desires to reduce transportation-related fatalities or serious injuries through design, operation, maintenance, education, and enforcement activities, with the objective of zero injuries and fatalities.

### **Action**

- By 2021, the City will develop and adopt an action plan to move the City towards zero traffic deaths or serious injuries.

3. The City will consider the needs and safety of all users in transportation projects, programs, and funding decisions, with special attention to the needs of vulnerable users (including but not limited to older people, children, people with disabilities, and other users of the transportation system).

### **Action**

- Identify, prioritize, and/or allocate funding for projects and programs to improve safety for vulnerable users.

4. The City will establish and enforce appropriate travel speeds based on the posted speed limit.

### **Actions**

- The City will plan for, design, construct, and/or reconstruct streets to achieve consistency between travel speeds and target speed limits and prioritize speeding and reckless driving enforcement programs on problematic routes.
- Create a citywide speed management program to address safety issues related to speed.
- Review street design in coordination with emergency services; amend Standards and Specifications accordingly.

6. Emergency response time goals will be considered in all transportation planning, design, and maintenance activities, including the capacity and design of roads and intersections (including

roundabouts), traffic calming devices, and installation of traffic signals that allow preemption for emergency vehicles.

10. The City's preferred intersection treatment is a roundabout, for reasons of safety, capacity, and traffic flow. The City may select a different intersection treatment, considering land acquisition needs, operational considerations, topography, and other engineering factors.

**Action**

- Update the Bend Roundabout Design Guide, incorporate in Standards and Specifications.

11. The City's policy is to reduce the impact of cut-through traffic in residential neighborhoods.

**Action**

- The City will create a plan that identifies and reduces safety issues caused by residential cut-through traffic throughout the City.

12. The City's standard for collectors and arterials is a three-lane configuration, but it will also consider a two-lane configuration with medians where appropriate for pedestrian crossing safety and traffic flow.

15. The City requires applicants with new land use proposals to assess the transportation system's adequacy and ensure safe, efficient transportation for people using all modes. The City will assess the transportation system's motor vehicular adequacy based on a peak hour analysis unless specified by the City Engineer. The City currently uses volume to capacity (v/c) targets and safety to evaluate intersection performance for motor vehicles. The City may adjust the v/c target, temporarily or permanently, for a specific intersection based on locational constraints, safety concerns, road classification, and/or surrounding existing or planned land uses. The City may impose reasonable conditions and mitigation requirements on development in proportion to their impacts. The City may use a measurement other than v/c in the future.

17. The City's policy is to manage congestion/corridor demand before adding motor vehicle lanes (not including center turn lanes). Adding travel lanes for motor vehicles will be considered only after the City has evaluated:

- a) The safety effects for all users and modes of travel;
- d) Whether appropriate transit, bicycle and pedestrian facilities, including safe crossings can be provided as part of a travel lane project;

19. The City is committed to equitably distributing the benefits and costs of transportation system plans and improvements. The City will develop and support programs and projects, both capital and maintenance, that reduce transportation-related disparities faced by populations that have historically had significant unmet transportation needs or who have experienced disproportionately negative impacts from the existing transportation system.

**Actions**

- Analyze crash and fatality data to determine where rates are higher in order to ensure that the annual [Capital Improvement Program] process includes projects that will improve safety outcomes and processes for all community members.

40. The City's policy is that all streets should be "complete streets." A complete street is one that is designed to allow everyone to travel safely and comfortably along and across the street by all travel modes. Arterials, collectors, and most local streets will have buffered sidewalks. Arterials, collectors, and select local streets will have facilities in compliance with the Low Stress Network and the Pedestrian Master Plan.

**Actions**

- Adopt the Low Stress Bikeway Map and Bikeway Design Guide.
- Create and adopt a Pedestrian Master Plan.
- Update the Standards and Specifications and/or Bend Development Code to identify how complete street elements will be incorporated during development and redevelopment, new construction, reconstruction, and maintenance activities.

41. The City will create and implement a Pedestrian Master Plan to establish a pedestrian network that safely and comfortably serves the community year-round. The Pedestrian Master Plan will identify key pedestrian routes, including crossings.

**Actions**

- Create and adopt a Pedestrian Master Plan that identifies key routes including enhanced crossing locations. The Pedestrian Master Plan will include (1) an infill program to systematically fund the construction of missing sidewalks and crosswalks on key routes with identified mechanisms for funding, and (2) identify appropriate pedestrian facilities for local streets and how to implement those facilities in existing neighborhoods.
- The Pedestrian Master Plan will include a Sidewalk Maintenance Plan to address issues including but not limited to sidewalk maintenance, winter operations and snow removal, and ADA Compliance.
- Amend the Bend Development Code and Standards and Specifications for sidewalk construction.
- Develop and implement a wayfinding program for the pedestrian network.

42. The City will establish a network of low stress bikeway facilities (level of traffic stress 1 or 2; see Bikeway Design Guideline) as shown on the bicycle Low Stress Network Map, to provide connections to schools, parks, and other destinations, as well as cross-City travel. It will accommodate small-wheeled vehicles, including shared micromobility transportation solutions, within local regulation and legal requirements. Implementation will focus on the key routes shown on the bicycle Low Stress Network Map.

43. The City will balance accessibility, mobility, travel time reliability, emergency vehicle access, and safety when considering traffic calming and traffic management tools to manage motor

vehicle speed, volume, and turning movements to meet the requirements of the bicycle Low Stress Network and Pedestrian Master Plan.

44. The City is committed to providing safe and comfortable walking and biking routes to schools.

**Action**

- In collaboration with the school district, the City will develop Safe Routes to School plans and implementation programs for existing schools. The school district, in collaboration with the City, will develop Safe Routes to School plans and implementation programs for new schools.

45. The City is committed to providing safe and comfortable walking and biking routes to parks.

**Action**

- In collaboration with the Bend Park and Recreation District (BPRD), the City will develop low stress route plans and implementation programs for existing parks. BPRD, in collaboration with the City, will develop low stress route plans and implementation programs for new parks.

47. The City requires enhanced crosswalks at key intervals to complete the walking and bicycling networks (established by the respective master plans), including school and trail crossings. All intersections are legal crosswalks; “enhanced” means that there are additional pedestrian safety treatments including, but not limited to, striping, safety islands, and enhanced lighting and flashing beacons where warranted.

**Actions**

- Develop requirements and clear and objective criteria for the installation of enhanced crosswalks and amend the Bend Development Code and the City’s Standards and Specifications to incorporate these.
- Update the Standards and Specifications to provide adequate illumination at crosswalks and intersections.

## **2025-2027 Bend City Council Goal Work Plan**

The 2025-2027 Council Goal Work Plan includes a transportation and infrastructure goal, policies, and actions. Below are the safety policy and actions.

Enhance safety, accessibility, and increased options for all modes of travel, with the goal of zero fatalities and a 10% decrease in crashes by the end of the biennium.

- Create and begin implementation of Pedestrian and Bike Master Plans that address system gaps, costs, and priorities and are aligned to the Transportation System and Climate Friendly and Equitable Communities plans and policies.
- Develop project and funding solutions to improve safety, reliability, maintenance, and capital needs, aligning revenue options with planning and performance metrics and goals.
- Update transportation design standards and specifications for all users.

## 2019 Bend Transportation Safety Action Plan (TSAP)

The 2019 Bend TSAP includes the following goals and actions. A summary of the high crash intersections identified in the 2019 TSAP is also provided.

**S-1.** The City will balance safety, connectivity, and travel time reliability for all modes of transportation in design and construction of transportation projects, and in transportation program implementation.

**Actions:**

- Adopt and implement the 2019 [TSAP], including mapping identified crash emphasis areas.
- Amend the Bend Development Code to include safety mitigation as part of development review.

**S-2.** The City is committed to zero transportation-related fatalities or serious injuries through design, operation, maintenance, and enforcement activities.

**Actions:**

- By 2021, the City will develop and adopt an action plan to move the City towards zero traffic deaths or serious injuries (e.g., Vision Zero). The plan will set a clear goal of eliminating traffic deaths and serious injuries among all road users within an explicit timeframe and actively engage key City departments.

**S-3.** The City will consider the needs and safety for all users in transportation projects, programs, and funding decisions, with special attention to the needs of vulnerable users (including but not limited to older people, children, people with disabilities, and other non-auto users of the transportation system).

**Actions:**

- Identify, prioritize, and/or allocate funding for projects and programs to improve safety for vulnerable users.

**S-4.** The City's policy is to achieve consistency between motorists' speeds and posted speed limits.

**Actions:**

- The City will plan for, design, construct, and/or reconstruct streets to achieve consistency between motorists' speeds and target speed limits and prioritize speeding and reckless driving enforcement programs on problematic routes.
- Create a citywide speed management program to address safety issues related to speed.
- Review street design in coordination with emergency services; amend Standards and Specifications accordingly.

**S-5.** The City will provide transparent, easy to understand, and effective communication programs to encourage safe travel on the transportation system.

**Actions:**

- Develop a comprehensive education program that promotes safe behavior by all roadway users. Utilize an interdisciplinary approach geared towards strategies that use positive messages aimed at adjusting community norms with regards to identified crash causation factors including, but not limited to, speeding, DUII, crosswalk yielding, red-light running, and distracted driving.

## High Crash Intersections

The 2019 Bend TSAP identified intersections with the highest collision scores. The table below lists those intersections and the status of improvements completed or planned at each location to-date.

**TABLE 3: 2019 BEND TSAP HIGH CRASH INTERSECTIONS**

Intersection Location	Status of Improvements Completed or Planned
Hwy 20 (Greenwood)/27th St	No safety projects are programmed. New detection and controller installed at traffic signal. US20 Refinement Plan identifies intersection improvements but no projects currently programmed.
Hwy 20 (Greenwood)/8th St	No safety projects are programmed. Improved curb ramps installed in 2025.
Purcell Blvd/Pettigrew Rd/Bear Creek Rd	Roundabout constructed in 2025, including sidewalks, bike lanes, and a center turn lane west of the roundabout.

Intersection Location	Status of Improvements Completed or Planned
Hwy 20 (3rd St)/Butler Mkt Rd/Mt Washington	Concept developed. Partial funding identified.
Hwy 20 (3rd St)/Olney Ave	No safety projects are programmed. Improved curb ramps installed in 2025.
3rd Street/Reed Mkt Rd	Streetlights were added in 2021. Reed Market corridor study identifies intersection improvements, but no projects currently programmed. A red-light enforcement camera for west-bound traffic will be installed in 2026.
Hwy 97/Powers Rd	Interchange concept identified in US97 Bend Parkway Plan but not projects currently programmed. A red-light enforcement camera for north-bound traffic will be installed in 2026.
3rd Street/Franklin Ave	Traffic signal enhancements and improved bike lanes. The current Franklin Ave corridor project may include intersection improvements.
Hwy 20 (Greenwood)/Purcell Blvd	No safety projects are programmed. Improved curb ramps installed in 2025.
3rd St/Wilson Ave	Traffic signal and intersection reconstructed in 2024. Includes enhanced bicycle and pedestrian infrastructure.
Neff Rd/Purcell Blvd	Traffic signal and intersection reconstructed in 2023. Includes enhanced bicycle and pedestrian infrastructure
Greenwood Ave/Hill St	Pilot project was installed in spring 2025 and includes bike lanes and center turn lane.
2nd St/Franklin Ave	Franklin Ave corridor project is currently being designed. Construction is expected in 2026-2027.
27th St/Neff Rd	No safety projects are programmed. In 2024, added merge arrows and removed median to allow full bike lanes. Accessible pedestrian push buttons added in 2025. Red-light enforcement cameras for south-bound and west-bound traffic will be installed in 2026

Intersection Location	Status of Improvements Completed or Planned
Hwy 97/Robal Ln	Improvements were constructed in 2022 as part of US97 North Corridor project including improved bicycle and pedestrian facilities. US97 North Corridor project reduced traffic volumes at this location.
Hwy 20 (Greenwood)/15th St	No safety projects are programmed. Improved curb ramps installed in 2025.
Hwy 97/Cooley Rd	Improvements were constructed in 2022 as part of US97 North Corridor project including improved bicycle and pedestrian facilities. US97 North Corridor project reduced traffic volumes at this location.
3rd St/Pinebrook Blvd	Construction of enhanced pedestrian crossing, including flashing beacons, in 2023.
Medical Center Dr/Neff Rd	Minor traffic signal improvements were completed in 2022. No safety projects are programmed.
Hwy 20 (Greenwood)/10th St	No safety projects are programmed. Improved curb ramps installed in 2025.
Columbia St/Colorado Ave	Roundabout constructed in 2021.
Hwy 20/Cooley Rd	Roundabout constructed in 2023.
3rd St/Revere Ave & Division St/Revere Ave	Planning study with concepts recently completed. No safety projects are programmed.
3rd St/Powers Rd	Project design complete. Improvements to the traffic signals are scheduled for construction in 2026.
3rd St/Miller Ave	This intersection is included in the Aune St corridor project currently being designed. Construction is scheduled for 2027.

### Additional Safety Projects Completed

The City has also implemented systemic safety improvements at several traffic signals and intersections. Those improvements include changes to pedestrian signal timing, installation of accessible pedestrian push buttons, installation of reflective backer plates, and improved signage. Additionally, the City has installed enhanced pedestrian crossings at

- 3rd Street and Hawthorne Avenue
- 3rd Street and Roosevelt Avenue

- 3rd Street and COIC Pilot Butte Canal
- 3rd Street and Pinebrook Boulevard

Along 3rd Street and Greenwood Avenue, ODOT has constructed new sidewalks, constructed new curb ramps, and improved overhead lighting. ODOT has also installed enhanced pedestrian crossings at:

- 3rd Street and Vail Avenue
- 3rd Street and Seward Avenue
- Greenwood Avenue and 4th Street
- Greenwood Avenue and 6th Street

## **Draft 2026 Deschutes County TSAP**

The draft 2026 Deschutes County TSAP includes the following goal and policies.

### **Goal**

Provide all roadway users – including the most vulnerable – with an accessible transportation system that strives to eliminate fatal and serious injury crashes.

### **Policies**

1. Deschutes County will reduce transportation-related fatalities and serious injuries through design, operation, maintenance, education, and enforcement, with the objective of zero serious injuries and fatalities.
2. Deschutes County will prioritize the needs and safety of all users in transportation projects, programs, and funding decisions, with special attention to the needs of vulnerable users.
3. Deschutes County will design their roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.
4. Deschutes County will establish and enforce appropriate motor vehicle travel speeds for the safety of all roadway users.
5. Deschutes County will regularly coordinate with emergency service providers and other safety partners to improve transportation planning, design, and maintenance activities.

# TECHNICAL MEMORANDUM

---

January 16, 2025

Project #31171.0

To: Project Management Team  
From: Eza Gaigalas, PE, Miranda Barrus, PE, and Matt Kittelson, PE  
Project: Bend Transportation Safety Action Plan Update  
Subject: Final Tech Memo #2: Safety Analysis Framework

---

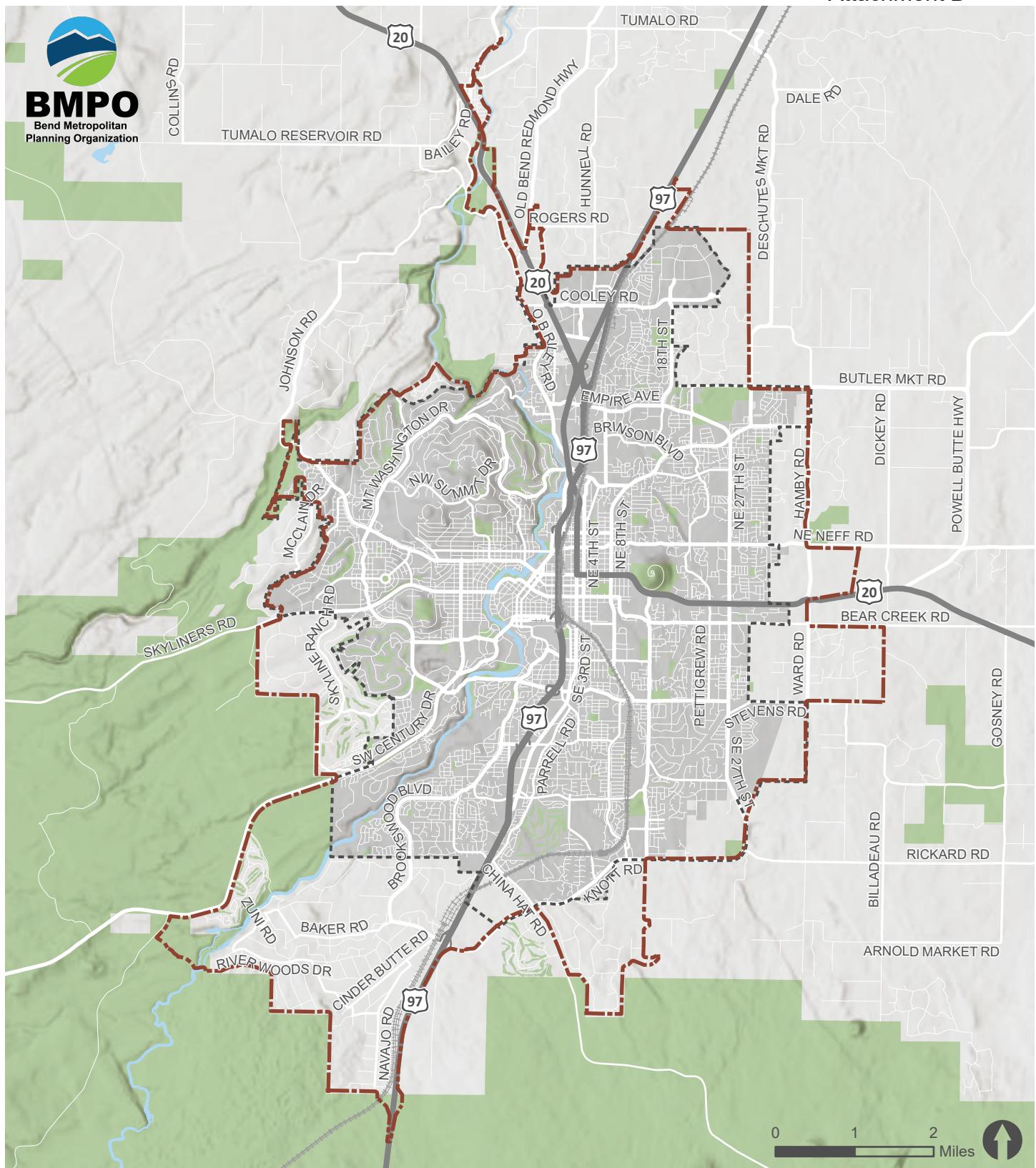
## Background

This memorandum presents the proposed safety analysis framework for the Bend Metropolitan Planning Organization (MPO) Transportation Safety Action Plan (TSAP) Update. Since the adoption of the first TSAP in 2019, the MPO is now updating the plan to assess progress in reducing fatal and serious injury crashes across its transportation network and to realign safety priorities as needed. The framework presented herein outlines the proposed safety analysis methodology for the TSAP that will support a prioritized list of projects, programs, and policies to reduce crash frequency and severity within the study area, shown in Figure 1. The study area includes all public roadways within the Bend Metropolitan Planning Organization (BMPO) boundary.

## Comprehensive Approach to Safety

A comprehensive approach to transportation safety acknowledges that policy, planning, programming, and projects are multidisciplinary. Recognizing this, the United States Department of Transportation (USDOT) has adopted the **Safe System Approach** to guide its roadway safety efforts based on six principles and five objectives, shown in the graphic to the right. The six Safe System Approach principles, shown on the outside ring of the graphic, encompass the fundamental beliefs upon which the approach is built. The five Safe System Approach objectives, shown in the middle ring of the figure to the right, are conduits through which the approach is implemented (Reference 1 – USDOT Safe System Approach).





- Bend MPO Boundary
- Bend Urban Growth Boundary
- City of Bend
- National Forest, Park, or Golf Course

**Figure 1 - Study Area**  
**Bend MPO TSAP**

To achieve a multidisciplinary plan, input will be gathered by a variety of community interests throughout the plan development process:

- **Project Management Team (PMT)** – The PMT includes key staff from the BMPO, City of Bend, and the Oregon Department of Transportation (ODOT) who meet regularly to provide technical input during key steps.
- **Project Advisory Committee (PAC)** – The PAC represents a wide range of interests (i.e., Deschutes County, City of Bend, Bend La Pine Schools, Federal Highway Administration, Central Oregon Intergovernmental Council, Commute Options, Deschutes County Bicycle and Pedestrian Advisory Committee, Bend Park and Recreation District, community members, Cascades East Transit, health services, law enforcement, Oregon State University Cascades, fire and emergency medical services, and ODOT). This group will meet three times at key project milestones to provide input on the existing conditions analysis and the TSAP's policy, program, and project recommendations. This group will also discuss and identify non-engineering solutions to further support crash reductions through a multidisciplinary approach.
- **BMPO Policy Board** – The PMT will engage with the governing body of the BMPO, BMPO Policy Board, three times during the project to provide updates and solicit guidance. The PMT will request that the BMPO Policy Board make a public commitment to the TSAP goal of zero transportation-related fatalities and serious injuries and a near-term benchmark to make progress toward the goal.
- **Bend City Council** – The PMT will engage with the governing body of the City, the Bend City Council, three times during the project to provide updates and solicit guidance. The PMT will request that the Bend City Council make a public commitment to the TSAP goal of zero transportation-related fatalities and serious injuries and a near-term benchmark to make progress toward the goal.
- **Community Engagement** – The planning process will include two rounds of public outreach at key milestones to inform transportation safety needs and develop associated recommendations. BMPO staff may also conduct additional outreach activities with interested parties or the general public to share project information and solicit feedback.

## Analysis Framework

The process, analysis tools, and methods that will be used to update the BMPO TSAP are organized into the four key phases that are summarized in Table 1. Details on each phase, its purpose, and desired outcomes are described after Table 1.

**Table 1. TSAP Update Process**

Phase	Steps
<b>#1: Due-Diligence</b>	<ul style="list-style-type: none"><li>- Review inventory of existing data</li><li>- Evaluate potential analysis tools and methods</li></ul>
<b>#2: Network Screening</b>	<ul style="list-style-type: none"><li>- Identify reference populations</li><li>- Establish data-driven emphasis areas</li><li>- Establish thresholds for comparison</li><li>- Identify sites for study within emphasis areas</li></ul>
<b>#3: Countermeasure Development &amp; Prioritization</b>	<ul style="list-style-type: none"><li>- Diagnose identified sites</li><li>- Identify contributing factors to crashes</li><li>- Identify potential countermeasures</li><li>- Calculate planning level project costs</li><li>- Rank by relative priority and ease of implementation</li><li>- Identify non-infrastructure countermeasures</li></ul>
<b>#4: TSAP Implementation</b>	<ul style="list-style-type: none"><li>- Develop performance measures</li><li>- Develop a regular update program</li></ul>

## PHASE #1 – DUE-DILIGENCE

This first phase of the analysis framework will assess the availability and quality of existing crash and transportation network data and determine the best method for performing a Network Screening (Phase #2) with that data. Crash, traffic volume, and roadway inventory data are typically needed to conduct an objective safety analysis, but the most critical data are reported crashes that are geospatially tied to the physical BMPO roadway network. Other helpful data includes specific roadway characteristics like traffic control, number of travel lanes, speed limits and 85<sup>th</sup> percentile speeds, the presence of pedestrian and bicycle facilities, transit centers, routes, and stops, school zones and routes, and streetlights. This secondary information is not necessary to complete the Network Screening but can be useful for detailed analyses and site diagnoses.

The data that will be used in the crash analysis for the BMPO TSAP Update include:

- Reported Crash Data (January 1, 2019 to December 31, 2023) – provided by ODOT
- BMPO Road Network – provided by the City of Bend and Deschutes County
- Sidewalk Network, Bicycle Facilities, Low Stress Network, Crosswalks, Paths and Trails, Primary Transit Corridors, Speed Limits, Intersection Traffic Control (as available), Mobility Hubs, Existing Land Use (Zoning), Future Land Use (Comprehensive Plan) – provided by the City of Bend
- Traffic Volumes (as available) – provided by ODOT and the City of Bend
- Equity-Related Population Data – provided by the BMPO and the City of Bend

Real-time data for fatal crashes are available from the National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis Reporting System (FARS). These data fall outside of the study period of ODOT's reported crashes and will not be incorporated into the five-year crash analysis to prevent skewed results. However, for the fatal crashes on FARS reported in years more recent than 2023,

their locations and characteristics will be compared to the five-year crash analysis results in Phase #2 to validate continued patterns or discover new trends.

## PHASE #2 – NETWORK SCREENING

This second phase of the analysis framework will screen the BMPO roadway network to identify sites and patterns where there is potential to reduce crash frequency and/or severity. Network screening methods that will be applied to the BMPO TSAP Update are described in detail in Chapter 4 of the Highway Safety Manual (HSM) and generally include the following steps (Reference 2 – HSM):

1. **Establish Emphasis Areas:** safety trends (e.g., time of day, seasonal variability, driver age, crash types, crash causes, crash locations, speeding, pedestrian and bicycle crashes, roadway classifications, etc.) that the City of Bend will want to address with systemic treatments and multidisciplinary actions. All public roads within the BMPO will be included in the crash pattern analysis. A separate crash pattern analysis will be conducted that focuses exclusively on local roads, with State Highways excluded.
2. **Identify Reference Populations:** study area characteristics that, when organized into groups, help develop the most cost-effective projects to reduce crashes. These can include area types (e.g., urban, rural, suburban), traffic control (e.g., signalized, unsignalized, roundabout, etc.), number of approaches (e.g., three-leg or four-leg intersection), cross-section (e.g., number of through lanes and turning lanes), functional classification, and traffic volumes.
3. **Select Performance Measures:** a quantitative “score” is applied to crash data across all sites. The HSM identifies 13 performance measures that can be used in network screenings. Based on available data and consistent with the 2019 Bend TSAP, the BMPO TSAP Update will apply the Equivalent Property Damage Only (EPDO) crash frequency performance measure to evaluate the study area. The EPDO crash frequency performance measure assigns a weighting to a crash based on its severity. Consistent with ODOT’s Safety Priority Index System (SPIS), Fatal and Suspected Serious Injury (A) crashes receive a weight of ‘100,’ Suspected Minor (B) and Possible (C) injury crashes receive a weight of ‘10,’ and Property Damage Only (O) crashes receive a weight of ‘1.’ To account for crash concentrations, the analysis also assesses intersection crashes and street segment crashes separately by identifying crashes within a specified boundary of an intersection and by using a sliding window along streets. Therefore, the greater the crash severity and/or the higher the crash frequency, the higher the score that a location will likely receive.
4. **Screen and Evaluate Results:** Geographic Information System (GIS) tools are used to perform the network screenings and identify the BMPO’s High Injury Network (HIN). Roadways and intersections are ranked across the BMPO based on their EPDO score and the potential that crash frequency and/or severity could be reduced at these sites. Ten sites overall will be selected in coordination with the PMT as priority for future improvement. Concepts will be developed for five of those locations, based on PMT direction, to further identify possible improvements and support future funding applications or project development activities. In some situations, top-ranked sites based on score may not be selected as a priority—such as if another project is already planned at that location or if State Highway sites rank higher than local sites, but this project will target the local system. All public and private roads within the BMPO will be included in the network screening. The analysis will also highlight local streets that appear on the overall HIN, enabling the BMPO to prioritize them for targeted improvements.

## PHASE #3 – COUNTERMEASURE DEVELOPMENT

The third phase of the analysis framework will identify factors contributing to fatal and serious injury crashes and develop countermeasures to reduce them. The following sections provide a general overview of the process the Consultant Team will use to develop these countermeasures.

### Identify Contributing Factors at Top Sites

Diagnosis will include desktop reviews for the top-ranked sites identified in Phase #2. For each site, diagnosis will include a review of the following three elements, as available:

1. Crash and volume data trends;
2. Site history (e.g., construction, traffic control modifications, etc.); and,
3. Field conditions using aerial imagery.

The Consultant will work with the PMT to identify up to 10 sites to be diagnosed to determine factors contributing to crashes, and countermeasures will be identified to address those contributing factors.

### Identify Infrastructure Countermeasures

The factors contributing to crashes, as identified through desktop analysis, are linked to countermeasures that can help reduce both the frequency and severity of these crashes. This step will require considering a range of countermeasures, then narrowing the options to those that have a documented ability through empirical study to reduce a specific crash type. This step uses Crash Modification Factors (CMFs) and/or Crash Reduction Factors (CRFs) in the HSM, ODOT's CRF Manual (Reference 3 – CRF Manual), and the Federal Highway Administration's (FHWA) CMF Clearinghouse (Reference 4 – CMF Clearinghouse) to identify potential solutions.

In addition to developing countermeasures for PMT's top 10 locations, the Consultant Team will also recommend low-cost systemic treatments from the sources above that can be applied at a broad scale to address the Emphasis Areas identified in Phase #2.

### Identify Non-Infrastructure Countermeasures

As documented earlier in this memorandum, engineering (infrastructure) countermeasures are only one component of a comprehensive safety program. The PAC includes multidisciplinary stakeholders that will provide input during a designated PAC meeting on potential non-infrastructure countermeasures that should be considered to address the Emphasis Areas identified in Phase #2.

### Prioritize Infrastructure Countermeasures

The goal of prioritizing countermeasures is to select projects that will most effectively reduce crash frequency and severity while minimizing costs. Chapters 7 and 8 of the HSM describe several methods for ranking projects, with benefit-cost analysis being a commonly used ranking method. Therefore, ranking requires that monetary costs and benefits be identified for each project. Improvement concepts and planning level project cost estimates will be prepared for five of the ten selected sites. The

CMFs/CRFs associated with identified countermeasures will be used to estimate benefits in terms of crash reductions, when available.

## Coordination with Other Agencies and Partners

Additional transportation safety projects that are not identified in the TSAP update projects—such as those in the 2019 TSAP that have yet to be implemented, new projects ODOT has identified for its system, or projects identified through other means—will be carried forward into the TSAP document as agreed to by the PMT to provide a complete safety project list.

## PHASE #4 – IMPLEMENTATION

In this phase, the City of Bend will implement TSAP Update recommendations by integrating them into projects, programs, and policies. Effective implementation extends beyond the prioritized list of infrastructure and non-infrastructure strategies. The TSAP Update may include recommendations in the following areas to enhance long-term safety performance:

- **Capital Improvement Program (CIP):** Update criteria and methods to incorporate safety performance.
- **Development Review:** Revise processes to integrate safety considerations.
- **Roadway Standards:** Update standards and standard details based on TSAP Update findings.
- **Performance Tracking:** Establish measures and excel log to monitor progress toward safety goals.
- **Education and Enforcement:** Identify new programs to improve outreach and compliance.
- **Policy Development:** Define needs that align with the BMPO's long-term vision.
- **Data Collection:** Address gaps to reduce statistical bias in future TSAP updates.
- **Public Health Integration:** Explore connections that support state and future BMPO and City goals.
- **Plan Maintenance:** Recommend methods and frequency for TSAP updates to ensure a proactive, current transportation safety management program.
- **Funding:** Ensure adequate financial resources to support implementation and establish a process to track funding allocations as part of executing the recommendations.
- **Emergency Services:** Identify strategies to improve crash response time, including technology enhancements that enable EMS to reach crash sites faster.

## Next Steps

The consultant will refine the safety analysis framework based on PMT feedback and initiate the Existing Conditions analysis using the agreed-upon methodology outlined in this memorandum.

## References

1. U.S. Department of Transportation. Principles of a Safe System Approach.  
<https://www.transportation.gov/NRSS/SafeSystem>
2. American Association of State Highway and Transportation Officials (AASHTO). Highway Safety Manual. 2010.
3. Oregon Department of Transportation (ODOT). Crash Reduction Factor Manual. 2024.
4. Federal Highway Administration (FHWA). CMF Clearinghouse.  
<https://cmfclearinghouse.fhwa.dot.gov/>

# Public Engagement Plan: Bend Transportation Safety Action Plan

January 2026

## Project Overview

Bend Metropolitan Planning Organization (BMPO) is updating its Transportation Safety Action Plan (TSAP) to make Bend's roads safer for everyone. The plan will look at all roads within the MPO boundary, which extends slightly beyond the Bend city limits (Figure 1). (Note that this TSAP update expands the project area from the previous 2019 Bend Area TSAP, which included the Bend Urban Growth Boundary.) TSAPs help set long-term goals, policies, and strategies as well as near-term actions to eliminate deaths and serious injuries on our roads.

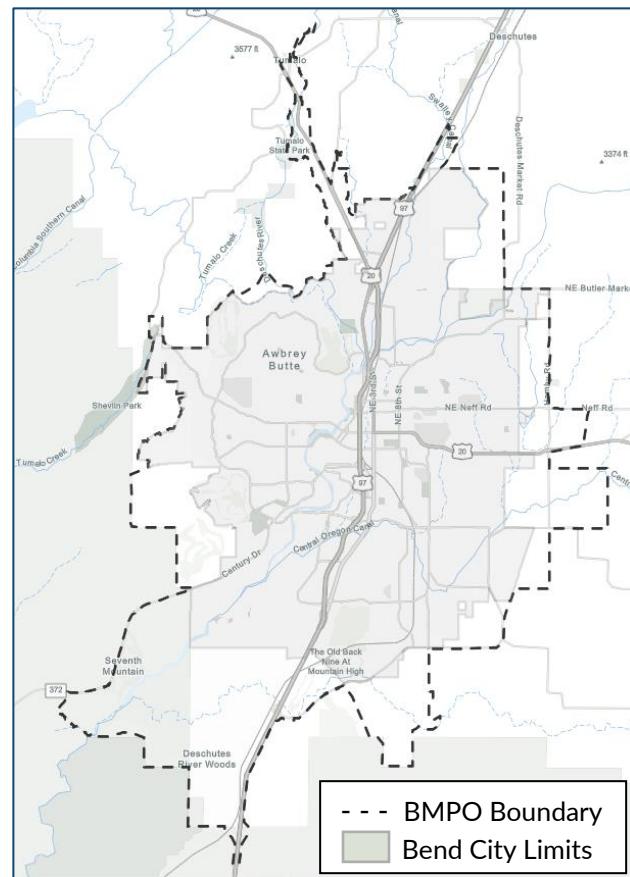
The plan will help us identify specific projects and strategies that can save lives. It will also give us a way to track our progress and measure the effectiveness of changes made over time. Hearing from community members is crucial in understanding transportation safety concerns in the BMPO.

## Project Goals

As the project gets started, the BMPO Policy Board will develop the project vision and goals. The Bend TSAP will:

- Strive for zero deaths and serious injuries on all roads within the MPO
- Include broad representation of the MPO community in the planning process, especially those who have faced higher rates of traffic injuries and deaths
- Create a list of safety projects and strategies that can save lives
- Establish a system to track progress

Figure 1: Map of BMPO Boundary



## Project Phases

Work to update the Bend TSAP began in fall 2025 and is expected to finish in spring 2027. There will be opportunities for the public to give feedback in two main phases of the update process, with the first round of engagement taking place in spring 2026 and the second round in fall 2026. In order to meaningfully accomplish the [U.S. Department of Transportation's 7 key components of a safety action plan](#), the project work will be carried out in several distinct phases, described below.

### **Regulations and Plans Review - Fall & winter 2025**

Staff will review federal and state guidance for safety planning, as well as the 2019 Bend Area TSAP, to gain an initial understanding of current regulations and strategies to be updated from the last plan.

### **Data Collection and Analysis - Winter 2025**

Conduct a crash analysis to gain an understanding of existing crash types, trends, causes, and locations. Locations with higher concentrations of crashes and missing safety features will be identified.

### **Public Engagement Round 1 - Spring 2026**

Engage the public to gain authentic and meaningful input on safety concerns from a diversity of community members, through an interactive project website, attending in-person events, and partnering with local leaders.

### **Strategy Development & Performance Measures - Summer & fall 2026**

Consider proven solutions from other areas along with Bend area demographics to develop a set of strategies for safer roads, speeds, and road users and improved post-crash care. Develop measures to monitor performance of focus areas and safety solutions over time.

### **Public Engagement Round 2 - Fall 2026**

Report back to the public on: what we heard during the first round of engagement, priority areas identified, and possible solutions to common safety issues.

### **Plan Update - Fall & winter 2026**

Use information gathered from all previous phases to draft a new TSAP that identifies long-term goals, policies, and strategies as well as near-term actions to eliminate deaths and life-changing injuries on the BMPO transportation system.

### **Plan Adoption - Spring 2027**

Implement the new plan; begin seeking funding for priority projects.

## Community Context

### Project Background: Concurrent Projects and Previous Engagement

This project will update the existing 2019 Bend Area TSAP to address the present needs of Bend's ever-changing community. The TSAP update will coordinate with the [Deschutes County TSAP](#) and the [Oregon TSAP](#). Both plans seek to create a safer transportation system for everyone and will help inform how we address transportation safety in Bend.

To create this Engagement Plan, we met with staff from BMPO and City of Bend to ask about their experience engaging with community members. The lessons learned from those discussions and BMPO's 2021 Public Participation Plan shaped how we will approach this engagement.

### Equity Analysis

Throughout engagement, we will focus on reaching communities who have historically faced higher rates of traffic injuries and deaths. According to the [National Safety Council's \(NSC\) 2025 reporting on Motor Vehicle Fatality Disparities by Race or Ethnic Origin](#), Black and Hispanic/Latino people experience a significantly higher traffic fatality rate compared to non-Hispanic white people, especially for those who are walking at night. Pedestrians and cyclists of all kinds are more vulnerable to traffic injuries and deaths compared to drivers, who are more protected by the vehicle's safety measures. Thus, individuals who do not travel by car—whether by choice or financial/physical constraints—are more vulnerable to traffic injuries and deaths in general. To gain a deeper understanding of these communities in the BMPO, the Project Management Team (PMT) analyzed a series of demographic data (Table 1 & Figure 2).

Proportions of racial and ethnic groups in the BMPO are relatively similar to that of Oregon's population. While most residents identify solely as white (83%), Bend is also home to Hispanic and Latino (9%), multiracial (5%), Asian (1%), American Indian and Alaska Native (0.3%), Black or African American (0.3%) people, Native Hawaiian and Other Pacific Islander (0.2%), and other communities which may not be fully represented in the U.S. Census data. Many residents in the region face transportation and access challenges. About one in four people (22%) have low incomes. Four percent of the community doesn't have access to internet and 5% doesn't have access to a vehicle. People living with a disability make up 10% of the Bend area population and people with limited English proficiency make up 1.5%.

Drawn from BMPO's Equity Demographic Viewer (Figure 2), a series of key takeaways describing where vulnerable populations are located within the BMPO are listed below:

- **Poverty and low-income communities** (people living below the Federal Poverty Level (FPL) ("poverty"), and people living below 200% of the FPL ("low-income")) tend to be concentrated in the central east side of Bend, with a concentrated pocket also appearing in the northeastern corner of the Deschutes River Woods neighborhood
- Areas with high portions of **senior age (65+) people** are concentrated on the outer portions of the BMPO area

- There are several census tracts in which **non-white and Hispanic/Latinx people** make up over 25% of the population; these are distributed throughout Bend, with a pocket of concentration in the Southeast Bend neighborhood as well as the western portion of the Old Farm District neighborhood
- Areas with higher amounts of **people with disabilities** tend to be either in the central portion of the city or on the very outskirts
- **Households without a car** are most concentrated along the immediate east side of the Deschutes river as well as areas surrounding Highway 20
- While **households with children** are relatively evenly distributed throughout Bend, the northern portions of the Southwest Bend and Larkspur neighborhoods have particularly high amounts, with over 50% of households having children
- **Communities ranking highest on ODOT's Transportation Disadvantaged Population Index**—which considers many of the same social vulnerability factors in the preceding bullet points—are in pockets throughout central and southern Bend (see Figure 2)

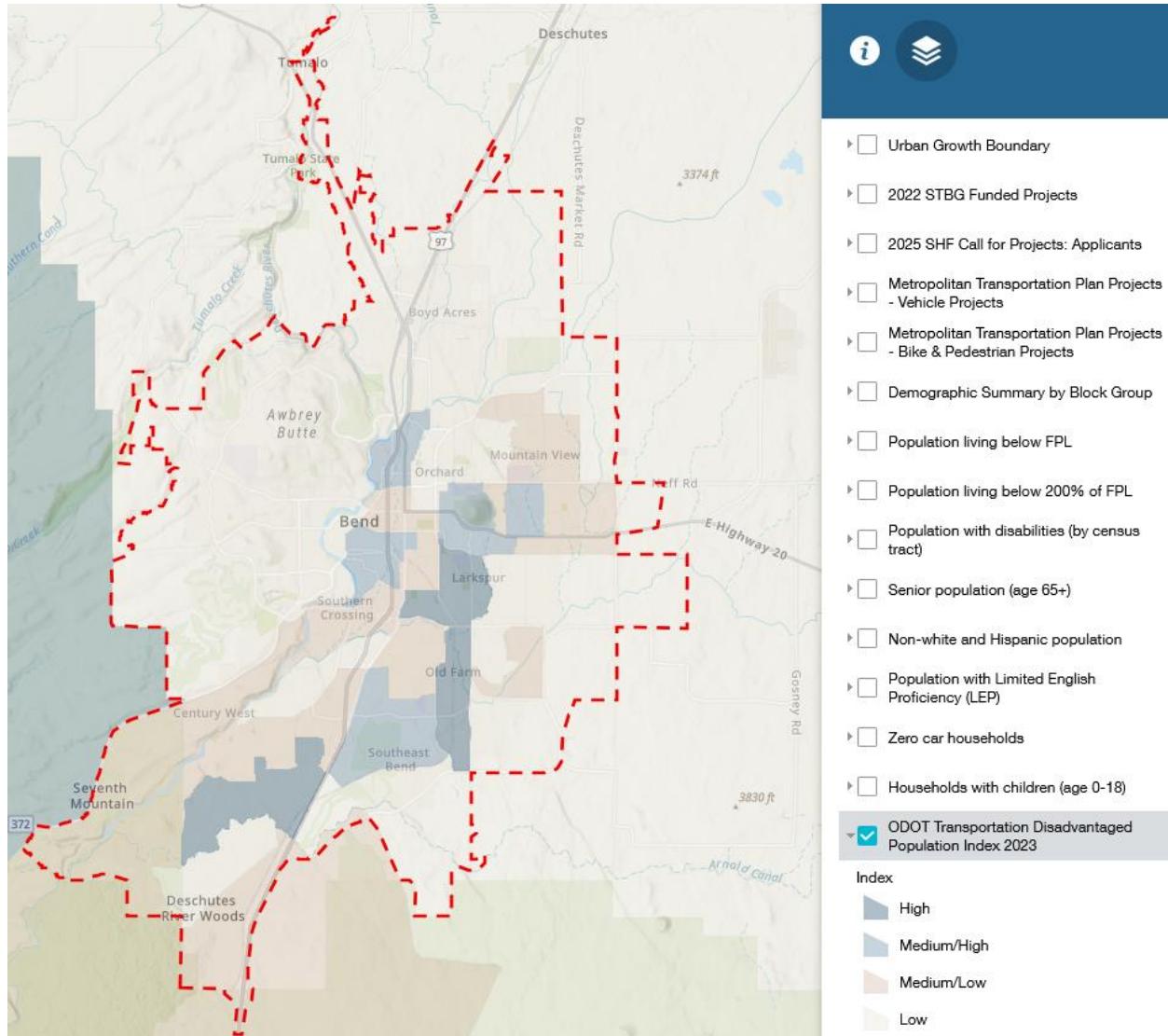
Table 1: Bend MPO demographics compared to Oregon state

Category	Bend MPO	Oregon
Population	109,902	4,238,714
Under 18 years	20%	20%
18 - 64 years	62%	61%
65 years and older	17%	19%
White	83%	72%
Black or African American	0.3%	2%
American Indian and Alaska Native	0.3%	1%
Asian	1%	4%
Native Hawaiian and Other Pacific Islander	0.2%	0.4%
Some other race	1%	0.5%
Two or more races	5%	6%
Hispanic or Latino (of any race)	9%	14%
Speaks Spanish and speaks English less than "very well"	1%	3%
Speaks some other language and speaks English less than "very well"	0.5%	2%
Population with a disability	10%	15%
Low income (Income below 200% of the Federal Poverty Level)	22%	28%
Owner occupied	66%	67%
Renter occupied	34%	33%
Households with no internet access	4%	6%
Households with no vehicles available	5%	7%

Source: 2023 American Community Survey 5-year Estimates.



Figure 2: Concentration of transportation disadvantaged populations in the Bend metropolitan area by level of disparity



## Engagement Approach

The PMT will work together to confirm the engagement approach before creating materials and executing engagement strategies. The following sections outline the engagement goals, priority audiences, key messages, engagement questions, and engagement strategies.

## Engagement Goals

The public engagement goals for the Transportation Safety Action Plan are to:

- Raise general community awareness about BMPO and their intent to make safety updates to the transportation system

- Engage a broad range of communities across the BMPO area, with a focus on reaching priority audiences that may be disproportionately impacted by traffic risks and traditionally underserved by safety efforts
- Partner with community organizations and local government departments to determine the best ways to engage their unique communities and tailor specific engagement tactics to match those needs
- Target community events and engagement opportunities in areas of the BMPO that are home to, and/or attended by, a higher amount of transportation disadvantaged populations (see “Equity Analysis”)
- Ask people about their biggest safety concerns in the transportation system and build trust through listening openly
- Compile and analyze feedback to identify top transportation safety priorities
- Closely coordinate between the engagement team and the broader TSAP PMT to ensure community input is reflected in solution recommendations
- Clearly inform the community what we heard and how their input is being used to inform the TSAP

## Key Messages

The following are key messages that will be used throughout public engagement materials.

- BMPO is creating a TSAP to work towards eliminating fatal and serious injury crashes in the Bend area.
- The plan’s goal is to create a transportation system where everyone can travel safely, whether you drive, walk, roll, bike, or use public transportation.
- The plan will guide decisions and investments to reduce crashes and eliminate traffic fatalities on all roads in the Bend area, with a strong focus on the most frequent crash areas.
- The Plan will be informed by both crash data and community input.
- BMPO wants to hear about the community’s biggest safety concerns and will offer opportunities for the public to share ideas about transportation safety through fall 2026.
- We especially want to hear from people who:
  - Have a higher risk of injury in crashes, like those who walk, bike, and roll.
  - Have trouble getting around or accessing transportation.

## Engagement Questions

Below are examples of questions that the PMT might focus on during engagement.

- Where do you usually go in Bend?
- How do you get to work, meet with friends/family, or run errands?
- What makes it hard to get around safely or efficiently?
- What transportation safety improvements would help you most?

- What do you like about traveling in/around the Bend area?
- What would make traveling in our city safer and easier?
- In what part of the BMPO area do you live?
- Are there roads you avoid because you feel they are unsafe? What do you feel is unsafe about these roads?

## Priority Audiences & Stakeholder Identification

Engagement for the TSAP will prioritize populations that are most vulnerable to traffic deaths and injuries. The team has identified these priority populations in Table 2 along with potential stakeholders in the Bend area that represent these populations.

Table 2: Priority audiences and potential stakeholder organizations

Priority Audience	Potential Stakeholder(s) Representing Audience	Stakeholder Contact Information
<b>Latino and Hispanic people; people with limited English proficiency</b>	Latino Community Association	Ask Kathya for preferred contact. LCA website contacts: <a href="https://latinocommunityassociation.org/who-we-are/staff/">https://latinocommunityassociation.org/who-we-are/staff/</a>
	Bend Parks & Recreation	Kathy Avila Choquez, Latino Community Outreach Specialist <a href="mailto:Kathy@bendparksandrec.org">Kathy@bendparksandrec.org</a>
<b>Communities of color</b>	Central Oregon Black Leaders Assembly leader, Embrace Bend, HREC, Father's Group	Ask Kathi for preferred contact.
<b>People with lower incomes</b>	Thrive Central Oregon	<a href="mailto:info@thrivecentraloregon.org">info@thrivecentraloregon.org</a>
	The Giving Plate	<a href="mailto:info@thegivingplate.org">info@thegivingplate.org</a>
	NeighborImpact	<a href="mailto:bend@neighborimpact.org">bend@neighborimpact.org</a>
<b>Unhoused people</b>	Homeless Leadership Coalition	Contacts not listed on website. Try their webform submission: <a href="https://cohomeless.org/who-we-are/contact-us/">https://cohomeless.org/who-we-are/contact-us/</a>
<b>People without access to a car</b>	Cascades East Transit	Work with contact serving on the TSAP advisory committee.
<b>People with disabilities</b>	City of Bend Accessibility Advisory Committee	Work with preexisting contact from when BMPO has taken materials to their past meetings.
<b>Children (age 0-18)</b>	[Organizers of] City of Bend Youth Summit	Work with René to possibly get a transportation-related question included in the survey. This initiative is not yet confirmed.
	Commute Options	<a href="mailto:info@commuteoptions.org">info@commuteoptions.org</a>
<b>Seniors (age 65+)</b>	Central Oregon Council on Aging	Ask René for contact.

## Possible Community Events

Starting in early 2026, BMPO staff will engage members of the public in conversations about the TSAP, with a focus on events that reach priority audiences. See attached spreadsheet titled



“Engagement Events Tracker” for possible events that target priority audiences. This list will be updated and refined as more events are posted in early 2026.

## Engagement Coordination

Close coordination between BMPO, Kittelson, and Zan Associates will be necessary to ensure materials are consistent with project goals and BMPO standards for communication. The following sections describe the team members, roles, responsibilities, and processes that will be involved in coordinating engagement for the TSAP.

## Project Management Team

The Bend TSAP Project Management Team (PMT) includes staff from Bend Metropolitan Planning Organization (BMPO), City of Bend, Kittelson & Associates, and Zan Associates. Table 3 shows the primary PMT members who will participate in reviews of engagement materials and conduct engagement strategies.

*Table 3: Project staff who will have key roles in engagement*

Name	Project Role	Organization	Email Address
Tyler Deke	Project Manager	BMPO	<a href="mailto:tdeke@bendoregon.gov">tdeke@bendoregon.gov</a>
Andrea Napoli	Project Support	BMPO	<a href="mailto:anapoli@bendoregon.gov">anapoli@bendoregon.gov</a>
Kelli Kennedy	Project Support	BMPO	<a href="mailto:kkennedy@bendoregon.gov">kkennedy@bendoregon.gov</a>
Matt Kittelson	Consultant Team Project Manager	Kittelson	<a href="mailto:mkittelson@kittelson.com">mkittelson@kittelson.com</a>
Miranda Barrus	Consultant Team Deputy Project Manager	Kittelson	<a href="mailto:mbarrus@kittelson.com">mbarrus@kittelson.com</a>
Summer Cook	Engagement Lead	Zan Associates	<a href="mailto:scook@zanassoc.com">scook@zanassoc.com</a>
Tom Holmes	Engagement Advisor	Zan Associates	<a href="mailto:tholmes@zanassoc.com">tholmes@zanassoc.com</a>



## Decision Makers

Multiple organizations are involved in the decision-making process for engagement on the Bend TSAP. The following are the decision makers and their roles on the project:

- **Consultant team** – Prepares initial materials
- **PMT** – Initial review and comment on draft materials
- **Project Advisory Committee (PAC)** – Review materials and provide guidance to the team and process
- **Public** – Review materials at key stages of project
- **MPO Policy Board & Bend City Council** – Review materials and provide guidance to the team and process; adoption of final plan

## Quality Assurance and Quality Control Process

Zan Associates will prepare ADA-accessible engagement materials for the Bend TSAP. These materials will follow City of Bend brand standards, using a modified style to incorporate BMPO's logo, and will be written in clear, plain language. BMPO staff and Kittelson PMT members will review the materials and provide feedback and recommendations. Zan will work closely with BMPO to ensure public materials are posted on the project website and appropriate social media platforms. Figure 3 illustrates the development and review process for engagement materials.

Figure 3: QA/QC process for engagement materials



## Engagement Strategies

Table 4 outlines the engagement strategies that will be used for public engagement between November 2025 and October 2026. Decision-making and quality assurance/quality control of the engagement materials and implementation are outlined in the Engagement Coordination section above.

*Table 4: Engagement strategies and timeline*

Date	Strategy	Description	Responsibility
November 2025 – November 2026	Project website	Project webpage nested directly under the BMPO website; primary tool for TSAP information sharing with Bend community; host project documents and link to Virtual Open House (VOH) #1 and #2	<b>BMPO:</b> Develop, implement updates <b>Zan:</b> Advise, develop promotional materials for BMPO to disseminate <b>Kittelson:</b> Advise, review materials
November 2025	Engagement discussion	Discussion with BMPO and City staff to learn about BMPO's past engagement efforts, specific goals/ideas for the TSAP engagement, and any relevant existing knowledge or data on disadvantaged populations in the jurisdiction.	<b>Zan:</b> Lead <b>BMPO and City:</b> Attend, answer questions <b>Kittelson:</b> Attend
November – December 2025	Public engagement plan	A plan to inform people about the safety conditions of the Bend area transportation system and ask what needs to be better.	<b>Zan:</b> Develop content <b>BMPO and Kittelson:</b> Review, approve, and present to PAC and BMPO Policy Board
January, April, and October 2026	PAC meetings	Three meetings with the Project Advisory Committee. PAC will provide multidisciplinary project guidance on technical analyses, project documentation, and public engagement.	<b>BMPO:</b> Organize and facilitate <b>Kittelson:</b> Develop agenda, presentation materials, post-meeting summary <b>Zan:</b> Review presentation materials, virtually attend up to two meetings as needed

Date	Strategy	Description	Responsibility
April – October 2026	In-person events	BMPO staff will attend in-person community events to share and gather information, focusing on events that reach members from priority audiences. Zan will develop appropriate materials for up to four different types of events (pop-up, small group discussion, presentation)	<b>BMPO:</b> Coordinate, promote, and attend events, post-event summaries <b>Zan:</b> Advise, develop event materials <b>Kittelson:</b> Advise, review and approve materials
April – June 2026	Virtual open house #1  <i>Gather input on existing crash patterns and concerns around transportation safety and identify possible locations, and ideas for improvements.</i>	Website, linked from Bend TSAP page, which includes: <ul style="list-style-type: none"> <li>Project objectives, schedule, and deliverables</li> <li>Email list signup</li> <li>Survey</li> <li>Interactive comment map</li> </ul>	<b>Zan:</b> Develop content and one-page summary after close <b>BMPO:</b> Review, approve, post to website, work with partners to distribute throughout the community, distribute summary; coordinate with city communications staff as needed <b>Kittelson:</b> Review, approve
September – October 2026	Virtual open house #2  <i>Request feedback on crash emphasis areas and high priority locations with initial proposed countermeasures as well as education and outreach strategies that could be included in the updated TSAP.</i>	Website, linked from Bend TSAP page, which includes: <ul style="list-style-type: none"> <li>Project objectives, schedule, and deliverables</li> <li>Email list signup</li> <li>Survey (or other interactive feedback tool)</li> </ul>	<b>Zan:</b> Develop content and one-page summary after close <b>BMPO:</b> Review, approve, post to website, work with partners to distribute throughout the community, distribute summary; coordinate with city communications staff as needed <b>Kittelson:</b> Review, approve
January – October 2026	Promotional materials	Promotional materials to be developed at two project milestones: <ul style="list-style-type: none"> <li>Social media text and static graphic compatible with Bend platforms</li> <li>Content for email promotions to list of interested parties</li> </ul>	<b>Zan:</b> Develop content <b>BMPO:</b> Review, approve, distribute; coordinate with city communications staff as needed <b>PAC:</b> Advise, review, distribute <b>Kittelson:</b> Review, approve