Bend Metropolitan Planning Organization
710 NW Wall Street
Bend, OR 97703

AGENDA

BMPO Policy Board

Date: November 20, 2026

Start Time: 12:00 p.m.

- **Meeting Format:** in accordance with Oregon state law, this meeting is open to the public and can be accessed and attended in person or remotely.
- **In-person Attendance:** board members and members of the public may attend in person at the following location:
  - Baney Conference Room (Oregon Department of Transportation [ODOT] Region 4 Headquarters, Building M), 63055 N. Highway 97, Bend
- **Remote Attendance:** board members and members of the public may attend remotely via Zoom webinar. Members of the public may also view the meeting via YouTube livestream.
  - **Zoom webinar link**
  - Zoom webinar phone: dial 1-888-788-0099 and enter webinar ID# 865 2083 6737
  - **YouTube livestream link**

BMPO Policy Board Meeting

Agenda Topics

1. Call to Order & Introductions
2. Hybrid Meeting Guidelines
3. Public Comment (Non-Agenda)
4. Meeting Minutes
5. Metropolitan Transportation Improvement Program (MTIP) Amendment
6. Bend Transportation Safety Action Plan (TSAP) Update – Project Review #3
7. Comment Letter for Proposed Census Changes
8. Comment Letter for Bipartisan American Affordability and Jobs Act (BAAJA)
9. Other Business
10. Public Comment (Agenda)
11. Next Meeting & Adjournment

Agenda Details

Start Time	Item	Information	Presenters
12:00	1. Call to Order & Introductions		Chair Méndez
12:05	2. Hybrid Meeting Guidelines		Tyler Deke, BMPO
12:07	3. Public Comment (Non-Agenda)	Time for members of the public to provide comments. Additional time for comment will be provided prior to adjournment.	Chair
12:10	4. Meeting Minutes	**Attachments/Links** Attachment A: Draft Policy Board meeting minutes, August 11, 2026. **Action Requested** Review and approve the draft Policy Board meeting minutes from August 11th. Recommended language for motion: *I move approval of the draft meeting minutes for the August 11, 2026, Policy Board meeting, as presented.*	Chair
12:15	5. MTIP Amendment	**Background** One amendment to the 2024-2027 MTIP is proposed. It involves cancelling a transit project. The project is listed in the third year of the 2024-2027 MTIP but is not listed in the current 2027-2030 MTIP. The proposed amendment will serve as a historical correction to the 2024-2027 MTIP. **Attachments/Links** Link to the **Transportation News Release** for the proposed amendment. **Action Requested** Review and consider approval of the proposed amendment.	Kelli Kennedy, BMPO

Start Time	Item	Information	Presenters
		Recommended language for motion: *I move to approve the proposed amendment to the 2024-2027 MTIP, as presented.*	
12:20	6. Bend TSAP Update – Project Review #3	**Background** Staff will present the recommended site specific and systemic improvement strategies. Staff will also review the Phase 1 Public Engagement Summary, upcoming Phase 2 public engagement, and project next steps. **Attachments/Links** Attachment B: Tech Memo #4 – Strategies. Attachment C: Phase 1 Public Engagement Summary (revised). Attachment D: Phase 2 Public Engagement Summary. Link to **Bend TSAP Update website**. **Action Requested** Review and provide input on Tech Memo #4.	Matt Kittelson, Kittelson & Associates (KAI) Miranda Barus, KAI Joel McCarroll, DKS Associates Andrea Napoli, BMPO Tyler Deke
1:45	7. Comment Letter for Proposed Census Changes	**Background** The Census Bureau is proposing changes to the decennial Census data collection process. Staff will review the proposed changes and the comment letter that was submitted by the Chair. **Attachments/Links** Attachment E: Signed Comment Letter for Proposed Census Changes, as submitted. **Action Requested** None. Informational item.	Tyler Deke
1:50	8. Comment Letter on BAAJA	**Background** The Senate Committee on Environment and Public Works and the Senate Committee on Energy and Natural Resources introduced	Tyler Deke

Start Time	Item	Information	Presenters
		BAAJA in September. Staff will review the draft legislation and discuss possible development of a BMPO comment letter. **Attachments/Links** Attachment F: Draft Comment Letter on BAAJA (will be attached prior to meeting). Link to a PDF copy of the **Association of MPOs' Analysis of the BAAJA**. **Action Requested** Consider submitting a comment letter on the draft legislation. Recommended language for motion: *I move approval of the draft comment letter on the Bipartisan American Affordability and Jobs Act, [as presented / with the changes discussed].*	

1:55	9. Other Business	**Policy Board Members**
		• Updates on projects/planning efforts
		• Future agenda topic requests
		
		BMPO Staff
		• Updates on projects/planning efforts
		• Upcoming agenda topics:
		  ○ ODOT Carbon Reduction Program Grant Mobility Points Update (City)
		  ○ State Highway Fund (SHF) & COVID Relief Programs: Project Status Updates from Recipients
			Chair & Staff

1:58	10. Public Comment (Agenda)	Additional time for members of the public to provide comment.	Chair
2:00	11. Next Meeting & Adjournment	The next meeting of the BMPO Policy Board is scheduled for December 18, 2026, at 12:00 p.m.	Chair

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Attachment A

Bend Metropolitan Planning Organization
710 NW Wall Street
Bend, OR 97703

MEETING MINUTES

BMPO Policy Board

Location: Awbrey Butte Conference Room (City Hall), 710 NW Wall, Bend, Oregon
Date: August 11, 2026
Time: 11:00 a.m.
Prepared by: ABC Transcription Services, LLC

In Attendance

- Voting Members
  - Chair Ariel "Ari" Méndez, City of Bend Councilor
  - Vice Chair Mike Riley, City of Bend Councilor
  - Phil Chang, Deschutes County Commissioner
  - Emerald Shirley, Oregon Department of Transportation (ODOT) Interim Central Oregon and Lower John Day Area Manager
- Staff & Other Attendees
  - Tyler Deke, BMPO Manager
  - Andrea Napoli, BMPO Senior Planner
  - Kelli Kennedy, BMPO Program Coordinator
  - Janet Hruby, City of Bend
  - David Abbas, City of Bend
  - Chris Doty, Deschutes County
  - James Dorofi, BMPO Technical Advisory Committee member
  - Haven Costello, member of the public

Agenda Items

1. Call to Order & Introductions
2. Hybrid Meeting Guidelines
3. Public Comment (Non-Agenda Items)
4. Meeting Minutes
5. City of Bend Transportation & Mobility Department Updates
6. Metropolitan Transportation Improvement Program (MTIP) Amendment
7. ODOT Expressway Designations Review
8. BUILD Act – Overview & Letter of Support

9. Other Business
10. Public Comment (Agenda Items & Wrap-Up)
11. Next Meeting & Adjournment

Notes

1. **Call to Order & Introductions**
   Chair Méndez called the meeting to order at 11:04 a.m. with a quorum established.

2. **Hybrid Meeting Guidelines**
   Tyler Deke reviewed the hybrid meeting guidelines.

3. **Public Comment (Non-Agenda Items)**
   Haven Costello raised the topic of increasing youth engagement with the BMPO and asked to explore options at future meetings. Chair Méndez would follow-up with Costello via email regarding further opportunities for involvement in the BMPO. Janet Hruby offered to connect with Costello after the meeting to discuss additional opportunities for involvement within the City.

4. **Meeting Minutes**
   Materials referenced
   - Attachment A: Draft Policy Board meeting minutes, July 17, 2026

   Motion 1: Phil Chang moved approval of the draft July 17, 2026, Policy Board meeting minutes as presented. Mike Riley seconded the motion which passed 4 to 0.
   (Ayes: Méndez (City of Bend), Riley (City of Bend), Chang (Deschutes County), Shirley (ODOT). Nays: None.)

5. **City of Bend Transportation & Mobility Department Updates**
   Janet Hruby presented on upcoming standards updates and transportation projects in the City. The 2027 Engineering Standards update would include a focus on transportation and traffic calming, small lot drainage, and clarifications regarding the Do-Not-Widen List. The Transportation Design Standards update would add context-sensitive street classifications, traffic calming tools, elements from the Complete Streets Guide, and new street lighting standards, with a public open house scheduled for September 17, 2026, and adoption by City Council anticipated in fall 2027. The Neighborhood Connections Project would consolidate funding for bikeway, sidewalk, and Slow Speeds and Safe Crossings projects into a biennial budget of $1.2 million, plus a one-time additional $1.2 million from Juniper land sales to be used on walking and biking safety improvement projects focused on better connections and slower streets, with project prioritization feedback to be gathered at the open house on September 17, 2026, from 5:30 p.m. to 7:30 p.m. at the Larkspur Community Center. An online open house would also be available from September 17 to October 1, 2026.

Questions were addressed about integrating new Transportation Standards with the Growth Plan by coordinating with the same consultant; considering standards work done by other cities or neighborhoods as a model; expediting the Do-Not-Widen List update timeline; concerns regarding e-bike and sidewalk regulations, and plans for the City to publish maps with routes for public clarification; adding legislative clarity around regulations for e-bike classifications and use on sidewalks or multi-use paths to City's state legislative priority list; and compliance with Dark Skies parameters for street lights despite not having adopted them into City standards.

6. MTIP Amendment

Materials referenced

- Link to the **Transportation News Release** for the proposed amendment

Kelli Kennedy presented an amendment to the 2024-2027 Metropolitan Transportation Improvement Program (MTIP) which involved adding an ODOT curb ramp improvement project using Americans with Disabilities Act (ADA) program savings which would cover fifteen locations, four of which were within the BMPO area. No comments were received during the public comment period.

Emerald Shirley explained the ramp locations had been identified in an existing ADA lawsuit, and that bids had been coming in under estimate, generating program savings. Anyone wishing to report substandard sidewalks or other issues could reach out to her or use the Bend Works service request system.

Motion 2: Emerald Shirley moved to approve the proposed amendment to the 2024-2027 MTIP. Phil Chang seconded the motion which passed 4 to 0.
(Ayes: Méndez (City of Bend), Riley (City of Bend), Chang (Deschutes County), Shirley (ODOT). Nays: None.)

7. ODOT Expressway Designations Review

Materials referenced

- Attachment B: ODOT Expressway Designations Memo
- Attachment C: Highway Expressway Designations Draft Comment Letter

Tyler Deke presented ODOT's proposed changes to expressway designations on US97 and US20 within the BMPO area including removing the designation from US20 north of Empire Ave extending past Tumalo and removing the designation from Business 97 and adding it to the new US97 alignment. The public comment period would remain open until September 4, 2026. He confirmed that State access management rules made creating new access points for development on those segments of US97 or US20 extremely difficult, preventing future commercial encroachment on the new expressway.

Emerald Shirley noted that most of ODOT's access management review process updates removed expressway designations to increase access to businesses and avoid inhibiting

growth in urban areas. She would return with more information regarding spacing requirements for pedestrian and bicycle crossings on expressways.

Motion 3: Mike Riley moved to approve the comment letter for the ODOT Expressway designations, as presented. Phil Chang seconded the motion which passed 4 to 0. (Ayes: Méndez (City of Bend), Riley (City of Bend), Chang (Deschutes County), Shirley (ODOT). Nays: None.)

8. **BUILD Act – Overview & Letter of Support**

Materials referenced

- Attachment D: BUILD Act Key Local and Regional Provisions Flyer
- Attachment E: BUILD Act Draft Support Letter
- Link to the library of transportation policy documents available at the **AMPO Policy Resources webpage**

Tyler Deke provided an overview of the Building Unrivaled Infrastructure and Long-term Development for America's 250th Act (BUILD Act), which passed the House Transportation and Infrastructure Committee with strong bipartisan support in May 2026. An extension of the current Infrastructure Investment and Jobs Act (IIJA) was expected before its expiration on September 30, 2026, and the BUILD Act was anticipated to be passed in 2027. The BUILD Act proposed approximately $580 billion in surface transportation funding over five years. Key provisions impacting the BMPO included a shift from competitive grants to formula-based funding; increasing the federal transportation funding received by local and regional entities to 22 percent; a major emphasis on bridge project funding; continuing the Federal Land Access Program (FLAP); continuing and nearly doubling funding for the Safe Streets and Roads for All (SS4A) program; new eligibility options allowing MPOs to become a Direct Recipient of PL funding from the Federal Highway Administration (FHWA); and reducing federal match requirements for PL funding to ten percent.

Questions were addressed about potential ramifications on transportation funding if the IIJA was not extended prior to its expiration, the four percent funding increase over the IIJA being nominal and not adjusted for inflation; most current local grant programs and formula allocation criteria being preserved or having equivalent eligibility under the new bill; City Finance Staff preferring to coordinate with ODOT for simplicity rather than become a Direct Recipient of PL Funds; the significant increase in funding for local and regional entities from about 15 percent to 22 percent; and considering potential alternative funding opportunities to make up for reductions in federal competitive grant programs that were utilized locally.

Discussion topics included the City's current involvement in several lawsuits regarding competitive grant funding and programs in other localities being rescinded by the federal government after funds were already obligated, and potential funding eligibility

and challenges for various bridge projects across the state or coordinated between two states.

Emerald Shirley abstained from the vote under agency direction from ODOT.

Motion 4: Mike Riley moved to approve the letter of support for the BUILD Act, as presented. Phil Chang seconded the motion which passed 3 to 0 to 1.
(Ayes: Méndez (City of Bend), Riley (City of Bend), and Chang (Deschutes County). Nays: None. Abstentions: Shirley (ODOT).

9. Other Business

Materials referenced

- Attachment F: ODOT TSAP Comment Letter, As Submitted
- Attachment G: ODOT Deschutes Triangle Active Transportation Plan Comment Letter, As Submitted

Transit Vision Work Group: Chair Méndez reported Cascades East Transit Executive Director Bob Townsend would be moving on, but the Microtransit Pilot Project that Townsend had been spearheading with the City would still be pursued, with January as the target start date. He noted the ex officio status held by Cascades East Transit on the BMPO Policy Board would pass to the new Executive Director. He thanked Bob Townsend for his service and input on the BMPO Policy Board.

Mike Riley stated the hiring process for Townsend's replacement was underway.

Bend Transportation Safety Action Plan (TSAP) Update status: Andrea Napoli reported on the Bend TSAP Update, noting that removing traffic congestion related comments from the public engagement data did not significantly change the top priority intersections, and a heat map of comments by location was being developed by consultants.

Tyler Deke stated the September 18th meeting may be rescheduled due to Staff attendance at the Association of Metropolitan Planning Organizations (AMPO) national conference, and that the consultants working on the TSAP had narrowed down to ten priority intersections, with five having detailed recommendations for safety improvements to be presented at the October meeting. He noted comment letters for ODOT's TSAP and Deschutes Triangle Active Transportation Plan were included in the agenda packet, as submitted.

Youth engagement was identified as a topic for a future meeting agenda.

10. Public Comment (Agenda Items & Wrap-Up)

There were no public comments.

11. Next Meeting & Adjournment

The next meeting of the BMPO Policy Board was tentatively scheduled for September 18, 2026, at 12:00 p.m. but the meeting was likely to be rescheduled.

Chair Méndez adjourned the meeting at 12:39 p.m.

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MEMORANDUM

To: Project Management Team
From: Matt Kittelson, PE, Miranda Barrus, PE, Eza Andrews, PE; Joel McCarroll, PE, Lacy Brown, PhD, PE, RSP_{2I} , Anders Hart, RSP_1
Date: November 13, 2026
Re: Bend Metropolitan Planning Organization TSAP Update
Revised Draft Tech Memo #4: Strategies

Introduction

This memorandum presents recommended strategies for the Bend Metropolitan Planning Organization (MPO) Transportation Safety Action Plan (TSAP) Update to work toward the goal of eliminating fatal and serious injury crashes on streets within the Bend MPO boundary. These strategies were developed based on systemic trends and site-specific crash histories identified through previous technical analyses, summarized in the *Existing Conditions Memorandum*, and from community feedback. The recommended strategies are included in the following sections:

- **Systemic Treatments**
  - Treatments for Intersection Crashes, including High-Impact Locations
  - Treatments for Speed-Involved Crashes, including High-Impact Locations
  - Treatments for Pedestrian-Involved Crashes, including High-Impact Locations
  - Treatments for Bicyclist-Involved Crashes, including High-Impact Locations
  - Treatments for Crashes Involving Aging (65+) Drivers, including High-Impact Locations
- **Priority Location Improvements**
- **Multi-Disciplinary Actions** (e.g. education, enforcement, emergency response, equity)
- **Next Steps**

The information presented herein describes the intent behind the strategies and how they work together to achieve the Safe System Approach (Figure 1) and improve safety culture for the Bend MPO.

The recommended strategies will be refined based on feedback from the Project Advisory Committee (PAC), MPO Policy Board, and community to be incorporated into the draft TSAP.



Figure 1. Safe System Approach Principles and Objectives (Source: FHWA)

Systemic Treatments

This section presents low-cost, high-benefit safety solutions that can be applied systemically across the MPO to address key crash patterns contributing to fatal and serious injury crashes and proactively reduce crash risks. The key crash patterns summarized in this section were identified as potential Emphasis Areas in *Technical Memorandum #3: Existing Conditions* and are based on 2019-2023 crash data in the MPO boundaries. The recommended solutions are not an exhaustive list of potential solutions; rather, they are strategies that are feasible and practical to implement on a large scale.

The solutions include crash reduction factors (CRFs) where they are available. The CRFs are from ODOT's Crash Reduction Factor Manual unless otherwise noted. This also presents high-impact locations for each emphasis area discussed herein, except the Aging (65+) Driver, which is less geographically specific than the others. These high-impact locations exclude the 10 priority locations presented in a later section of this memorandum. Additional information for the high-impact locations is provided, including whether they are on the High-Injury Network (HIN), Low Stress Network (LSN) for biking[1], whether any fatal crashes occurred between 2024 and 2026 based on preliminary data from ODOT[2], and whether they are found in higher-scoring Community Risk Index (CRI) tracts (higher scores indicate higher equity needs)[3].

The package of systemic treatments that advances to the draft TSAP will include the typical cost and ease of implementation for each countermeasure.

Treatments for Intersection Crashes

The following summaries provide insight into intersection crashes that help to identify effective systemic treatments for such locations.

Crash Data Summary

- Number of intersection crashes[4]: 3,203
- Number of fatal and serious-injury intersection crashes: 120
- Percent of crashes that occurred at/near an intersection: 64%
- Percent of fatal and serious-injury crashes that occurred at/near an intersection: 59%
- Percent of intersection crashes that resulted in a fatality or serious injury: 4%

[1] See Figure 5-2 in Bend's Transportation System Plan: **https://bend.municipal.codes/CompPlan/Appendixes**
[2] See ODOT's Initial Crash Information Viewer for 2025-2026 data (**https://www.oregon.gov/odot/data/pages/initial-fatal-info-viewer.aspx**) and 2020-2024 crash reports for 2024 data.
[3] See **https://bendoregon.maps.arcgis.com/home/item.html?id=4c5e5bb005ac405a9ccc2bf3f957ee5d#overview**
[4] In this section, "intersection crash" is defined as any crash that occurred within 100 feet of an intersection that is not roundabout controlled. A buffer of between 250-500 feet was used for roundabouts.

Detailed Summary

- The top contributing factors for these crashes were: failure to yield the right-of-way (28%), followed too closely (13%), and failed to avoid a vehicle ahead (12%).
    - Among fatal and serious injury crashes, the top contributing factors were failure to yield the right-of-way (33%), careless driving (9%), and disregarded traffic signal (8%).
- 34% of crashes were rear-ends, 26% were turning crashes, and 20% were angle crashes
    - Among the fatal and serious injury crashes, 31% were turning crashes, 27% were angle crashes, and 13% were fixed-object crashes.
- 5% of crashes involved alcohol impairment, 1% involved drug impairment, and 0.25% involved both drugs and alcohol.
    - Among the fatal and serious injury crashes, 15% involved alcohol impairment, 6% involved drug impairment, and 3% involved both drugs and alcohol.
- 15% of crashes involved speed.
    - 16% of the fatal and serious injury crashes involved speed.
- 79% of crashes happened in daylight conditions, while 22% occurred in dark or dark lit conditions.
    - 73% of the fatal and serious injury crashes happened in daylight conditions, while 27% happened in dark or dark lit conditions.
- **40% of crashes occurred at stop-controlled intersections, 22% at traffic signals, 15% at locations with unknown traffic control, and 8% at yield-controlled intersections[5]**
    - **Among fatal and serious injury crashes, 45% occurred at stop-controlled intersections, 21% at traffic signals, and 11% at locations with unknown traffic control.**
- **41% of crashes occurred on urban principal arterials, 33% on urban minor arterials, 12% on urban major collectors, and 13% on urban local streets.**
    - **Among fatal and serious injury crashes, 41% occurred on urban principal arterials 42% occurred on urban minor arterials, 10% on urban major collectors, and 7% on urban local streets.**

Recommended Countermeasures

Table 1 shows the recommended systemic countermeasures for intersection crashes.

[5] This includes some roundabouts.

Table 1: Recommended Countermeasures for Intersection Crashes

Countermeasure	Crash Reduction Factor	Applicable Crashes
All Location Types		
I1 – Install Lighting at Intersection	38%	Night crashes at all injury severities (excluding PDO)
I15-Install Flashing Beacons as Advance Warning for Intersections	13%	All crashes at all severities (including PDO)
I17 - Increase Triangle Sight Distance	48%	All crashes at all injury severities (excluding PDO)
I19 - Left-turn Traffic Calming Treatments for Posted Speeds Less Than 35 MPH	10%	Left-turning crashes at all severities (including PDO)
I33 – Curb Extensions	30%	All crashes at all severities (including PDO)
Signalized Intersections		
I2 - Improve Signal Hardware: Lenses, Reflectorized Back plates, Size, and Number	20% (2 Treatments) 25% (3-4 Treatments) 30% (5-6 Treatments)	All crashes at all severities (including PDO)
I7-Replace Nighttime Flash with Steady Operation	48%	All crashes at all severities (including PDO)
I8-Replace Doghouse with Flashing Yellow Arrow Signal Heads	25%	Left-turning crashes at all severities (including PDO)
I9 - Replace Urban Permissive or Protected/Permissive Left Turns to Protected Only	99%	Left-turning crashes at all severities (including PDO)
I10 - Protected Left Turn: Split Side Street Signal Phasing	70%	Left-turning crashes at all severities (including PDO)
I11 - Replace Urban Permissive Left Turns to Protected/Permissive	16%	Left-turning crashes at all injury severities (excluding PDO)
I12 - Change from Permissive Only to FYA Permissive Only	50%	Left-turning crashes at all severities (including PDO)
I13 - Coordinate Signal Timing for Urban Traffic Signals	17%	All crashes at all severities (including PDO)
I22 - Install Signal Ahead Advance Warning Signs	35%	Angle crashes at all severities (including PDO)
I16 - Install Actuated or Coordinated Flashing Beacons as Advance Warning for Signalized Intersections	10%	Rear-end crashes at all severities (including PDO)
I29-Prohibit Right Turn on Red	9%	All crashes at all severities (including PDO)

Countermeasure	Crash Reduction Factor	Applicable Crashes
I31 - Provide Overhead Lane-use Signs	10%	Rear-end crashes at all severities (including PDO)
Install Red-light Cameras[6]	25%	Angle crashes at all severities (including PDO)
Unsignalized Intersections		
H20 - Convert Urban 2-way or Yield Control to All-way Stop Control	75%	Angle crashes at all severities (including PDO)
I21 - Improve Intersection Warning: Stop Ahead Pavement Markings, Stop Ahead Signs, Larger Signs, Additional Stop Signs and/or Other Intersection Warning or Regulatory Signs	20% (1-2 Treatments) 25% (3-4 Treatments) 30% (5-7 Treatments)	All crashes at all severities (including PDO)
I24 - Provide Flashing Beacons at All-way Stop-controlled Intersections	28%	Angle crashes at all severities (including PDO)
I25 - Provide Flashing Beacons at Minor-road Stop-controlled Intersections	13%	Angle crashes at all severities (including PDO)
I26 - Provide Actuated Flashing Beacons Triggered by Approaching Vehicles at Unsignalized Intersections	27%	All crashes at all severities (including PDO)
I28 - Install 6-foot or Greater Raised Divider on Stop Approach (splitter island)	15%	All crashes at all severities (including PDO)
I34 - Install Right-in Right-out Operations at Stop-controlled Intersections	45%	All crashes at all severities (including PDO)

High-Impact Locations

Figure 2 shows five locations with a high frequency and severity of intersection crashes that may benefit from the systemic countermeasures presented in Table 1.

[6] CMF Clearinghouse CMF #420: Install red-light cameras, **https://cmfclearinghouse.fhwa.dot.gov/detail.php?facid=420**

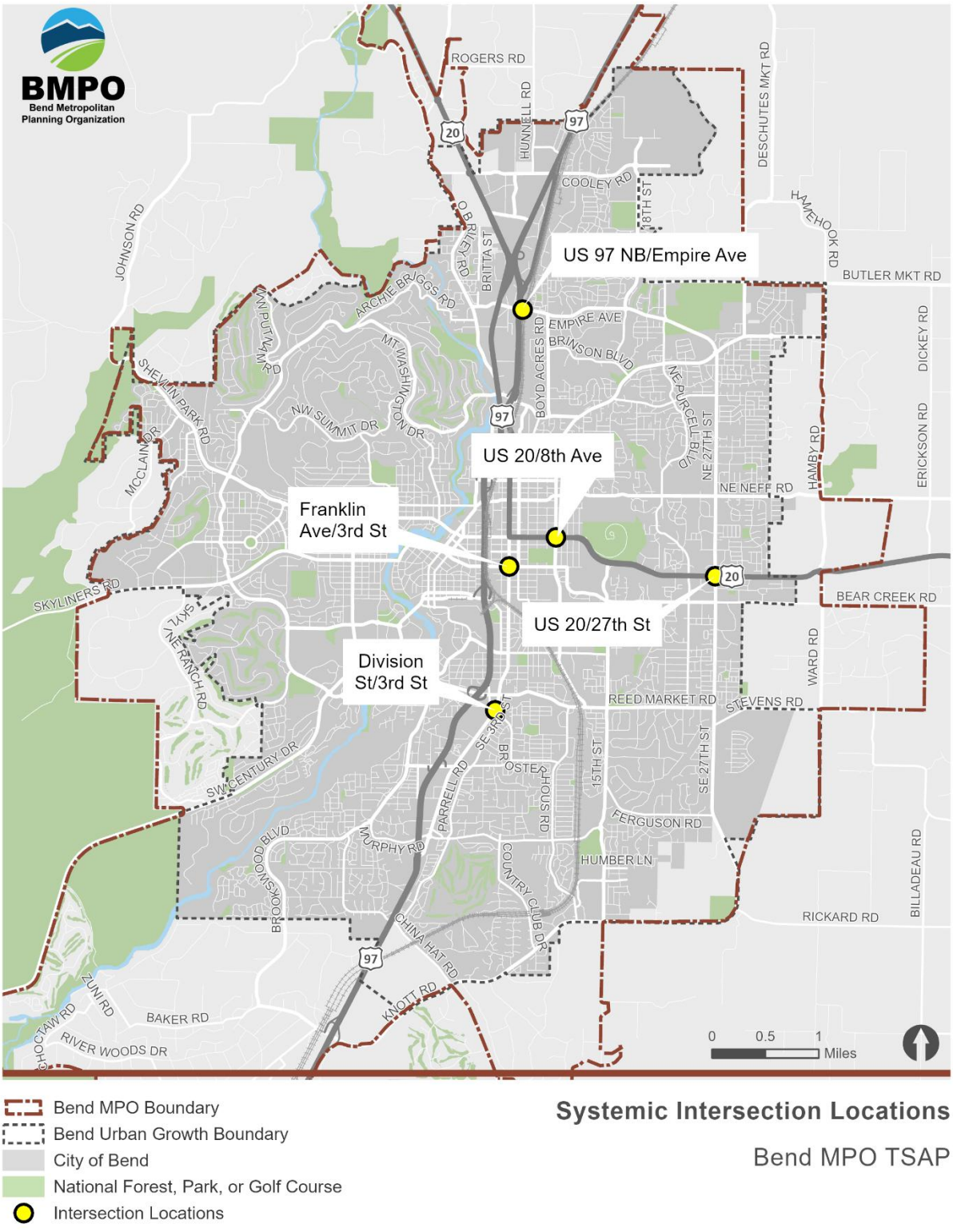


Figure 2: Systemic Intersection Locations

- **US 97 Northbound Ramp/Empire Avenue**
  - This signalized intersection saw 23 crashes, including one serious injury crash.
  - Empire Avenue is on the LSN.
  - Empire Avenue, US 97, and the intersection itself are on the HIN.
  - This area has a Low CRI score.
  - There were no fatal crashes at this location between 2024 and 2026.
- **US 20/27th Street**
  - This signalized intersection saw 43 crashes, including three serious-injury crashes.
  - Both cross streets and the intersection itself are on the HIN.
  - 27th Street is on the LSN.
  - This location is located in areas with Low/Medium to Medium/High CRI scores.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - *This location is also identified as a high-impact location for speed-involved systemic treatments (see later section, Treatments for Speed-Involved Crashes).*
- **Division Street/Brosterhous Road/3rd Street**[7]
  - This signalized intersection saw 41 crashes, including two serious-injury crashes.
  - 3rd Street, Division Street, and the intersection itself are on the HIN.
  - 3rd Street and Brosterhous Road are on the LSN.
  - This location has a Low/Medium CRI score.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - *This location is also identified as a high-impact location for bicycle-involved systemic treatments (see later section, Treatments for Bicycle-Involved Crashes).*
- **US 20/8th Avenue**
  - This signalized intersection saw 24 crashes, including one serious-injury crash.
  - This intersection is not on the LSN.
  - This intersection and US 20 are on the HIN.
  - This intersection is in a tract with a Low/Medium CRI score.
  - There were no fatal crashes at this location between 2024 and 2026.
  - *This location is also identified as a high-impact location for speed-involved and bicycle-involved systemic treatments (see later section, Treatments for Speed-Involved Crashes and Treatments for Bicycle-Involved Crashes).*
- **Franklin Avenue/3rd Street**[8]
  - This signalized intersection saw 35 crashes, including one serious-injury crash.
  - Both cross streets and the intersection are on the HIN.
  - Frankline Avenue is on the LSN.
  - This location is located in an area with Low/Medium to Medium/High CRI scores.
  - There were no fatal crashes between 2024 and 2026 at this location.

[7] This intersection was recently reconfigured to a different lane configuration and signal phasing.
[8] As of October 2026, this intersection is under construction to provide safety improvements.

Treatments for Speed-Involved Crashes

The following summaries provide insight into speed-involved crashes that helps to identify effective systemic treatments and locations for such treatments.

Crash Data Summary

- Number of crashes that involved speed (all severities): 849
- Number of fatal and serious-injury crashes that involved speed: 39
- Percent of crashes that involved speed (all severities): 17%
- Percent of fatal and serious-injury crashes that involved speed: 19%
- Percent of speed-involved crashes that resulted in a fatality or serious injury: 5%

Detailed Summary

- 31% of crashes involved a vehicle hitting a fixed object, 25% were rear-end crashes, and 12% were turning crashes.
    - Among fatal and serious injury crashes, 46% were fixed-object crashes, 15% were head-on, and 10% were angle crashes.
- 59% of crashes occurred in daylight conditions, and 31% occurred in dark or dark lit conditions.
    - Among the fatal and serious injury crashes, 49% occurred in daylight conditions, and 51% occurred in dark or dark lit conditions
- 10% of the crashes involved alcohol, 1% involved drugs, and 0.3% involved both drugs and alcohol.
    - Among the fatal and serious injury crashes, 33% involved speed, 8% involved drugs, and 8% involved alcohol and drugs.
- **33% of crashes happened on urban minor arterials, 30% on urban principal arterials, and 19% on urban local streets.**
    - **Among fatal and serious injury crashes, 46% occurred on urban minor arterials, 21% on urban principal arterials, 11% on urban major collectors, and 11% on urban local streets.**
- **Top contributing factors were too fast for conditions (68%), speeding (exceeding the speed limit) (18%), and careless driving (5%).**
    - **Among fatal and serious injury crashes, the top contributing factors were too fast for conditions (41%), speeding (exceeding the speed limit) (38%), and careless driving (10%).**

Recommended Countermeasures

Table 2 shows the recommended systemic countermeasures for speed-involved crashes.

Table 2: Recommended Countermeasures for Speed-Involved Crashes

Countermeasure	Crash Reduction Factor	Applicable Crashes
All Location Types		
H30 - Install Lighting on a Roadway Segment	28%	Night crashes at all injury severities (excluding PDO)
H48 - Increase Pavement Friction on Curve Segment by Installing High Friction Surface Treatment	52%	Wet-road crashes at all severities (including PDO)
H49 - Increase Pavement Friction on Ramps by Installing High Friction Surface Treatment	86%	Wet road crashes at all severities (including PDO)
H50 - Install Urban Variable Speed Limit Signs	8%	All crashes at all severities (including PDO)
H66 - Install Speed Humps or Table on Non-state Highways[9]	50%	All crashes at all severities (including PDO)
RD4 - Increase Pavement Friction by Installing High Friction Surface Treatment on Segment	52%	Wet road crashes at all severities (including PDO)
RD9 - Provide Static Combination Horizontal Alignment and Advisory Speed Sign for Curve Segment	13%	All crashes at all injury severities (excluding PDO)
RD10 - Install Advance Curve Warning Flashers with Existing Curve Warning Signs	10%	Curve crashes at all severities (including PDO)
RD13 - Install Raised or Recessed Pavement Markers	15%	Nighttime crashes at all severities (including PDO)
RD14 - Install Post-mounted Delineators on Curves	30%	Nighttime curve crashes at all severities (including PDO)
RD12 - Speed Feedback Signs	10%	All crashes at all severities (including PDO)
I19 - Left-turn Traffic Calming Treatments for Posted Speeds Less Than 35 MPH	10%	Left-turning crashes at all severities (including PDO)
I33 - Curb Extensions	30%	All crashes at all severities (including PDO)
Speed Enforcement Cameras[10]	54%	All crashes at all severities

High-Impact Locations

Figure 3 shows corridors with a concentration of speed-involved crashes that may benefit from the systemic countermeasures presented in Table 2.

[9] Recommended to be used on local streets or other lower volume/speed streets.
[10] This CRF is from Countermeasure 2915 from the Crash Modification Clearinghouse: **https://cmfclearinghouse.fhwa.dot.gov/detail.php?facid=2915**

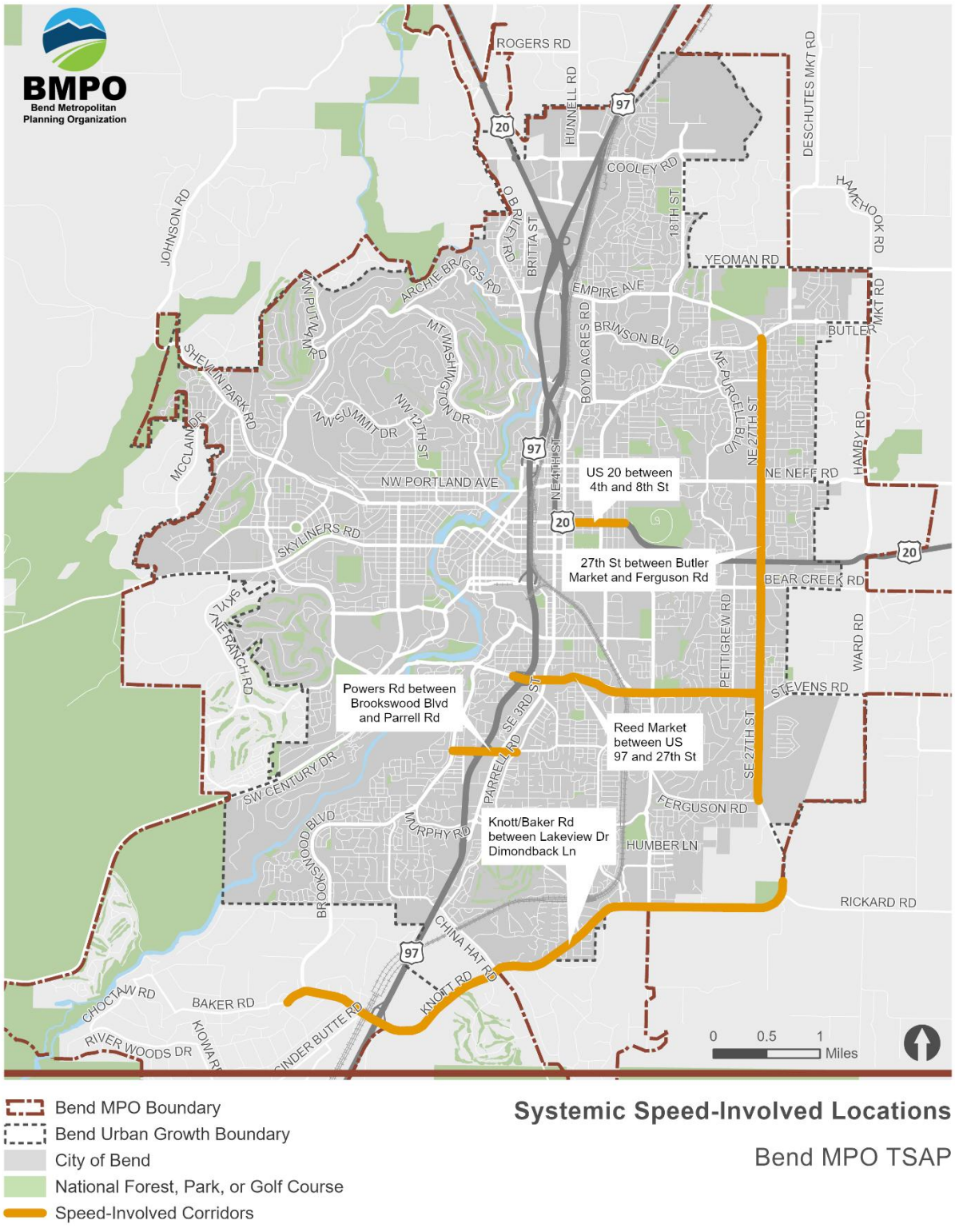


Figure 3: Systemic Speed-Involved Locations

- **Reed Market Road between US 97 and 27th Street**
  - This corridor varies between three and five lanes. Forty (40) speed-involved crashes were reported, with no fatal or serious injury crashes among them.
  - Reed Market Road from 9th Street to 15th Street is on the LSN. Several cross streets are on the LSN, including 27th Street, 15th Street, and 3rd Street.
  - The segment between US 97 and Admiral Way is on the HIN, as are several intersections, including at 15th Street, American Lane, and 3rd Street.
  - This corridor traverses areas with CRI scores varying from Low to High.
  - There were no fatal crashes in this corridor between 2024 and 2026.
  - *A part of this location is also identified as a high-impact location for bicycle-involved systemic treatments (see previous section, Treatments for Bicycle-Involved Crashes).*
- **27th Street between Butler Market Road and Ferguson Road**
  - This corridor varies between two lanes (Ferguson Road to Bear Creek Road) to three/four lanes (Bear Creek Road to Butler Market Road). Thirty-nine (39) speed-involved crashes were reported, including two serious injury crashes.
  - 27th Street between Forum Drive and Ferguson Road is on the LSN, as well as several intersecting streets, including Wilderness Way, Bear Creek Road, and Forum Drive.
  - 27th Street between Keyte Road and Chilliwack Way is on the HIN, as are several intersections, including Bear Creek Road, US 20, and Neff Road.
  - This corridor traverses areas with CRI scores ranging from Low to Medium/High.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - *Parts of this corridor are also identified as high-impact locations for intersection and pedestrian-involved systemic treatments (see previous section, Treatments for Intersection Crashes and subsequent section, Treatments for Pedestrian-Involved Crashes).*
- **Knott Road/Road Baker Road between Lakeview Drive and Diamondback Lane**
  - This location saw 39 speed-involved crashes, including one serious-injury crash. A fatal crash occurred west of China Hat Road in 2024 that was not speed-involved. Another fatal crash occurred in 2025 near Country Club Road, though it is unknown if speed was involved. This segment is a two-lane road that includes an interchange with US 97 and traverses low-density developed and undeveloped areas.
  - This road is on the HIN near US 97 and Rickard Road. Several intersections are also on the HIN, including both ramp terminals of US 97.
  - The segment between Mountain High Drive and Diamondback Lane is on the LSN.
  - This segment does not overlap with any higher-scoring CRI areas.

- **Powers Road between Brookswood Boulevard and Parrell Road**
  - This three-lane corridor includes a signalized intersection with US 97 as well as on/off ramps with the same highway.
  - 12 speed-related crashes were reported here, none of which resulted in a death or serious injury.
  - This corridor is on the HIN, as are the intersections with US 97 and 3rd Street. Powers Road between Blakely Road and 3rd Street is on the LSN.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - This corridor is located in areas with CRI scores ranging from Low to Medium/High.
  - *This location is also identified as a high-impact location for bicyclist-involved systemic treatments (see later section, Treatments for Bicyclist-Involved Crashes).*
- **US 20 between 4th Street and 12th Street**[11]
  - This five-lane corridor includes signalized intersections at 8th Street and rectangular rapid flashing beacons (RRFBs) at 6th Street and 12th Street.
  - 10 speed-related crashes were reported in this corridor, none of which were fatal or serious injury.
  - The entire corridor is on the HIN, as are the intersections at 4th Street, 5th Street, 6th Street, 8th Street, 10th Street, and 12th Street.
  - 4th Street, 6th Street, and 12th Street are on the LSN.
  - This corridor runs through areas with CRI Low/Medium and Medium/High scores.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - *This location is also identified as a high-impact location for bicyclist-involved and intersection systemic treatments (see earlier section, Treatments for Intersection Crashes and later section, Treatments for Bicyclist-Involved Crashes).*

Treatments for Pedestrian-Involved Crashes

The following summaries provide insight into pedestrian-involved crashes that helps to identify effective systemic treatments and locations for such treatments.

Crash Data Summary

- Number of crashes that involved a pedestrian (all severities): 66
- Number of fatal and serious-injury crashes that involved a pedestrian: 13
- Percent of crashes that involved a pedestrian (all severities): 1%
- Percent of fatal and serious-injury crashes that involved a pedestrian: 6%
- **Percent of pedestrian-involved crashes that resulted in a fatality or serious injury: 20%**

Detailed Summary

- 32 (49%) were attributed to a failure to yield the right-of-way and 16 (24%) involved a non-motorist illegally in the roadway;
    - 25 (78%) of the 32 failure-to-yield crashes were due to a driver not yielding, 5 (16%) were due to the pedestrian not yielding the right-of-way, and 2 (6%) were due to both a driver and a pedestrian not yielding.
    - Among the fatal and serious injury crashes, 54% were attributed to a failure to yield the right-of-way, 31% to a non-motorist illegally in the roadway, 8% to not visible/dark or non-reflective clothing, and 8% to other.
- 47% occurred at intersections and 53% occurred on road segments[12]
    - 39% occurred at stop-controlled intersections.
    - 29% occurred at traffic signals.
    - 13% occurred at pedestrian signals.
    - 3% occurred at roundabouts or other yield-controlled intersections.
    - Among the fatal and serious injury crashes, 50% occurred at stop-controlled intersections, 17% occurred at yield-controlled intersections, 17% at school crossings, and 17% at a special pedestrian signal.
- **64% occurred in daytime, 36% occurred in dark/dawn/dusk conditions**
    - **Among fatal and serious injury crashes, 54% occurred in dark/dawn/dusk conditions.**
- **47% of crashes occurred on urban principal arterials and 20% occurred on urban minor arterials.**
    - **54% of fatal and serious injury crashes occurred on urban principal arterials and 23% on urban minor arterials.**

[12] In this section, the definition of "intersection crashes" is based on ODOT crash data fields, which include crashes that occurred at intersections or were intersection-related.

Recommended Countermeasures

Table 3 shows the recommended systemic countermeasures for pedestrian-involved crashes.

Table 3: Recommended Countermeasures for Pedestrian-Involved Crashes

Countermeasure	Crash Reduction Factor	Applicable Crashes
All Location Types		
BP2[13] - Provide intersection illumination (Bicycle and Pedestrian)	42%	Nighttime pedestrian/bicycle crashes at all injury severities (excluding PDO)
I33 – Curb extensions at stop-controlled or signalized intersections	30%	All severities (including PDO)
BP29 – Add Sidewalk	20%	Pedestrian crashes (along roadway segment) at all severities (including PDO)
H30 – Install Lighting on a Roadway Segment	28%	Night crashes at all injury severities (excluding PDO)
Conduct a high-visibility enforcement of laws requiring motorists to yield to pedestrians	N/A[14]	All crashes
Signalized Intersections		
BP1 – Install Pedestrian Countdown Timer(s)	70%	Pedestrian crashes at all severities (including PDO)
BP5 – Reduce Permissive Right-Turn Vehicle-Pedestrian Conflicts (Right Turn Arrow)	20%	Pedestrian and bicycle crashes at all severities (including PDO)
BP3 - Install leading pedestrian interval at urban signalized intersections	37%	Pedestrian and bicycle crashes at all severities (including PDO)
BP4 - Install no-pedestrian Phase Feature with Flashing Yellow Arrow	43%	Pedestrian crashes at all severities (including PDO)
I29 - Prohibit right turn on red (especially at locations with LPIs)	9%	All crashes at all severities (including PDO)
Unsignalized Intersections and Mid-Block Crossings		
B8 – Install Pedestrian Refuge Island	32%	Pedestrian crashes at all severities (including PDO)

[13] Countermeasure codes (e.g., BP2) are from the 2024 ODOT Crash Reduction Factor Manual: **https://www.oregon.gov/odot/Engineering/ARTS/CRF-Manual.pdf**

[14] There is not a CRF for this countermeasures, but it has a four (out of five) star effectiveness rating in NHTSA's Countermeasures that Work: **https://www.nhtsa.gov/book/countermeasures-that-work/speeding-and-speed-management/countermeasures/enforcement**

Countermeasure	Crash Reduction Factor	Applicable Crashes
BP14 - Install Pedestrian Activated Flashing Beacon in Conjunction with Median and Stop Bar	56%	Pedestrian crashes at all severities, including PDO)
BP15 - Install Continental Crosswalk Markings and Advance Pedestrian Warning Signs at Uncontrolled Locations	15%	Pedestrian crashes at all severities (including PDO)
BP11 - Install Rectangular Rapid Flashing Beacon on 3-lane or More Roadway with Median	56%	Pedestrian crashes at all severities (including PDO)
BP18 - Install Pedestrian Signal	55%	Pedestrian and bicycle crashes at all severities (including PDO)
BP 19 - Install pedestrian hybrid beacon on non-stop controlled approaches at two-way stop-controlled intersections	55%	Pedestrian and bicycle crashes at all severities (including PDO)
BP 28 - Install raised crosswalk at stop-controlled intersections	30%	Pedestrian and bicycle crashes at all severities (including PDO)
H20 - Convert Urban 2-way or Yield Control to All-way Stop Control	75%	Angle crashes at all severities (including PDO)

High-Impact Locations

Figure 4 shows locations with a concentration of pedestrian-involved crashes that may benefit from the systemic countermeasures presented in Table 3. They are:

- **27th Street/Wells Acres Road**[15]
  - This unsignalized intersection is stop-controlled on the Wells Acres Road approaches. Two pedestrian-involved crashes occurred, both of which resulted in a possible injury.
  - Both cross streets and the intersection itself are on the HIN.
  - Wells Acres Road is on the LSN.
  - This intersection is adjacent to areas with Low or Low/Medium CRI scores.
  - No fatal crashes occurred at this location between 2024 and 2026.
  - *This location is also identified as a high-impact location for speed-involved systemic treatments (see earlier section, Treatments for Speed-Involved Crashes).*

[15] A roundabout is included in Bend's Capital Investment Program for fiscal year 2028-2029.

- **3rd Street between Lafayette Avenue and Franklin Avenue**
  - This corridor consists of five lanes and has signalized intersections at US 20 and Franklin Avenue.
  - 11 pedestrian-involved crashes occurred here, none of which resulted in a death or serious injury.
  - 3rd Street, plus the intersections at Kearney Avenue, US 20, Irving Ave, Hawthorne Avenue, and Franklin Avenue are on the HIN.
  - Lafayette Avenue, Hawthorne Avenue, and Franklin Avenue are on the LSN.
  - This corridor runs through areas with a Low/Medium CRI score.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - *This location is also identified as a high-impact location for intersection systemic treatments (see previous section, Treatments for Intersection Crashes).*
- **US 20 (Business) from Mervin Sampels Road to 550' South (Burger King)**[16]
  - This corridor is five lanes and meets Mervin Sampels Road at a signalized intersection.
  - Four pedestrian-involved crashes occurred here, including one fatal crash.
  - US 20 and the intersection with Mervin Sampels Road are on the HIN.
  - Mervin Sampels Road is on the LSN.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - This corridor has a Low CRI score.[17]
- **US 97 at Pinebrook Boulevard**
  - This intersection, which currently includes an RRFB crossing of US 97, saw two pedestrian-involved crashes, both of which resulted in serious injuries.
  - US 97 and the intersection itself are on the HIN.
  - Pinebrook Boulevard is on the LSN.
  - This location has a Low/Medium CRI score.
  - There were no fatal crashes between 2024 and 2026 at this location.

[17] ODOT installed a traffic signal at the US 20 (Business)/Mervin Sampels Road intersection during the study intersection. There is a high pedestrian activity at this location partly due to the presence of the Bethlehem Inn on Mervin Sampels Road just west of US 20 (Business).

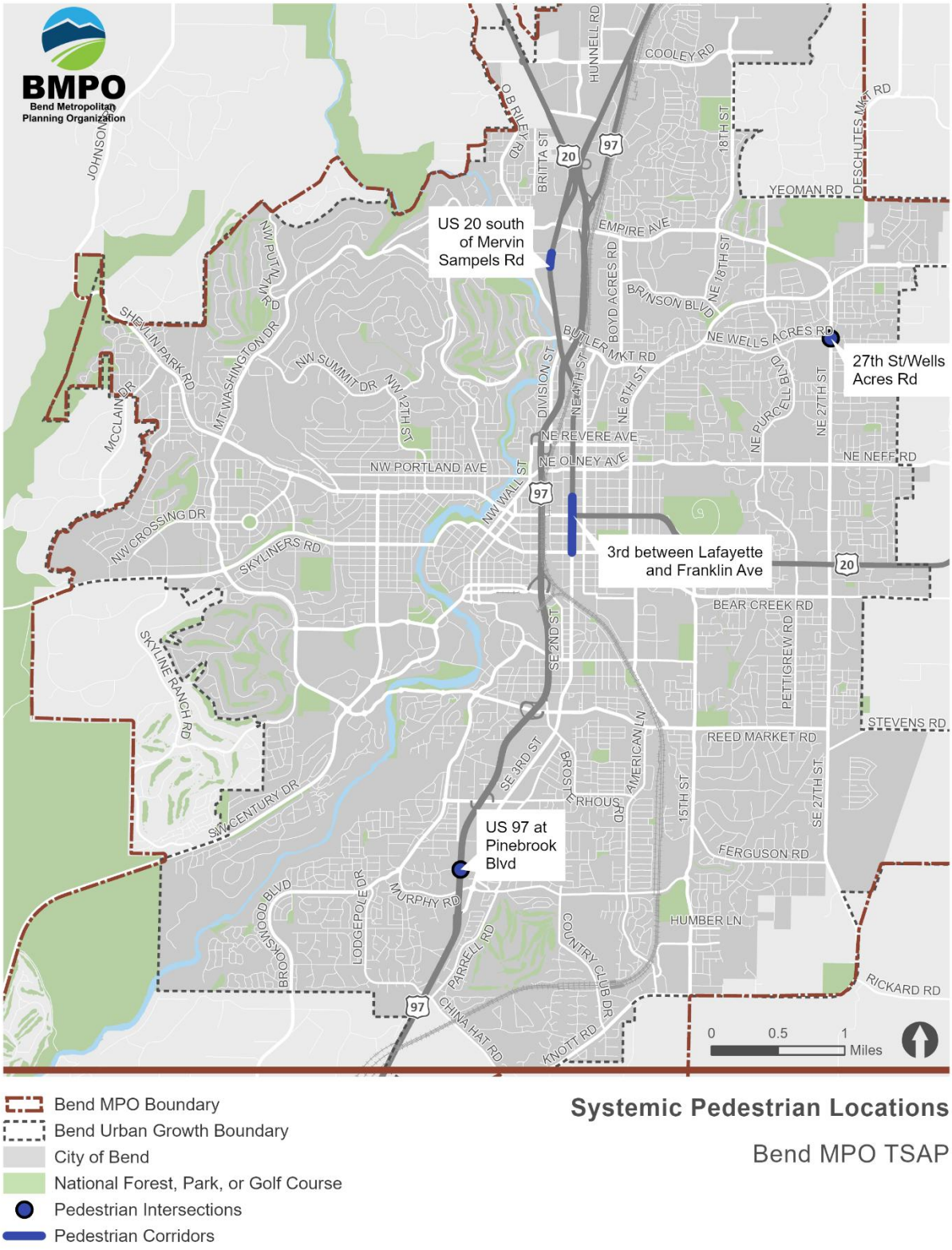


Figure 4: Systemic Pedestrian Locations

Treatments for Bicyclist-Involved Crashes

The following summaries provide insight into bicyclist-involved crashes that helps to identify effective systemic treatments and locations for such treatments.

Crash Summary

- Number of crashes that involved a bicyclist (all severities): 109
- Number of fatal and serious-injury crashes that involved a bicyclist: 13
- Percent of all Crashes that involved a bicyclists: 2%
- Percent of fatal and serious injury crashes that involved a bicyclist: 6%
- Percent of bicyclist-involved crashes that resulted in a fatality or serious injury: 12%

Detailed Summary

- 62 (57%) were attributed to a failure to yield ROW, 6 (6%) involved careless driving, and 6 (6%) were attributed to a non-motorist illegally in roadway.
    - Of the failure to yield the ROW crashes, 16% involved a bicyclist failing to yield, in 2% of crashes it was not clear whether the driver or bicyclist failed to yield (or they both failed to yield), and 81% were attributed to a driver failing to yield.
    - Among the fatal and serious injury crashes, 46% were caused by a failure to yield the right-of-way, 16% by an obscured view, and 8% each of careless driving, speed racing, reckless driving, wrong way driving, and passed a stop sign or red flasher.
- **61% occurred at intersections and 39% occurred on segments.**[18]
    - Of crashes that occurred at intersections (52%) were at stop-controlled locations.
    - 22% were at signalized intersections.
    - 6% were at roundabouts or other yield-controlled locations.
    - 51% of intersection crashes were angle crashes and 45% were turning crashes.
    - Among the fatal and serious injury intersection crashes, 46% occurred at a traffic signal, 36% at stop-controlled intersection, 9% at unknown control, and 9% at a special pedestrian signal.
- 83% of crashes occurred during daylight conditions (92% for fatal and serious injury crashes).
- **The majority of crashes of all severities occurred on arterials. Urban principal arterials accounted for 44%, and urban minor arterials accounted for 35%.**
    - 76% of the fatal and serious injury crashes occurred on these facility types.

[18] Intersection crashes occurred at intersections or were intersection-related per ODOT crash data.

Recommended Countermeasures

Table 4 summarizes the systemic countermeasures to address bicyclist-involved crashes.

Table 4: Recommended countermeasures for bicyclist-involved crashes

Countermeasure	Crash Reduction Factor	Applicable Crashes
All Location Types		
Conduct an educational campaign to raise awareness of vehicle-bicycle right-hook crashes.	Varies	Bicycle crashes
H30 – Install Lighting on a Roadway Segment	28%	Night crashes at all injury severities (excluding PDO)
Intersections		
BP3 – Install Leading Pedestrian Interval at Urban Signalized Intersections[19]	37%	Pedestrian and bicycle crashes at all severities (including PDOs)
BP6 - Install Green Bike Lanes at Conflict Points in Urban Area	39%	Bicycle crashes at all severities (including PDO)
BP7 - Install Bike Box at Conflict Points	35%	Bicycle crashes at all severities (including PDO)
BP21 - Install Bike Signal[20]	45%	Bicycle crashes at all severities (including PDO)
Road Segments		
BP27-Install Bicycle Boulevard[21]	63%	Bicycle crashes at all severities (including PDO)
H53-Convert 4-Lane Roadway to 3-Lane Roadway with Center Turn Lane (Road Diet)	29%	All crashes at all severities (including PDO)
BP22 – Install Bike Lanes	36%	Bicycle crashes at all severities (including PDO)
BP23 – Install Cycle Tracks	59%	Bicycle crashes at all injury severities (excluding PDO)
BP24 – Install Buffered Bike Lanes[22]	47%	Bicycle crashes at all injury severities (not including PDO)
BP28 – Install Raised Crosswalk	30%	Pedestrian and bicycle crashes at all severities (including PDOs)

[19] This countermeasure improves safety for bicyclists who use marked crosswalks at intersections.
[20] Leading bicyclist intervals can be added at locations with bicycle signals on a case-by-case basis.
[21] This countermeasure should be applied to develop low-stress parallel routes adjacent to arterials.
[22] This countermeasure can include narrowing vehicle lane widths to create a bike lane or buffer for a bike lane.

High-Impact Locations

Figure 5 shows corridors with a concentration of bicyclist-involved crashes that may benefit from the systemic countermeasures presented in Table 4.

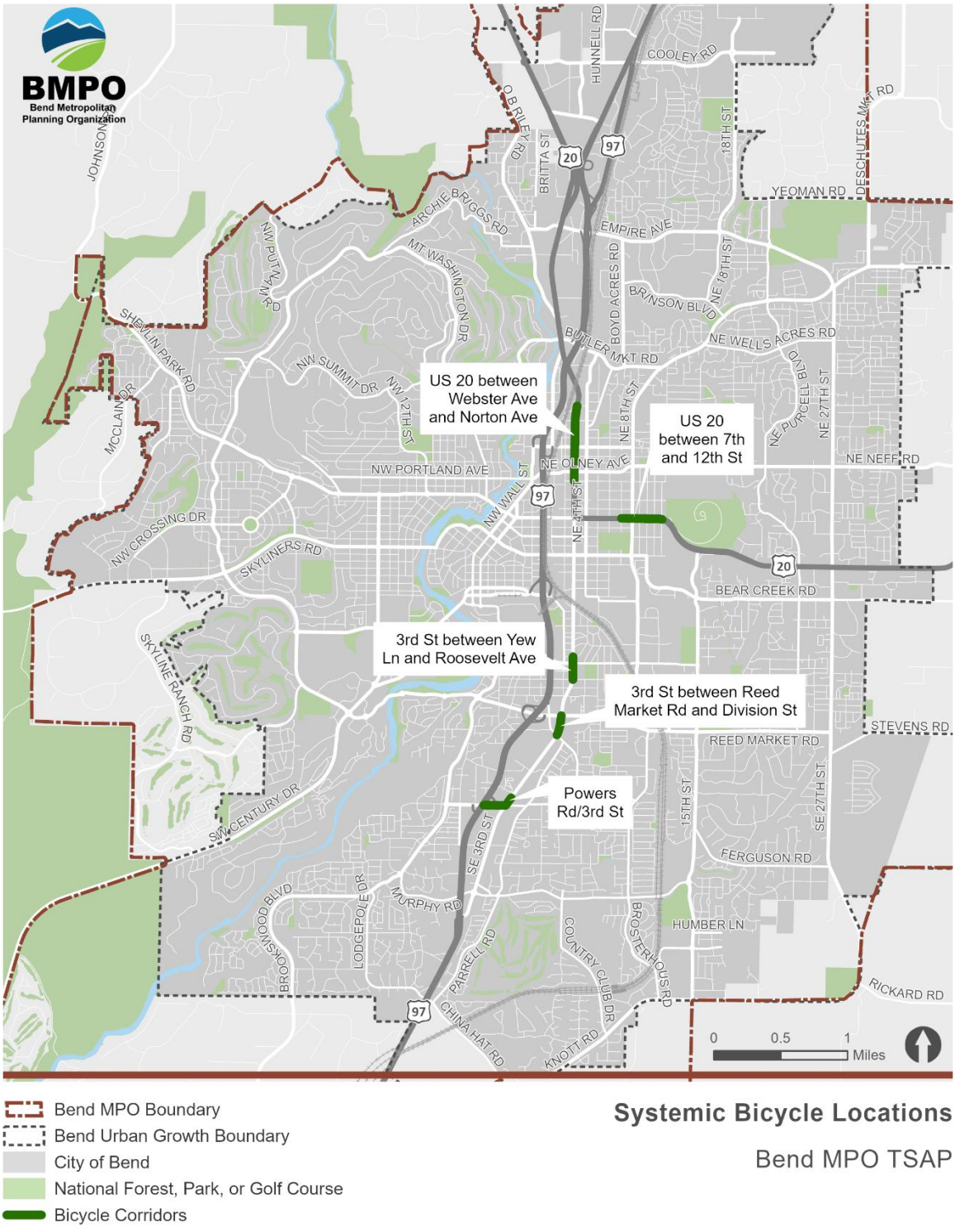


Figure 5: Systemic Bicycle Locations

- **US 20 (NE 3rd Street) between Webster Avenue and Norton Avenue[23]**
  - This corridor is five lanes and has signalized intersections at Revere Avenue and Olney Avenue. On both sides of the road there are curb-tight shoulders (about four feet wide) that can be used as bike lanes.
  - Seven bicyclist-involved crashes occurred here, including one fatal and two serious injury crashes.
  - US 20 (NE 3rd Street) and the intersections at Norton Avenue, Olney Avenue, Quimby Avenue, Revere Avenue, and Underwood Avenue are on the HIN.
  - Underwood Avenue, Revere Avenue, and Olney Avenue are on the LSN.
  - This location runs through areas with Low/Medium and Medium/High CRI score.
  - One fatal crash occurred in 2025 on 3rd Street between Underwood Avenue and Thurston Avenue. Another fatal crash occurred in 2024 at Revere Avenue.
- **US 20 (NE Greenwood Avenue) between 7th Street and 12th Street**
  - This five-lane corridor saw six bicyclist-involved crashes, including one serious-injury crash. The corridor has curb-tight non-buffered bike lanes.
  - US 20 (NE Greenwood Avenue) and the intersections with 8th Street, 10th Street, and 12th Street are on the HIN.
  - 12th Street is on the LSN.
  - There were no fatal crashes on this corridor between 2024 and 2026.
  - This corridor is located in areas with a Low/Medium to Medium/High CRI scores.
  - *This location is also identified as a high-impact location for intersection and speed-involved systemic treatments (see previous sections, Treatments for Intersection Crashes and Treatments for Speed-Involved Crashes).*
- **Powers Road between US 97 and 3rd Street and 3rd Street just north of the Powers Road intersection[24]**
  - This corridor is three lanes on Powers Road and five lanes on 3rd Street. It saw four bicyclist-involved crashes, all of which resulted in a possible injury. Powers Road has curb-tight non-buffered bike lanes, while 3rd Street has curb-tight buffered bike lanes.
  - Powers Road, 3rd Street, and the intersection of the two are on the HIN.
  - Powers Road west of 3rd Street and 3rd Street are on the LSN.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - This corridor is located in areas with CRI scores ranging from Low to Medium/High.
  - *This location is also identified as a high-impact location for speed-involved systemic treatments (see previous section, Treatments for Speed-Involved Crashes).*

[23] ODOT's Vulnerable Road User Crash Program will fund medians at Norton Avenue and between Thurton Avenue and Underwood Avenue on 3rd Street.

[24] A new signal pole was added at the northwest corner in 2026 with updated signal phasing. A red light running and speed camera was also added at this location in 2026. These improvements may result in fewer crashes going forward.

- **3rd Street between Reed Market Road and Division Street[25]**
  - Four bicyclist-involved crashes occurred here, including one serious-injury crash. All of the crashes occurred at either the intersection with Reed Market Road or Division Street. This stretch of 3rd Street has buffered curb-tight bike lanes that continue through both intersections.
  - 3rd Street and both intersections are on the HIN.
  - 3rd Street is on the LSN, as is Brosterhous Road (the southeast leg of the intersection with Division Street).
  - This area does not include high-scoring CRI areas, and no fatal crashes occurred between 2024 and 2026.
  - *This location is also identified as a high-impact location for intersection and speed-involved systemic treatments (see previous sections, Treatments for Intersection Crashes and Treatments for Speed-Involved Crashes).*
- **SE 3rd Street between Yew Lane and Roosevelt Avenue**
  - Four bicyclist-involved crashes occurred on this five-lane corridor, all of which resulted in possible injury or minor injury. The corridor has curb-tight non-buffered bike lanes and a signalized, protected intersection at 3rd Street/Wilson Avenue. The protected intersection was added in June 2024 (after the crash study period).
  - 3rd Street, Wilson Avenue, the intersection of the two, and the 3rd Street/Roosevelt Avenue intersection are on the HIN.
  - Wilson Avenue and Roosevelt Avenue are on the LSN.
  - There were no fatal crashes between 2024 and 2026 at this location.
  - This corridor is located in areas with (CR(scores ranging from Low/Medium to High.

[25] A red light running and speed camera was added at this location in 2026.

Treatments for Crashes Involving Aging (65+) Drivers

The following summaries provide insight into pedestrian-involved crashes that helps to identify effective systemic treatments.

Crash Summary

- Number of crashes that involved a 65+ driver (all severities): 544
- Number of fatal and serious-injury crashes that involved a 65+ driver: 61
- Percent of all Crashes that involved a 65+ driver: 11%
- Percent of fatal and serious injury crashes that involved a 65+ driver: 30%
- Percent of 65+ driver crashes that resulted in a fatality or serious injury: 11%

Detailed Summary

- The top collision types were rear-end (36%), turning (26%), angle (19%).
    - Among the fatal and serious injury crashes, the top collision types were turning (25%), angle (20%), and rear-end (18%).
- 160 (29%) crashes were attributed to a failure to yield ROW, 71 (13%) involved following too closely, 60 (11%) involved careless driving, and 59 (11%) involved a failure to avoid a vehicle ahead.
    - Among the fatal and serious injury crashes, 28% were attributed to a failure to yield the right-of-way, 15% to careless driving, and 7% to illness.
- 57% of crashes occurred at/near intersections and 43% occurred on segments.[26]
    - Of intersection crashes, 52% occurred at stop-controlled locations and 27% occurred at traffic signals, and 6% occurred at roundabouts or other yield-controlled locations.
    - Among the fatal and serious injury intersection crashes, 56% occurred at stop-controlled intersections, 21% at traffic signals, and 6% at no control type listed, with the remainder (16%) at other control types.
- 54% of crashes occurred on urban principal arterials and 30% occurred on urban minor arterials
    - Among fatal and serious injury crashes, 41% occurred on urban principal arterials and 38% occurred on urban minor arterials
- 86% of crashes occurred during daylight conditions (87% for fatal and serious injury crashes).
- 21% of fatal and serious injury crashes involved roadway departure.

[26] In this section, the definition of "intersection crashes" is based on ODOT crash data fields, which include crashes that occurred at intersections or were intersection-related.

Recommended Countermeasures

Table 5 summarizes the recommended systemic countermeasures for drivers 65+.

In addition to the systemic countermeasures presented in Table 5, it is also recommended to provide educational resources related to aging drivers, including:

- Courses and educational events for older drivers that teach how to adjust driving to accommodate age-related cognitive and physical changes.
- Help aging drivers plan for driving retirement by promoting resources available through the Oregon Department of Motor Vehicles to help aging drivers assess their driving skills, know when it is time to stop driving, and prepare for life after driving. This program can also include resources to help family members and caregivers.
- Promote non-driving transportation modes, including Cascades East Transit's (CET) dial-a-ride program[27].
- Promote CET ridership, which is free for residents over 65

Additionally, devices, markings, and signs related to safety should be maintained at the highest level required to meet the needs of road users with the greatest visibility or navigation challenges (e.g., increase the font size and reflectivity of signs and markings).

Note: High impact locations are not provided for this crash type because aging-driver crashes occur citywide and are not clustered in specific locations.

[27] **https://cascadeseasttransit.com/policies/ride-assist/**

Table 5: Recommended countermeasures for crashes involving aging drivers

Countermeasure	Crash Reduction Factor	Applicable Crashes
Intersections		
I1 – Install lighting at an intersection	38%	Nighttime crashes at all injury severities (excluding PDO)
I3 - Add 3-inch Yellow Retroreflective Sheeting to Signal Backplates	15%	All crashes at all severities (including PDO)
I9 – Replace Urban Permissive or Protected/Permissive Left Turns to Protected Only	99%	Left-turning crashes at all severities (including PDO)
I16- Install Actuated or Coordinated Flashing Beacons as Advance Warning for signalized Intersections	10%	Rear-end crashes at all severities (including PDO)
I17 – Increase triangle sight distance	48%	All crashes at all injury severities (excluding PDO)
I21-Improve Unsignalized Intersection Warning	20% (1-2 Treatments) 25% (3-4 Treatments) 30% (5-7 Treatments)	All severities (including PDO)
BP3 – Install Leading Pedestrian Interval at Urban Signalized Intersections[28]	37%	Pedestrian and bicycle crashes at all severities (including PDOs)
Road Segments		
H30 – Install lighting on a roadway segment	28%	Nighttime crashes at all injury severities (excluding PDO)
RD24-Install wider edge lines (4 inches to 6 inches)	18%	All crashes at all severities (including PDO)

Summary of Treatments

Table 6 summarizes the treatments described above based on the emphasis areas they address. This table highlights the multi-faceted nature of safety countermeasures, where applying one treatment can address multiple emphasis areas. Note that treatments recommended for multiple emphasis areas in the preceding sections are included only once in Table 6.

[28] This countermeasure may benefit aging drivers who tend to have slower reflexes and less neck mobility, as well as aging pedestrians who may need more time to cross the street.

Table 6: Summary of Countermeasures by Emphasis Area Addressed

Treatment	Emphasis Area Addressed				
Countermeasure	**Intersection Crashes**	**Speed-Involved Crashes**	**Pedestrian-Involved Crashes**	**Bicyclist-Involved Crashes**	**Aging Driver Crashes (65+)**
Primary Treatment Group: Intersection Crashes					
I1 – Install Lighting at Intersection	X		X	X	X
I15-Install Flashing Beacons as Advance Warning for Intersections	X				X
I17 - Increase Triangle Sight Distance	X				X
I19 - Left-turn Traffic Calming Treatments for Posted Speeds Less Than 35 MPH	X	X			
I33 – Curb Extensions	X	X	X	X	X
I2 - Improve Signal Hardware: Lenses, Reflectorized Back plates, Size, and Number	X				X
I7-Replace Nighttime Flash with Steady Operation	X				
I8-Replace Doghouse with Flashing Yellow Arrow Signal Heads	X				
I9 - Replace Urban Permissive or Protected/Permissive Left Turns to Protected Only	X		X	X	X
I10 - Protected Left Turn: Split Side Street Signal Phasing	X				
I11 - Replace Urban Permissive Left Turns to Protected/Permissive	X		X	X	X
I12 - Change from Permissive Only to FYA Permissive Only	X		X		X

Treatment	Emphasis Area Addressed				
Countermeasure	**Intersection Crashes**	**Speed-Involved Crashes**	**Pedestrian-Involved Crashes**	**Bicyclist-Involved Crashes**	**Aging Driver Crashes (65+)**
I13 - Coordinate Signal Timing for Urban Traffic Signals	X				
I22 - Install Signal Ahead Advance Warning Signs	X				X
I16 - Install Actuated or Coordinated Flashing Beacons as Advance Warning for Signalized Intersections	X				X
I29-Prohibit Right Turn on Red	X		X	X	
I31 - Provide Overhead Lane-use Signs	X				X
Install Red-light Cameras	X	X			X
H20 - Convert Urban 2-way or Yield Control to All-way Stop Control	X				
I21 - Improve Intersection Warning: Stop Ahead Pavement Markings, Stop Ahead Signs, Larger Signs, Additional Stop Signs and/or Other Intersection Warning or Regulatory Signs	X				X
I24 - Provide Flashing Beacons at All-way Stop-controlled Intersections	X				X
I25 - Provide Flashing Beacons at Minor-road Stop-controlled Intersections	X				X
I26 - Provide Actuated Flashing Beacons Triggered by Approaching Vehicles at Unsignalized Intersections	X				X

Treatment	Emphasis Area Addressed				
Countermeasure	**Intersection Crashes**	**Speed-Involved Crashes**	**Pedestrian-Involved Crashes**	**Bicyclist-Involved Crashes**	**Aging Driver Crashes (65+)**
I28 - Install 6-foot or Greater Raised Divider on Stop Approach (splitter island)	**X**	**X**			**X**
I34 - Install Right-in Right-out Operations at Stop-controlled Intersections	**X**				**X**
Primary Treatment Group: Speed-Involved Crashes					
H30 - Install Lighting on a Roadway Segment		**X**	**X**	**X**	**X**
H48 - Increase Pavement Friction on Curve Segment by Installing High Friction Surface Treatment		**X**			**X**
H49 - Increase Pavement Friction on Ramps by Installing High Friction Surface Treatment		**X**			**X**
H50 - Install Urban Variable Speed Limit Signs		**X**			
H66 - Install Speed Humps or Table on Non-state Highways		**X**			
RD4 - Increase Pavement Friction by Installing High Friction Surface Treatment on Segment		**X**			**X**
RD9 - Provide Static Combination Horizontal Alignment and Advisory Speed Sign for Curve Segment		**X**			

Treatment	Emphasis Area Addressed				
Countermeasure	**Intersection Crashes**	**Speed-Involved Crashes**	**Pedestrian-Involved Crashes**	**Bicyclist-Involved Crashes**	**Aging Driver Crashes (65+)**
RD10 - Install Advance Curve Warning Flashers with Existing Curve Warning Signs		X			X
RD13 - Install Raised or Recessed Pavement Markers		X			
RD14 - Install Post-mounted Delineators on Curves		X			X
RD12 - Speed Feedback Signs		X			
Speed Enforcement Cameras		X			
Primary Treatment Group: Pedestrian-Involved Crashes					
BP2 - Provide intersection illumination (Bicycle and Pedestrian)	X		X	X	
BP29 – Add Sidewalk			X		
Conduct a high-visibility enforcement of laws requiring motorists to yield to pedestrians			X		
BP1 – Install Pedestrian Countdown Timer(s)			X		
BP5 – Reduce Permissive Right-Turn Vehicle-Pedestrian Conflicts (Right Turn Arrow)	X		X		
BP3 - Install leading pedestrian interval at urban signalized intersections			X	X	X
BP4 - Install no-pedestrian Phase Feature with Flashing Yellow Arrow			X		
B8 – Install Pedestrian Refuge Island			X	X	

Treatment	Emphasis Area Addressed				
Countermeasure	**Intersection Crashes**	**Speed-Involved Crashes**	**Pedestrian-Involved Crashes**	**Bicyclist-Involved Crashes**	**Aging Driver Crashes (65+)**
BP14 - Install Pedestrian Activated Flashing Beacon in Conjunction with Median and Stop Bar			X		
BP15 - Install Continental Crosswalk Markings and Advance Pedestrian Warning Signs at Uncontrolled Locations			X		
BP11 - Install Rectangular Rapid Flashing Beacon on 3-lane or More Roadway with Median			X		
BP18 - Install Pedestrian Signal			X		
BP 19 - Install pedestrian hybrid beacon on non-stop controlled approaches at two-way stop-controlled intersections			X		
BP 28 - Install raised crosswalk at stop-controlled intersections			X	X	
Primary Treatment Group: Bicyclist-Involved Crashes					
Conduct an educational campaign to raise awareness of vehicle-bicycle right-hook crashes.				X	
BP6 - Install Green Bike Lanes at Conflict Points in Urban Area				X	
BP7 - Install Bike Box at Conflict Points				X	
BP21 - Install Bike Signal				X	
BP27-Install Bicycle Boulevard		X		X	

Treatment	Emphasis Area Addressed				
Countermeasure	**Intersection Crashes**	**Speed-Involved Crashes**	**Pedestrian-Involved Crashes**	**Bicyclist-Involved Crashes**	**Aging Driver Crashes (65+)**
H53-Convert 4-Lane Roadway to 3-Lane Roadway with Center Turn Lane (Road Diet)		X		X	
BP22 – Install Bike Lanes				X	
BP23 – Install Cycle Tracks				X	
BP24 – Install Buffered Bike Lanes				X	
Primary Treatment Group: Aging Driver Crashes (65+)					
I3 - Add 3-inch Yellow Retroreflective Sheeting to Signal Backplates	X				X
RD24-Install wider edge lines (4 inches to 6 inches)					X

Priority Location Improvements

The *Existing Conditions Memorandum* identified the High Injury Network (HIN) within the Bend MPO boundary, highlighting roads and intersections with the highest concentrations of crashes—particularly those resulting in fatal or serious injuries. MPO, City, and ODOT staff reviewed the HIN crash locations alongside recently completed projects, funded and unfunded planned projects, and programmed improvements. This review found that many high-crash locations have already been addressed or are advancing through design and implementation, demonstrating significant recent investment in improving safety. Based on this evaluation, observed crash patterns, and community input regarding safety concerns, the MPO and City selected 10 locations for capital projects where additional safety improvements are needed.

These capital projects are generally more costly than the previously presented systemic treatments. Figure 6 identifies these 10 priority locations. Potential improvements have been developed for each location: conceptual layouts are provided for five locations, while treatments that are generally systemic in nature are proposed for the remaining five. The MPO and the City and their partners will continue to refine proposed changes to the transportation system through further analysis, design, and stakeholder input. Recommendations were developed based on each location's crash history as well risk factors and potential emphasis areas identified in the *Existing Conditions Memorandum*.

Priority Locations with Conceptual Layouts of Recommended Improvements:

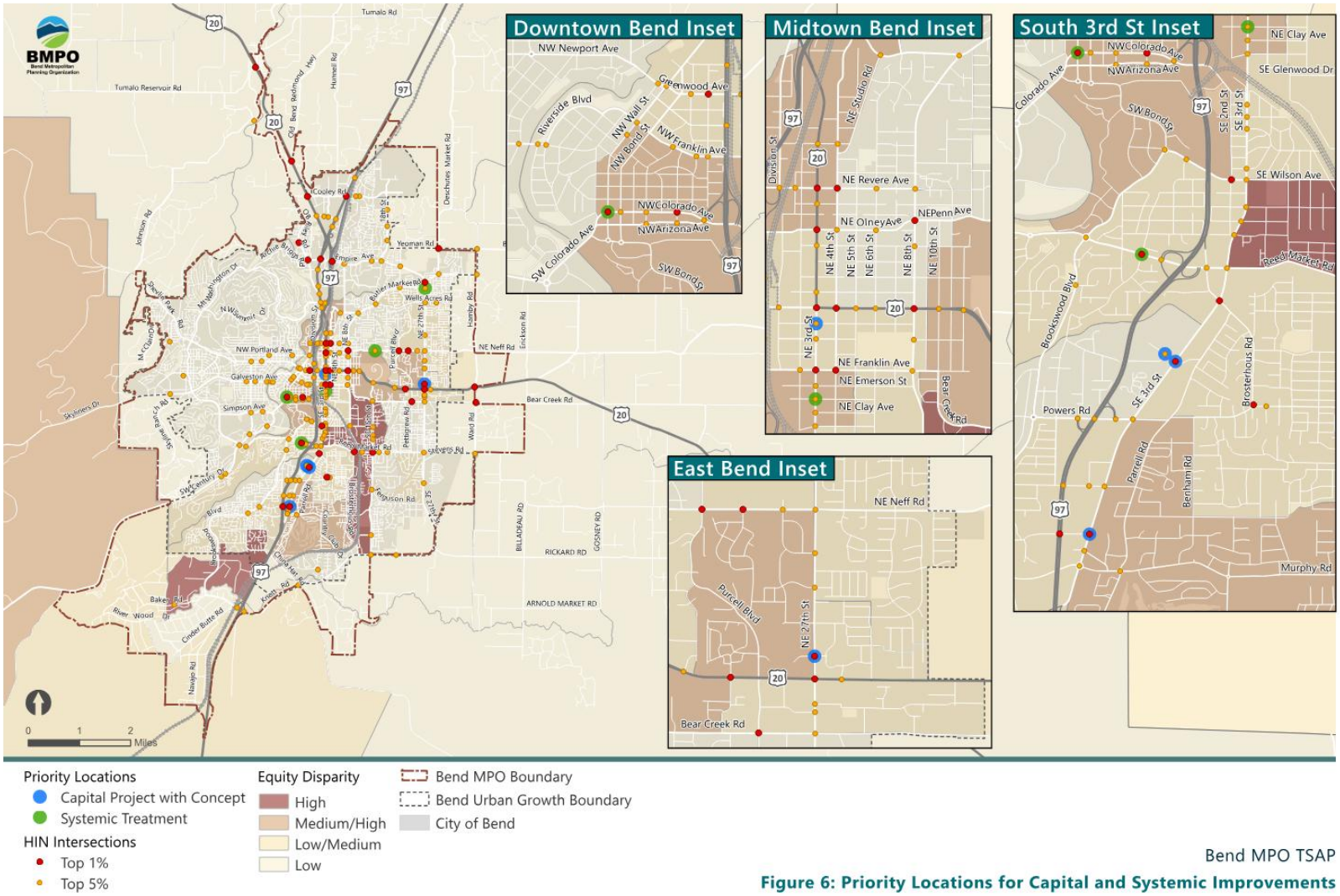
- 27th Street / Micks Drive / Grand Way
- 3rd Street / Reed Lane
- Meyer Drive / Reed Lane
- 3rd Street / Irving Avenue
- 3rd Street / Pinebrook Boulevard

Priority Locations with Systemic Treatments Recommended:

- Colorado Avenue / Wall Street
- Reed Market Road / Silver Lake Boulevard
- 3rd Street / Dekalb Avenue
- Neff Road / Shepard Road
- 27th Street / Jill Avenue

Figure 6 displays the 10 locations and how they correspond to social equity data within the study area (shown in beige shading), which was sourced from ODOT. This illustrates that, in addition to addressing priority safety improvements within the Bend MPO boundary, many of these projects are generally situated near people that are often underserved by the transportation system.

Figure 6. Priority Locations for Capital and Systemic Improvements



Bend MPO TSAP

Figure 6: Priority Locations for Capital and Systemic Improvements

The following sections present a brief summary of the crash characteristics at these locations along with the recommended changes to reduce their crash frequencies and severities. The recommended changes are guided by the intersection design principles listed below, which are rooted in the Safe System Approach:

- Reducing the number of conflict points (between all users)
- Improving (reducing) conflict angles
- Reducing speeds
- Improving visibility
- Separating different modes of transportation

All recommendations are for consideration by the MPO and City and its partners and require additional evaluation for project development, such as, but not limited to, traffic operations analysis at intersections with traffic control and/or lane configuration changes, lighting assessments, and sight distance measurements.

Equity Considerations

City staff developed an equity rating methodology to help in selecting the 10 priority locations with underserved users in mind. Each location was evaluated across several demographic and socioeconomic indicators using data from the American Community Survey (ACS) 2024 5-year estimates and the ODOT Transportation Disadvantaged Index (2023)[29]. Intersections received a score from 0 to 3 in each category, representing conditions ranging from below the Bend MPO average to high concentrations of the identified population. Evaluation categories included poverty, low-income households, disability, age 65 years and older, race and ethnicity, Limited English proficiency (LEP), zero-car households, and households with children (ages 0-18). Detailed ratings are provided in Attachment A.

Priority Locations with Conceptual Layouts

This section presents the recommended modifications for the five priority locations with conceptual layouts. Proven countermeasures from the ODOT All Roads Transportation Safety (ARTS) Program approved countermeasure list were intentionally selected in order to be consistent with ODOT guidance. For treatments that are not available in this list that would address key contributors to crashes, the Federal Highway Administration (FHWA) Crash Modification Factor (CMF) Clearinghouse was referenced. The conceptual layouts presented herein communicate preliminary concepts and ideas. The concepts will be further evaluated, refined, and advanced through subsequent project development and design.

29 https://bendoregon.maps.arcgis.com/apps/webappviewer/index.html?id=d896e2e8b88743c29155c5ba60262a77

27th Street / Micks Drive-Grand Way

The 27th Street / Micks Drive-Grand Way intersection is a signalized intersection in east Bend. 27th Street is a four-lane, north-south major arterial with a posted speed limit of 35 mph, while Micks Drive and Grand Way are east-west private roads that follow the basic rule which states that one must drive at a speed that is reasonable and cautious for existing conditions. Bike lanes are provided along 27th Street and marked crosswalks are available on all legs of the intersection. The west leg, Micks Drive, primarily functions as an access road to the Forum Shopping Center, while the east leg, Grand Drive, serves residences and commercial uses.

Both the east and west approaches have a shared through/left turn lane with permissive left-turn phasing. Trees are present on all approaches to the intersection. Lighting is present on the east and west legs. The surrounding mix of commercial and residential development generates activity from a variety of transportation users. This intersection received a 'high' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 7.

Table 7. 27th Street / Micks Drive-Grand Way Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Turning Movement	-	3	5	**8**
Rear-End	-	1	7	**8**
Angle	-	5	2	**7**
Bicyclist	-	1	-	**1**
Backing	-	-	1	**1**
Fixed Object or Other Object	1	-	-	**1**
Pedestrian	-	1	-	**1**
Sideswipe-Overtaking	-	-	1	**1**
Total	**1**	**11**	**16**	**28**

Failure to yield and signal compliance were among the most significant contributing factors to crashes; winter weather was another contributing factor, although less significant. Traffic on 27th Street appeared to be the most common travel direction in reported crashes, particularly angle and turning-movement collisions, where the majority are southbound-through vehicles.

Additional details on the reported intersection crashes are provided in Attachment B.

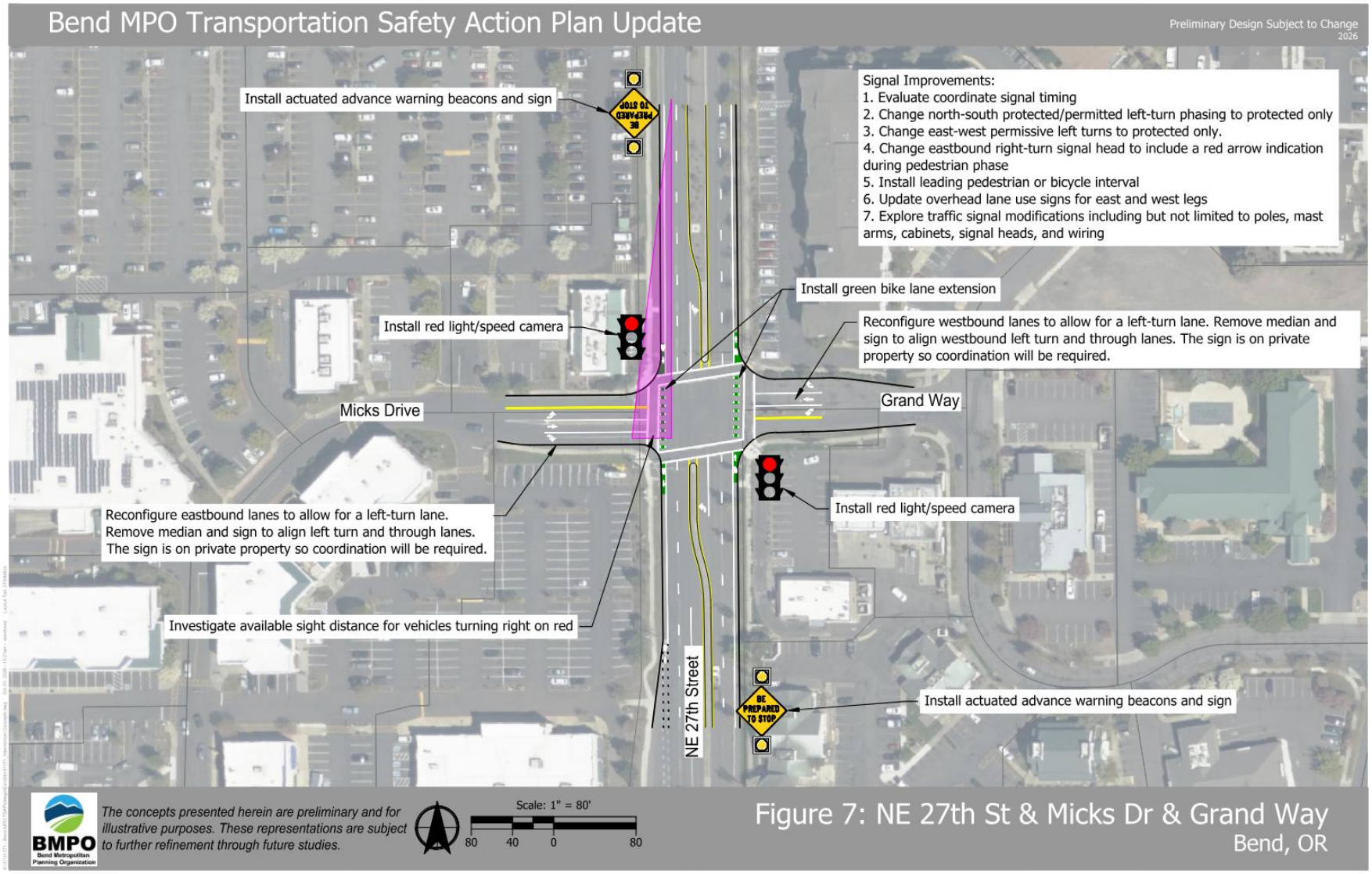
The modifications recommended for this intersection to address its crash history are identified in Table 8, including countermeasure Crash Reduction Factors (CRF), illustrated in Figure 7. Lane configurations for Micks Drive and Grand Way will be determined by traffic analysis in the design process, including the need for right-turn lanes. An additional recommendation is to review the yellow and all-red intervals for the signal. The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Table 8. 27th Street / Micks Drive / Grand Way Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
I1	Install lighting at intersection	38%	Night	All except PDO
I9	Replace urban permissive or protected/permissive left turns with protected only	99%	Left Turns	All
I13	Coordinate signal timing for urban traffic signals	17%	All	All
I16	Install actuated flashing beacons as advance warning for signalized intersections	10%	Rear-End	All
I17	Increase triangle sight distance	48%	All	All except PDO
BP3	Install leading pedestrian or bicycle interval at signalized intersection	37%	Bicycle/ Pedestrian	All
BP5	Reduce right turn permissive conflicts (right turn arrow)	20%	Bicycle/ Pedestrian	All
BP6	Install green bike lanes at conflict points	39%	Bicycle	All
N/A	Install red light running cameras[1]	37% for all crash types and 47% for angle crashes associated with red-light-running	All	All

[1] https://cmfclearinghouse.fhwa.dot.gov/study_detail.php?stid=513

Figure 7. 27th Street / Micks Drive-Grand Way Treatments



3rd Street / Meyer Drive-Reed Lane and Meyer Drive / Reed Lane

This section presents the crash history and conceptual modifications of the 3rd Street / Meyer Drive-Reed Lane and Meyer Drive / Reed Lane intersections together given their proximity to one another.

3rd Street / Meyer Drive-Reed Lane

The 3rd Street / Meyer Drive-Reed Lane intersection is a signalized intersection in southeast Bend. 3rd Street is a five-lane, north-south major arterial with a posted speed limit of 35 mph, while Meyer Drive and Reed Lane are east-west local roads with a statutory speed limit of 25 mph. Buffered bike lanes are provided along 3rd Street and non-buffered bike lanes are available on the west leg, Meyer Drive. Marked crosswalks are available on the south, east, and west legs of the intersection; the north leg crossing is closed.

3rd Street is one of Bend's major commercial corridors. The west leg, Meyer Drive, primarily serves Fred Meyer and adjacent residences, as well as a route to the Bend Parkway (US 97). The east leg, Reed Lane, primarily connects to residences, along with some commercial uses along 3rd Street. There is no street lighting present at the intersection. The surrounding mix of commercial and residential development generates activity from a variety of transportation users. This intersection received a 'high' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 9.

Table 9. 3rd Street / Meyer Drive-Reed Lane Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Moderate / Minor Injury	Property Damage Only (PDO)	Total
Rear-End	1	4	2	**7**
Turning Movement	-	2	1	**3**
Angle	-	1	1	**2**
Total	**1**	**7**	**4**	**12**

Reported rear-end crashes predominantly involved vehicles stopped in traffic. Driver inattention, careless driving, following too closely, and failure to avoid the vehicle ahead were the most common contributing factors. While most crashes occurred during clear, dry conditions, multiple crashes also occurred on icy roadways. The most prominent travel movements involved southbound vehicles. Turning-movement crashes were associated with signal violations, speeding, and impairment. Additional details on the reported intersection crashes are provided in Attachment B.

The modifications recommended for this intersection to address its crash history are identified in Table 10 and illustrated in Figure 8 at the end of this section.

Table 10. 3rd Street / Meyer Drive-Reed Lane Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
I1	Install lighting at intersection	38%	Night	All except PDO
I13	Coordinate signal timing for urban traffic signals	17%	All	All
I16	Install actuated flashing beacons as advance warning for signalized intersections	10%	Rear-End	All
I17	Increase triangle sight distance	48%	All	All except PDO
BP3	Install leading pedestrian or bicycle interval at signalized intersection	37%	Bicycle/ Pedestrian	All
BP6	Install green bike lanes at conflict points	39%	Bicycle	All

In addition, review the yellow and all-red intervals for the signal.

The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Meyer Drive / Reed Lane

The Meyer Drive / Reed Lane intersection is a two-way stop-controlled intersection in southeast Bend. Meyer Drive and Reed Lane are local roads with a statutory speed limit of 25 mph, where Meyer Drive is the east-west street. Meyer drive has opposing left turn lanes and non-buffered bike lanes on the east leg. Street trees are present on the north side of Meyer Drive. There is no lighting or marked crosswalks at the intersection.

The south leg, Reed Lane, provides access to the Bend Parkway (US 97). The north leg provides access to Fred Meyer. The west leg provides additional access to Fred Meyer, as well as an apartment complex and car wash. The east leg connects to 3rd Street, which has many commercial businesses. This intersection received a 'high' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 11.

Table 11. Meyer Drive / Reed Lane Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Turning Movement	1	2	1	**4**
Angle	-	1	1	**2**
Total	**1**	**3**	**2**	**6**

Failure to yield was the primary contributing factor in nearly all reported crashes at this location. The most common crash pattern involved southbound left-turning vehicles entering from driveways or side accesses and colliding with eastbound through vehicles. Two crashes were due to inattention. All reported crashes occurred during daylight and dry pavement conditions.

Additional details on the reported intersection crashes are provided in Attachment B.

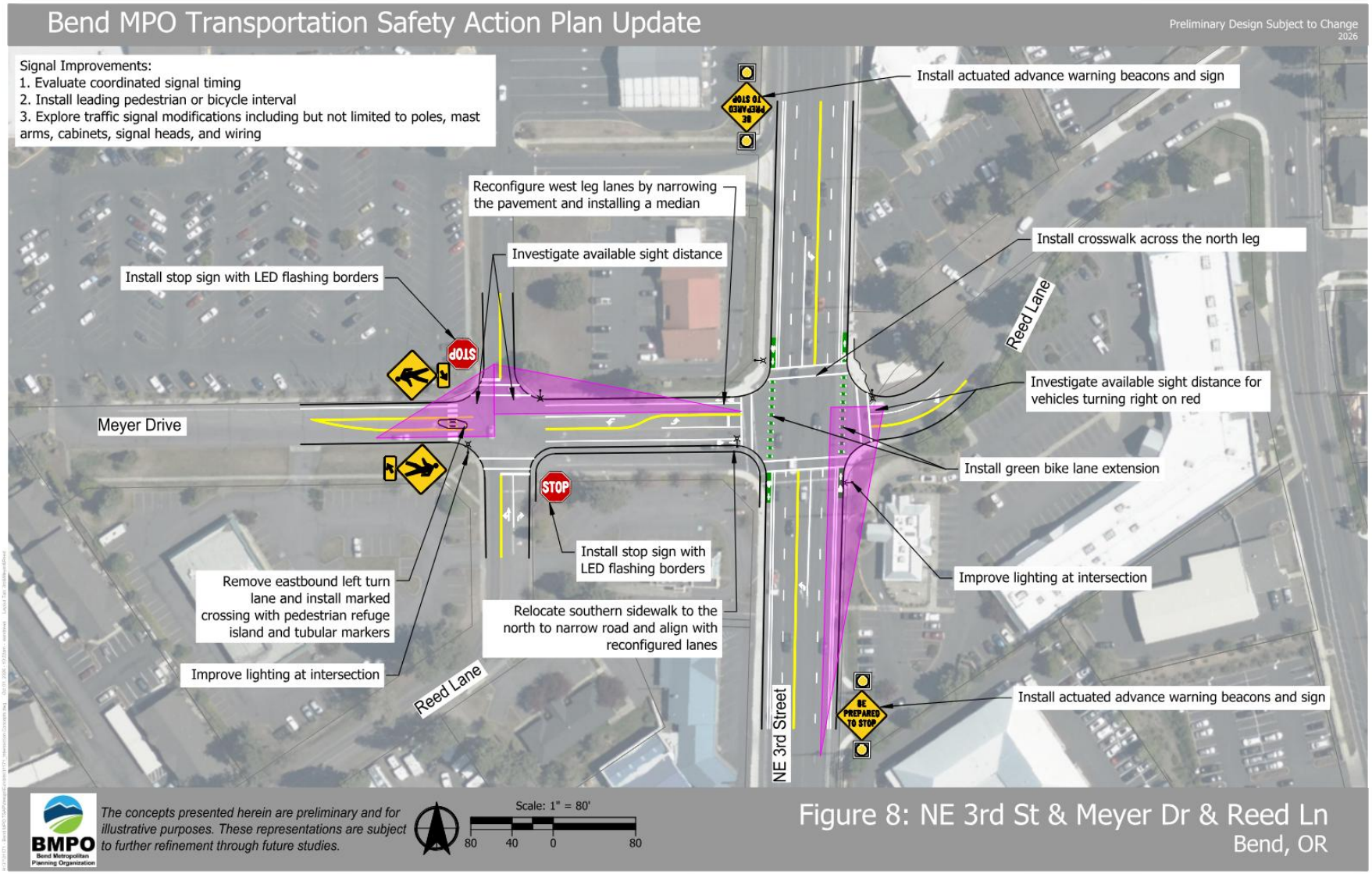
The modifications recommended for this intersection to address its crash history are identified in Table 12, including countermeasure crash reduction factors, and illustrated in Figure 8. The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Table 12. Meyer Drive / Reed Lane Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
H17	Channelized Left Turn Lane with Raised Median on All Approaches (3- or 4-leg)[1]	27%	All	All except PDO
I1	Install lighting at intersection	38%	Night	All except PDO
I17	Increase triangle sight distance	48%	All	All except PDO
I25	Provide flashing beacons at minor road stop-controlled intersections	13%	Angle	All

[1]While the concept in does not recommend turn lane medians on all approaches, including this countermeasure demonstrates that there is potential crash reduction in channelizing turn lanes with raised medians.

Figure 8. 3rd Street / Meyer Drive-Reed Lane and Meyer Drive / Reed Lane Treatments



3rd Street / Irving Avenue

The 3rd Street / Irving Avenue intersection is a two-way stop-controlled intersection in central Bend situated just south of the Greenwood Avenue traffic signal. 3rd Street is a five-lane, north-south major arterial with a posted speed limit of 35 mph, while Irving Avenue is an east-west local street with a statutory speed limit of 25 mph. 3rd Street has two lanes in each direction with a two-way left turn lane and bike lanes at the intersection. Lighting is present on the north leg. No marked crosswalks are available at the intersection. There are two hotels to the west of the intersection and several commercial businesses to the east. 3rd Street is one of Bend's major commercial corridors. This intersection received a 'low' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 13.

Table 13. 3rd Street / Irving Avenue Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Turning Movement	1	2	3	**6**
Rear-End	-	1	2	**3**
Angle	-	-	2	**2**
Bicyclist	-	1	-	**1**
Fixed Object or Other Object	-	-	1	**1**
Sideswipe-Overtaking	-	-	1	**1**
Total	**1**	**4**	**9**	**14**

Failure to yield was the primary contributing factor in reported crashes at this intersection, particularly for vehicles turning from Irving Avenue and entering or crossing 3rd Street. Driver inattention, improper turns, and limited sight distance were also contributing factors. Most crashes occurred during midday and afternoon peak periods.

Additional details on the reported intersection crashes are provided in Attachment B.

The modifications recommended for this intersection to address its crash history are illustrated in Figure 9 and identified in Table 14 including countermeasure crash reduction factors. The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Figure 9. 3rd Street / Irving Avenue Treatments

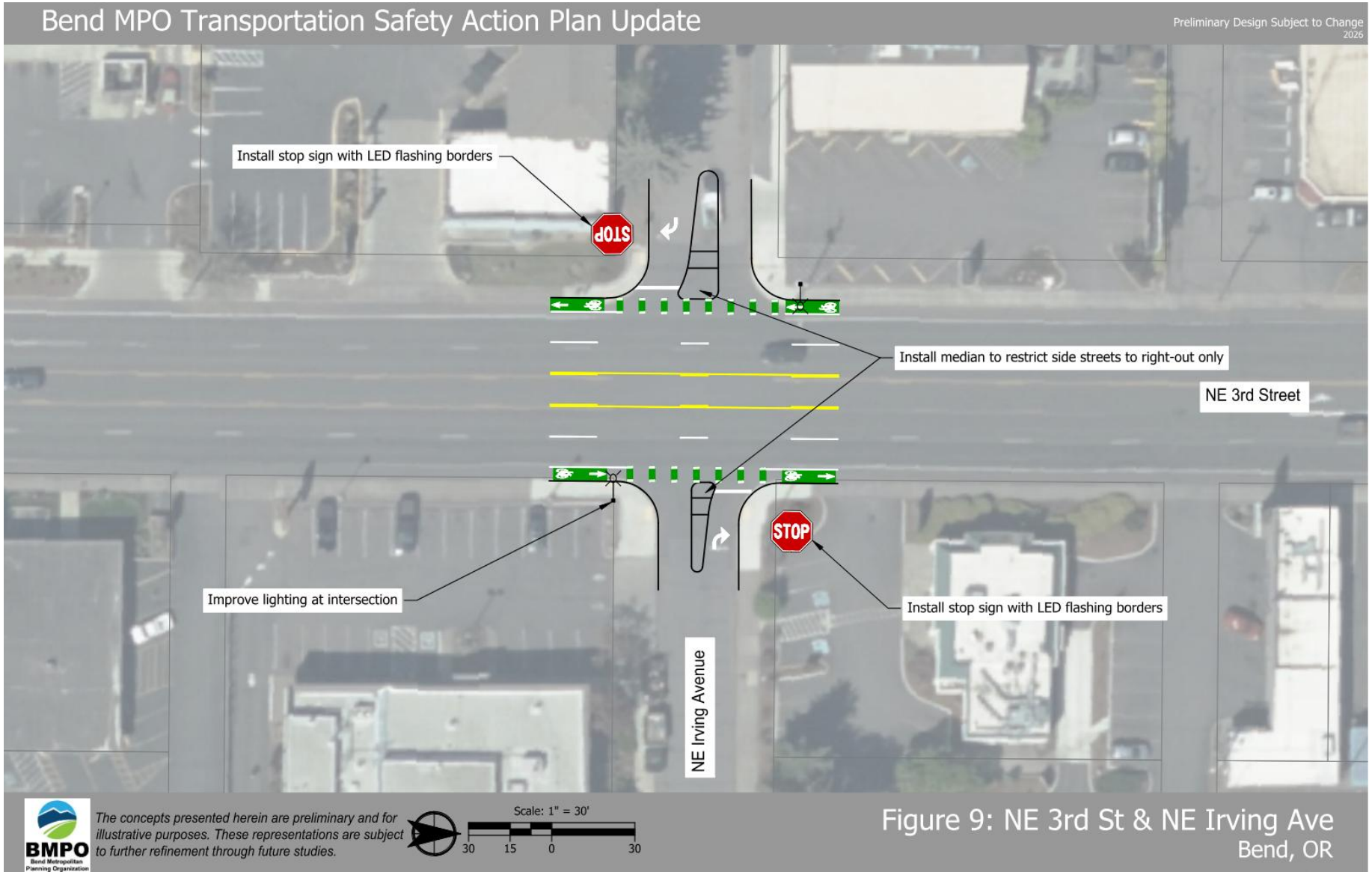


Table 14. 3rd Street / Irving Avenue Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
H38	Install right-in right-out operations at stop-controlled intersections	45%	All	All
I1	Install lighting at intersection	38%	Night	All except PDO
I25	Provide flashing beacons at minor road stop-controlled intersections	13%	Angle	All
BP6	Install green bike lanes at conflict points	39%	Bicycle	All

3rd Street / Pinebrook Boulevard

The 3rd Street / Pinebrook Boulevard intersection is a two-way stop-controlled intersection in southeast Bend. 3rd Street is a north-south major arterial with a posted speed limit of 35 mph, while Pinebrook Boulevard is an east-west local road with a statutory speed limit of 25 mph. 3rd Street is one of Bend's major commercial corridors. The north leg has a channelized left turn with a pedestrian refuge island, marked crosswalks, and pedestrian-activated beacons. The south leg has one northbound and two southbound travel lanes, and a striped northbound left turn-lane. The west leg, Pinebrook Boulevard, provides access to Safeway, Walmart, and the Bend Parkway (US 97). The east leg is a commercial driveway without a stop sign that provides access to several restaurants and a hotel. Bike lanes are provided along both streets. Lighting is present on all legs except the east driveway. This intersection received a 'high' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 15.

Table 15. 3rd Street / Pinebrook Boulevard Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Turning Movement	-	2	6	**8**
Angle	1	2	2	**5**
Rear-End	-	2	-	**2**
Total	**1**	**6**	**8**	**15**

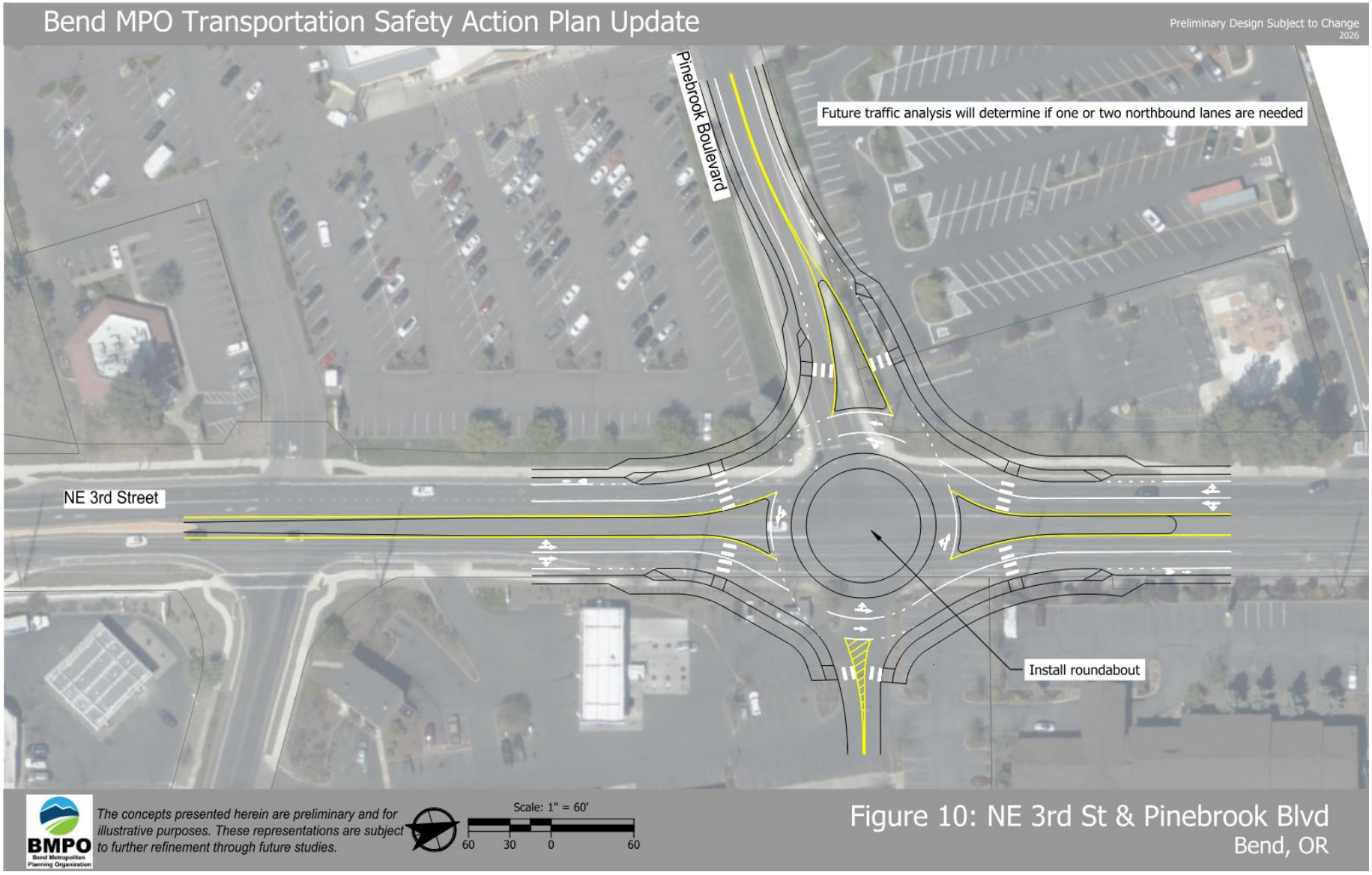
Failure to yield was the primary contributing factor in reported crashes at this intersection, particularly involving vehicles entering from westbound driveways and eastbound left-turning vehicles conflicting with southbound through traffic. Angle and turning-movement crashes were the most common crash types, while rear-end crashes were infrequent. Most crashes occurred during clear, dry, daylight conditions. Additional details on the reported intersection crashes are provided in Attachment B.

The modifications recommended for this intersection to address its crash history are identified in Table 16, including countermeasure crash reduction factors, and illustrated in Figure 10. The multilane roundabout depicted in Figure 10 is intended to illustrate a worst-case scenario for property impacts. Number of lanes will be verified through the design process. The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Table 16. 3rd Street / Pinebrook Boulevard Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
H18	Install Roundabout from Minor Road Stop Control	82%	All	All

Figure 10. 3rd Street / Pinebrook Boulevard Treatments



Priority Locations with Systemic Treatments

This section presents the recommended treatments for the remaining five priority locations that are generally systemic in nature, with some exceptions, and do not have conceptual layouts. Similar to the previous five priority locations, proven countermeasures from the ODOT ARTS Program approved countermeasure list were selected in order to align with ODOT guidance. For treatments that are not available in this list that would address key contributors to crashes, the FHWA CMF Clearinghouse was referenced.

Colorado Avenue / Wall Street

The Colorado Avenue / Wall Street intersection is a signalized intersection in northwest Bend. Colorado Avenue and Wall Street are one-way streets of westbound and southbound travel directions. Colorado Avenue is an east-west minor arterial with a posted speed limit of 25 mph, while Wall Street is a north-south collector with a posted speed limit of 25 mph. Buffered and non-buffered bike lanes are provided on the north, east, and west legs of the intersection, and share-the-road pavement markings are provided on the south leg. Marked crosswalks are provided on all legs of the intersection.

Wall Street provides access to Downtown Bend and the Old Mill District, while Colorado Avenue connects the Bend Parkway (US 97) with west Bend via one of Bend's Deschutes River crossings. The land use surrounding the intersection is commercial with some residential. Lighting and street trees are present on the north and east intersection legs. This intersection received a 'low' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 17.

Table 17. Colorado Avenue / Wall Street Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Angle	1	4	2	**7**
Rear-End	-	2	-	**2**
Total	**1**	**6**	**2**	**9**

Signal violations were the primary contributing factor in reported crashes at this intersection, particularly in angle crashes involving southbound Wall Street and westbound Colorado Avenue movements. Most crashes occurred under clear, dry conditions during both daylight and darkness.

Additional details on the reported intersection crashes are provided in Attachment B.

The modifications recommended for this intersection to address its crash history are identified in Table 18, including countermeasure crash reduction factors. In addition, review the yellow and all-red intervals for the signal. The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Table 18. Colorado Avenue / Wall Street Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
I13	Coordinate signal timing for urban traffic signals	17%	All	All
I16[1]	Install actuated flashing beacons as advance warning for signalized intersections	10%	Rear-End	All
I17	Increase triangle sight distance	48%	All	All except PDO
N/A	Install red light running cameras[1]	37% for all crash types and 47% for angle crashes associated with red-light-running	All	All

[1] Install flashing beacons that are not coordinated with signal timing as advance warning at intersections (I15) could also be considered. This has a CRF of 13% for all crash types and all crash severities.
[2] **https://cmfclearinghouse.fhwa.dot.gov/study_detail.php?stid=513**

Reed Market Road / Silver Lake Boulevard

The Reed Market Road / Silver Lake Boulevard intersection is a two-way stop-controlled intersection in southwest Bend. Reed Market Road is an east-west major arterial with a posted speed of 25 mph, while Silver Lake Boulevard is a north-south local road with a posted speed limit of 25 mph. The intersection has eastbound and westbound opposing left turn lanes that are channelized with raised medians. Lighting is present on the north leg. No marked crosswalks are available at the intersection. Large pine trees in the southwest and northeast intersection corners may be obstructing sight distance for Silver Lake Boulevard motorists.

Reed Market Road connects the Bend Parkway (US 97) with west Bend via Bend's most southern Deschutes River crossing and is also a key route to the Old Mill District. Silver Lake Boulevard provides access to surrounding residences. This intersection received a 'medium/high' priority ranking based on the equity evaluation, where some of the demographics contributing to that ranking are associated with the several assisted living facility locations in the area. The crash history at this intersection is summarized in Table 19.

Table 19. Reed Market Road / Silver Lake Boulevard Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Angle	-	4	1	5
Turning Movement	1	1	-	2
Rear-End	-	1	-	1
Total	1	6	1	8

Failure to yield was a recurring factor in reported crashes at this intersection, particularly in angle crashes involving northbound Silver Lake Road vehicles and eastbound Reed Market Road traffic. All crashes occurred during daylight conditions, and distraction contributed to multiple injury crashes.

Additional details on the reported intersection crashes are provided in Attachment B.

The modifications recommended for this intersection to address its crash history are identified in Table 20, including countermeasure crash reduction factors. The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Table 20. Reed Market Road / Silver Lake Boulevard Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
I1	Install lighting at intersection	38%	Night	All except PDO
I17	Increase triangle sight distance	48%	All	All except PDO
I21	Improve intersection warning: stop ahead pavement markings, stop ahead signs, larger signs, additional stop signs and/or other intersection warning or regulatory signs	20% (1-2 treatments) 25% (3-4 treatments) 30% (5-7 treatments)	All	All
I25	Provide flashing beacons at minor road stop-controlled intersections	13%	Angle	All
I26	Provide actuated flashing beacons (on Reed Market Rd) triggered by approaching vehicles (on Silver Lake Blvd) at unsignalized intersections	27%	All	All
RD12	Install speed feedback signs	10%	All	All

3rd Street / Dekalb Avenue

The 3rd Street / Dekalb Avenue intersection is a two-way stop-controlled intersection in central Bend, two blocks south of the Franklin Avenue traffic signal. 3rd Street is a five-lane, north-south major arterial with a posted speed limit of 35 mph, while Dekalb Avenue is an east-west local street with a statutory speed limit of 25 mph. 3rd Street has two lanes in each direction with a two-way left turn lane and bike lanes at the intersection. Lighting is present on the north leg. No marked crosswalks are available at the intersection, but a bus stop is present just to the north on the west side of 3rd Street. There are commercial business surrounding the intersection as 3rd Street is one of Bend's major commercial corridors. This intersection received a 'low' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 21.

Table 21. 3rd Street / Dekalb Avenue Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Angle	1	1	-	**2**
Turning Movement	-	1	-	**1**
Rear-End	-	-	1	**1**
Total	**1**	**2**	**1**	**4**

Failure to yield was the primary contributing factor in reported crashes at this intersection, particularly in angle and turning-movement crashes involving eastbound and westbound vehicles conflicting with southbound traffic on 3rd Street. Most crashes occurred during clear, dry conditions, and driver inattention contributed to several injury crashes.

Additional details on the reported intersection crashes are provided in Attachment B.

The modifications recommended for this intersection to address its crash history are identified in Table 22, including countermeasure crash reduction factors. Table 22 includes multiple options that should be further investigated and take into account modifications that are planned on 3rd Street nearby, including crossing treatments at the 3rd Street / Burnside intersection and changes along the Franklin Avenue corridor in the vicinity

The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Table 22. 3rd Street / Dekalb Avenue Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
BP8	Install pedestrian refuge island[1]	31%	Pedestrian	All
H38	Provide a raised median on urban multilane road	22%	All	All except PDO
I1	Install lighting at intersection	38%	Night	All except PDO
I17	Increase triangle sight distance	48%	All	All except PDO
I21	Improve intersection warning: stop ahead pavement markings, stop ahead signs, larger signs, additional stop signs and/or other intersection warning or regulatory signs	20% (1-2 treatments) 25% (3-4 treatments) 30% (5-7 treatments)	All	All
I25	Provide flashing beacons at minor road stop-controlled intersections	13%	Angle	All
I34	Install right-in right-out operations at stop-controlled intersections	45%	All	All
RD25	Install any type of median barrier	30%	All	All except PDO

[1]Although no pedestrian crashes were reported during the study period, a pedestrian refuge island could be constructed through the intersection to restrict intersection turn movements and provide a marked crossing to address risk for pedestrians and bicyclists crossing 3rd Street.

Neff Road / Shepard Road

The Neff Road / Shepard Road intersection is a two-way stop-controlled intersection in northeast Bend, situated on the north side of Pilot Butte. Neff Road is an east-west minor arterial with a posted speed limit of 25 mph, but is a school zone with a 20-mph speed limit during school hours. Shepard Road is a north-south local road with a posted speed limit of 25 mph. The south leg is the primary Pilot Butte Middle School access and the north leg provides access to residences. Neff Road is a key route to St. Charles and other medical offices. The east and west legs have short medians and the west leg has a continental crosswalk. Bike lanes are provided along Neff Road. There is lighting on the east leg only. This intersection received a 'high' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 23.

Table 23. Neff Road / Shepard Road Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Sideswipe Meeting	1	-	-	**1**
Bicyclist	-	1	-	**1**
Fixed Object or Other Object	-	-	1	**1**
Rear-End	-	-	1	**1**
Total	**1**	**1**	**2**	**4**

The reported crashes at this location do not exhibit a single dominant crash pattern, but failure to yield was a contributing factor in several crashes, including the serious injury sideswipe crash and bicyclist crash. Crashes occurred under a variety of conditions and involved diverse crash types, including vehicle, bicycle, rear-end, and fixed-object crashes. Driver behavior factors, including improper yielding, following too closely, alcohol involvement, and reckless driving, were the primary contributors to the reported crashes.

Additional details on the reported intersection crashes are provided in Attachment B.

The modifications recommended at this intersection to address its crash history are identified in Table 24, including countermeasure crash reduction factors. Table 24 includes multiple options that should be further investigated for feasibility. The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Table 24. Neff Road / Shepard Road Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
BP8	Install pedestrian refuge island	31%	Pedestrian	All
BP9	Install rectangular rapid flashing beacon on 2-lane road	10%	Pedestrian	All
I1	Install lighting at intersection	38%	Night	All except PDO
I21	Improve intersection warning: stop ahead pavement markings, stop ahead signs, larger signs, additional stop signs and/or other intersection warning or regulatory signs	20% (1-2 treatments) 25% (3-4 treatments) 30% (5-7 treatments)	All	All
I25	Provide flashing beacons at minor road stop-controlled intersections	13%	Angle	All
I34	Install right-in right-out operations at stop-controlled intersections[1]	45%	All	All
H18	Install roundabout from minor road stop control[2]	82%	All	All

[1] Can be done in conjunction with a pedestrian refuge island (BP8).
[2] A roundabout at this location requires further evaluation to confirm geometric feasibility and right-of-way impacts.

27th Street / Jill Avenue

The 27th Street / Jill Avenue intersection is a two-way stop-controlled intersection in northeast Bend just south of the two-lane roundabout at Butler Market Road. 27th Street is a north-south major arterial with a posted speed limit of 35 mph, while Jill Avenue is an east-west local street with a posted speed limit of 25 mph speed. Bike lanes are provided along 27th Street. No marked crossings are available at the intersection. Lighting is present on the north leg. There are opposing left turn lanes on the northbound and southbound approaches. There are several trees surrounding the intersection, especially on the northeast and southeast corners. The land use in the area is residential. This intersection received a 'medium' priority ranking based on the equity evaluation. The crash history at this intersection is summarized in Table 25.

Table 25. 27th Street / Jill Avenue Crash History (2019-2023)

Crash Type	Level of Severity			
	Fatal / Serious Injury	Minor / Possible Injury	Property Damage Only (PDO)	Total
Turning Movement	1	1	1	**3**
Fixed Object or Other Object	-	-	1	**1**
Total	**1**	**1**	**2**	**4**

Failure to yield was the primary contributing factor in reported crashes at this intersection, particularly in left-turn conflicts involving southbound and eastbound vehicles. Most crashes occurred during clear daylight conditions, with driver inattention noted in multiple turning-movement crashes. Additional details on the reported intersection crashes are provided in Attachment B.

The modifications recommended for this intersection to address its crash history are identified in Table 26, including countermeasure crash reduction factors. Table 26 includes multiple options that should be further investigated and take into account nearby neighborhood circulation.

The planning-level cost estimate for these improvements will be detailed in the updated TSAP.

Table 26. 27th Street / Jill Avenue Countermeasures

ARTS #	Description	CRF	Crash Type	Crash Severity
H17	Channelize left-turn lane at 3- or 4-leg intersection with raised median on all approaches	27%	All	All except PDO
H37	Provide a raised median on urban 2-lane road	39%	All	All except PDO
I1	Install lighting at intersection	38%	Night	All except PDOs
I17	Increase triangle sight distance	48%	All	All except PDOs
I21	Improve intersection warning: stop ahead pavement markings, stop ahead signs, larger signs, additional stop signs and/or other intersection warning or regulatory signs	20% (1-2 treatments) 25% (3-4 treatments) 30% (5-7 treatments)	All	All
I25	Provide flashing beacons at minor road stop-controlled intersections	13%	Angle	All
I34	Install right-in right-out operations at stop-controlled intersections	45%	All	All
RD25	Install any type of median barrier	30	All	All except PDO

Multidisciplinary Actions

As described in the introduction, the Safe System Approach is a comprehensive framework for reducing transportation-related fatalities and serious injuries through strategies that extend beyond infrastructure improvements. Several Bend MPO crash emphasis areas, such as impaired or distracted driving, speeding, and failure to use protective equipment, may benefit from non-engineering strategies and partnerships among multiple agencies.

Table 27 presents potential multidisciplinary actions that could advance the Safe System Approach within the Bend MPO boundary. These actions would complement the capital improvements described above and require collaboration among MPO and City staff, elected officials, law enforcement, educators, emergency responders, other public agencies, and public health providers.

Table 27. Bend TSAP General Safety Culture and Educational Action Items

ID	Strategy	Description	Focus	Lead Agency or Partner	Supporting Agencies	Funding Need	2026 Status
A1	**Regional Safety Coordination Committee**	Maintain a regional multidisciplinary transportation safety committee to coordinate TSAP implementation, share data and resources, align agency activities, and identify emerging safety needs. Include staff from transportation, planning, public safety, emergency response, public health, and community organizations.	Safety Culture	MPO, City, or ODOT	Deschutes County, Police, Sheriff, District Attorney's Office, Emergency Services, OLCC, Department of Public Health	$$$	COIC has coordinated a Regional Safety Committee and education and outreach campaign for the past 2 years. ODOT provided funding for this work. The funding was not renewed for FY27. City of Bend formed internal transportation safety communications team with goal of having City-focused transportation safety messaging in summer 2027.
A2	**Dedicated TSAP Implementation Staff**	Designate and fund staff capacity to coordinate the regional transportation safety committee and oversee TSAP implementation.	Safety Culture	MPO, City, or ODOT	Deschutes County	$$	See information under Action A1.
A3	**Safety Communications Plan**	Develop and implement a Bend-area safety communications plan that uses sustained, locally relevant messages to promote attentive, sober, calm, and speed-appropriate travel.	Safety Culture	MPO, City	Deschutes County, ODOT	$$	City of Bend formed internal transportation safety communications team with goal of having City-focused messaging in summer 2027.
A4	**Sustained Safety Messaging Program**	Implement a coordinated communications program that focuses on a limited number of priority safety topics for sustained periods and includes recurring outreach at community events.	Safety Culture	COIC, City	MPO, Deschutes County, ODOT	$$	Instead of a monthly messaging campaign, COIC and the City of Bend are focusing messaging on a limited number of safety issues for longer durations. COIC is leading regional safety messaging. The City will launch safety messaging in spring 2027.
A5	**Neighborhood Safety Outreach Partnerships**	Partner with Bend neighborhood districts to expand safety outreach and identify funding or in-kind support for local messaging.	Safety Culture	MPO, City	Bend Neighborhood Organizations	$$	Not started.
A6	**Visitor Safety Outreach**	Partner with visitor-serving organizations, lodging providers, restaurants, and event venues to share targeted transportation safety messages with visitors.	Safety Culture	COIC, City	MPO, Visit Bend	$$	COIC worked with Old Mill/Hayden Homes Amphitheater on DUII messaging for 2026 concert season. City of Bend 2027 safety campaign may include coordination with Visit Bend, restaurants and hotels.
A7	**Employer and School Safety Outreach**	Partner with major employers and schools to distribute transportation safety information and support workplace- and school-based education.	Safety Culture	MPO, City	Major Employers and Schools	$$	Not started.

ID	Strategy	Description	Focus	Lead Agency or Partner	Supporting Agencies	Funding Need	2026 Status
A8	**Data-Driven High-Visibility Enforcement**	Use current crash and citation data to direct high-visibility enforcement to locations, behaviors, and times associated with the greatest risk of fatal and serious injury crashes. Coordinate deployments through the Central Oregon Multi-Agency Traffic Team (MATT) and periodically reassess priorities.	Safety Culture, Enforcement	MATT, Police	MPO, City	$$	Central Oregon Multi-Agency Traffic Team (MATT) established to prevent fatal and serious injury crashes. MATT includes representatives from Bend, Redmond, Sunriver, Black Butte Ranch, Deschutes County and Oregon State Police. MATT uses grant funding for targeted enforcement (e.g., seat belts, DUII, speeding). The City of Bend has two officers dedicated to DUII enforcement. The City of Bend installed speeding and red-light running cameras at 3 high crash intersections in 2026. Additional signals may be added to the network in the future.
A9	**Automated Speed and Red-Light Enforcement**	Continue and evaluate automated speed and red-light enforcement at high-crash locations, and expand the program where supported by data, law, and community engagement.	Safety Culture, Enforcement, Aggressive Driving	Police	MPO, City, Deschutes County, ODOT	$	City of Bend and City of Redmond launched automated enforcement pilot projects in 2026. Additional information listed under A8.
A10	**Emergency Response and Post-Crash Care**	Continue improving emergency response and on-scene care through coordination among dispatch, EMS, law enforcement, trauma partners, and state 911 modernization efforts. Use response-time and outcome data to identify opportunities for improvement.	Emergency Response	EMS, Police		$	The Oregon Office of Emergency Management is modernizing the state's 911 emergency systems in 2026 and 2027. The City of Bend uses several software systems to optimize response times and on-scene response including: ProQA/Medical Priority Dispatch System, Live911, SPIDR Tech, and PulsePoint Respond.
A11	**Comprehensive Speed Management Program**	Implement a comprehensive speed management program that aligns target speeds, design standards, speed limits, traffic calming, automated enforcement, speed-feedback devices, resident reporting, and public communication. Prioritize locations with high injury risk and vulnerable road users. For vulnerable road user safety, consider avoiding right-turn slip lanes at intersections and the need for protected intersections, raised crosswalks, and modal filters or traffic diverters.	Safety Culture, Aggressive Driving	City	Various City departments, Police	$$	The City of Bend updated its road design standards in 2021 and is updating the standards in 2026. The updates include complete streets concepts and standards for low stress routes. The City implemented the Neighborhood Street Safety Program and worked with Neighborhood Associations to identify safety projects throughout Bend. The City has speed radar feedback signs and moves the signs around the City. The City has a "Bend Works" website and app where residents can log issues and concerns. City staff categorize and respond to the issues.
A12	**Employer and Family Safe-Driving Policies**	Provide employers and families with model safe-driving policies and agreements addressing distraction, impairment, seat-belt use, and safe speeds.	Safety Culture, Distracted Driving	City, MPO	Employers	$	Not started.

ID	Strategy	Description	Focus	Lead Agency or Partner	Supporting Agencies	Funding Need	2026 Status
A13	**Distracted-Driving Enforcement**	Coordinate grant-funded, high-visibility distracted-driving enforcement with partner agencies, using safe and legally compliant observation methods.	Safety Culture, Distracted Driving, Enforcement	Police		$$	The Central Oregon Multi-Agency Traffic Team (MATT) has received grant funding to conduct enhanced distracted driving enforcement campaigns in Bend and throughout Central Oregon.
A14	**Repeat Impaired-Driving Intervention**	Support evidence-based assessment, treatment, supervision, and monitoring programs for repeat impaired-driving offenders.	Impaired Driving	Deschutes County		$	Not started. The DUII Intensive Supervision Program (DISP) is currently only administered in Multnomah County.
A15	**Designated Rideshare and Taxi Loading Zones**	Designate and clearly communicate passenger loading zones in downtown and other nightlife or event districts for taxis, rideshare vehicles, and designated drivers.	Safety Culture, Impaired Driving	MPO, City	Downtown Bend, Restaurants and Bars, Cab and Rideshare companies	$$	There are no formalized locations. The City of Bend encourages users to meet drivers in designated 15-minute loading zones or at the Troy Field Mobility Hub.
A16	**Discounted Safe-Ride Partnerships**	Partner with hospitality businesses, event venues, and transportation providers to offer or promote discounted safe rides to and from locations where alcohol is served.	Safety Culture, Impaired Driving	MPO, City	Downtown Bend, Old Mill, Visit Bend, Chamber of Commerce, Restaurants and Bars, Cab and Rideshare companies	$	Not started.
A17	**Motorcycle Safety Outreach**	Partner with motorcycle retailers, trainers, and rider groups on targeted outreach about impairment, speed, conspicuity, protective equipment, group riding, vehicle maintenance, and advanced riding skills.	Safety Culture, Motorcycles	MPO, City, ODOT	Motorcycle shops and groups	$	Not started.
A18	**Walking, Bicycling, and E-Mobility Education**	Develop and evaluate education and promotion programs for walking, bicycling, and e-mobility, including locally relevant e-bike messaging. Include community education on the difference between e-bikes and e-motos.	Safety Culture; Pedestrians/ Bicyclists	Commute Options	MPO, City	$	The City of Bend and Commute Options have partnered to develop safety messaging for e-bikes.
A19	**Adult Active Transportation Education**	Provide adult education on safe walking, bicycling, and e-mobility practices, including how to use new or unfamiliar facilities.	Safety Culture; Pedestrians/ Bicyclists	Commute Options	MPO, City	$	In the past, Commute Options led bicycle and pedestrian safety classes for adults. The City of Bend will be conducting outreach in 2026 and 2027 for new bike and pedestrian infrastructure (e.g., diverters, protected lanes).

ID	Strategy	Description	Focus	Lead Agency or Partner	Supporting Agencies	Funding Need	2026 Status
A20	**Rules-of-the-Road and Conflict Education**	Educate drivers, bicyclists, and e-bike riders on applicable laws, predictable operation, safe passing and yielding, sidewalk and crosswalk use, roundabouts, and common conflict patterns.	Safety Culture; Pedestrians/ Bicyclists	MPO, City	Commute Options	$	See notes under A18 and A19.
A21	**Low-Stress Route Wayfinding**	Complete and promote a walking and bicycling wayfinding system that directs users to comfortable, low-stress routes and key destinations.	Pedestrians/ Bicyclists	City, MPO	ODOT, Deschutes County, Visit Bend, Chamber of Commerce	$$	The City of Bend is installing bicycle and pedestrian wayfinding signs on key corridors in 2026. Additional signage may be installed in the future.
A22	**Pedestrian Network Gap Program**	Implement and periodically update the Pedestrian Implementation Plan to close priority sidewalk and crossing gaps, with consideration of expanding the plan citywide.	Pedestrians/ Bicyclists	City	ODOT, Deschutes County; Neighborhood Organizations	$$$	The City of Bend completed the Pedestrian Implementation Plan in 2023. It does not cover the entire city but is focused on key areas and routes. The Plan geography may be expanded in the future.
A23	**Early Transportation Safety Education**	Begin age-appropriate transportation safety education before driving age through schools, youth programs, and community partners.	Safety Culture, Young Drivers	Commute Options, Safety Towns, School District	Bend Park and Recreation District	$	Commute Options leads bicycle and pedestrian safety programs in elementary and middle schools in Bend.
A24	**Winter Driving Education**	Provide seasonal education on winter driving behavior, vehicle preparation, traction requirements, and safe speeds for conditions.	Safety Culture, Winter Driving	ODOT, City	Deschutes County		The Deschutes County Sheriff's Office offers a public SkidCar Training Program that teaches drivers how to handle snow, ice, and low-traction conditions using a specialized vehicle system. Future City of Bend transportation safety messaging may include pre-winter messaging.
A25	**Integrated Transportation Safety Data Program**	Build an integrated transportation safety data program that combines crash, volume, speed, near-miss, asset, and multimodal detection data to identify risks and evaluate treatments.	Technology	City, MPO	ODOT, Deschutes County	$$	The City of Bend is building a robust transportation data system. The City is seeking grant funding to purchase equipment for counting and to assess near-miss activity. The City installed new bicycle and pedestrian detection technology at the Portland/Olney/Wall intersection.
A26	**Traffic Signal Safety Technology**	Monitor, pilot, and evaluate technologies that can reduce severe crashes at signals, including improved detection, signal control, conflict monitoring, and automated enforcement.	Technology	City, MPO	ODOT, Deschutes County	$	The City of Bend and ODOT have upgraded traffic signal control systems over the past few years. The City of Bend installed speeding and red-light running cameras at a few high crash intersections. This program may be expanded to additional intersections in the future.

ID	Strategy	Description	Focus	Lead Agency or Partner	Supporting Agencies	Funding Need	2026 Status
A27	**Proactive Risk and Near-Miss Screening**	Use exposure, speed, near-miss, and community-reported data alongside crash history to identify and prioritize locations with emerging or underreported safety risks.	Technology	City, MPO	ODOT, Deschutes County	$$	See A25
A28	**Recurring TSAP Monitoring and Updates**	Establish a recurring TSAP monitoring and update process, including annual progress reporting, minor updates every two to three years, and a major update approximately every five years.	Monitoring	City, MPO		$	Not started. In the future, the City of Bend and BMPO will strive for minor updates every 2-3 years and major update every 5 years.
A29	**Motorcycle Risk Communication**	Share objective, contextualized motorcycle crash and injury data to support informed decisions and reinforce safer riding practices without stigmatizing riders.	Safety Culture, Motorcycles	ODOT, City, MPO, Deschutes County		$	Not started.
A30	**Community-Based Safety Education**	Partner with community-based organizations serving transportation-disadvantaged populations to co-develop and deliver accessible, culturally responsive transportation safety education.	Safety Culture, Impaired Driving	City, MPO, Commute Options	ODOT, Deschutes County	$	Not started.
A31	**Access Management Program**	Implement an access management program that evaluates systemwide access management opportunities on higher-order facilities to reduce intersection and driveway conflicts with higher traffic volumes and travel speeds.	Intersections	City	ODOT	$$	

Next Steps

The recommended strategies presented in this memorandum will be refined based on input from the PAC, MPO Policy Board, and community, and incorporated into the draft TSAP. These strategies, grounded in the Safe System Approach, aim to comprehensively improve transportation safety and culture for the Bend MPO. Performance measures, which are used to evaluate progress toward the goal of zero transportation-related fatalities and serious injuries as TSAP strategies are implemented, will be documented in *Technical Memorandum #5*.

Attachment A: Equity Rating

Attachment B: Priority Location Crash Report Details

BMPO
Bend Metropolitan Planning Organization

BEND TRANSPORTATION SAFETY ACTION PLAN PHASE 1 PUBLIC ENGAGEMENT SUMMARY

September 2026

Introduction

The Bend Metropolitan Planning Organization (BMPO) is updating its Transportation Safety Action Plan (TSAP) to help make roads, sidewalks, crossings, and bike facilities safer in the Bend area. In April and May 2026, BMPO gathered feedback about transportation safety concerns and the changes that would help people feel safer getting around. This feedback will help guide future transportation safety projects, policies, and programs.

The engagement team—made up of staff from BMPO, Zan Associates, and Kittelson—used several ways to reach people across the community. Outreach included community events, an online engagement website, and social media promotion (Figure 1). These efforts helped gather concerns from people who live, work, and travel in the Bend area.

Figure 1: Engagement Photos





Key Findings

This section highlights the transportation safety concerns that appeared most often during public engagement. The findings below summarize the roads, intersections, and transportation issues most frequently identified by community members. Together, they help identify where people experience the greatest transportation challenges in the Bend area.

Key Locations

The following roads and intersections received the highest number of public comments during engagement. Comments focused on areas where people experience safety concerns, congestion, difficult crossings, or other transportation challenges. This feedback may help guide future transportation safety priorities and investments.

Roads

1. **Empire Avenue** – Congestion, confusing merge movements, and fast-moving traffic near US 97 and Empire Ave were among the most frequently discussed safety concerns.
2. **3rd Street** – Heavy traffic volumes, long delays, and limited crossing opportunities make 3rd St uncomfortable for people walking, biking, and driving.
3. **Greenwood Avenue** – Community members described Greenwood Ave as stressful and difficult to cross for all modes because of speeding, heavy traffic, and turning conflicts.
4. **Reed Market Road** – Traffic speeds, growing congestion, and safety concerns at intersections and roundabouts were recurring themes along Reed Market Rd.
5. **US 97 / Bend Parkway** – Residents identified speeding, congestion, and difficult merges on US 97 / Bend Parkway as major transportation concerns.
6. **Revere Avenue** – Speeding, safety concerns at intersections, and missing bike lanes and sidewalks are the top concerns along this corridor.

Intersections

1. **US 97 and Empire Avenue** – Drivers described the US 97 and Empire Ave interchange as confusing and stressful because of heavy traffic and difficult merges.
2. **US 97 and Reed Market Road** – Congestion, closely spaced ramps, and difficult turning movements were common concerns at the US 97 and Reed Market Rd interchange.
3. **Greenwood Ave and 3rd Street** – Fast-moving traffic and difficult crossings for all modes make Greenwood Ave and 3rd St one of the most stressful intersections discussed in public comments.
4. **Wall Street and Olney Avenue** – Despite recent improvements, community members said vehicles still travel too quickly through the Wall St and Olney Ave intersection area.
5. **Century Drive and Campbell Road** – Limited crossing opportunities for walkers, bikers, and high vehicle speeds make it difficult to safely access nearby neighborhoods and trails at Century Dr and Campbell Rd.
6. **Greenwood Avenue and Wall Street** – Heavy traffic volumes and turning conflicts contribute to safety concerns for drivers, walkers and bikers crossing at Greenwood Ave and Wall St.

Key Themes

Public comments were also reviewed to identify transportation issues and concerns that appeared repeatedly across the Bend area. The themes below summarize the most common transportation safety and mobility concerns raised during engagement. These themes help show the types of issues community members experience most often, regardless of location.

1. **Traffic** – Congestion, backups, and heavy traffic volumes were the most common concerns raised throughout the Bend area transportation system.
2. **Speed** – Speeding on major roads, neighborhood streets, and near crossings was identified as a major safety issue across the region.
3. **Turning** – Drivers described challenges turning onto busy roads because of high traffic speeds, limited gaps in traffic, and confusing lane configurations.
4. **Crossing** – Difficulty crossing busy streets safely was a major concern for people walking and biking throughout the Bend area.
5. **Design** – Community members frequently discussed roadway and intersection designs that feel confusing, uncomfortable, or unsafe.
6. **Visibility** – Poor visibility caused by lack of lighting, poor sight lines, vegetation, and fast-moving traffic contributes to safety concerns at many locations.

Promotions

BMPO used a mix of online outreach, community and agency partnerships, media promotion, and in-person events to encourage participation during the first phase of engagement (Figure 2). Outreach efforts focused on reaching a broad range of community members across the Bend area, including historically underserved populations. Table 1 summarizes major outreach and promotion activities completed between February and May 2026.

Figure 2: Promotional Images

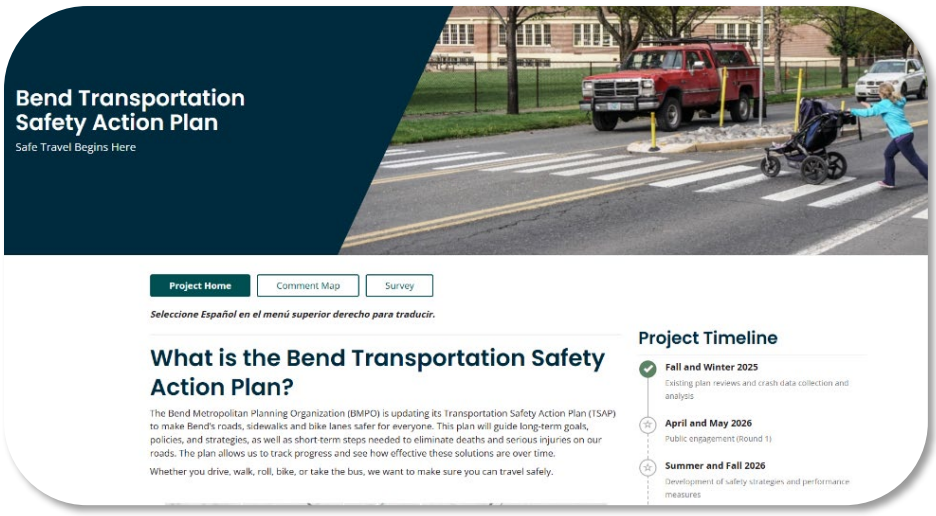




Table 1: Promotional Timeline

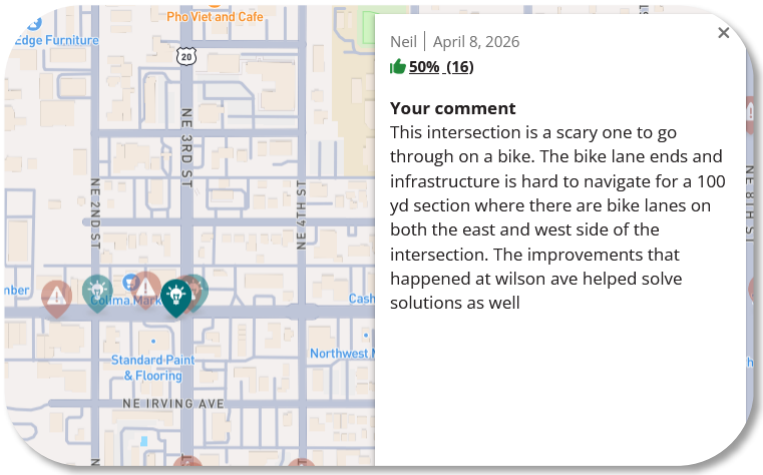
Date	Promotion	Description
2/6/2026	Presentation to City of Bend Accessibility Advisory Committee	Presented project overview and discussed future engagement opportunities
3/3/2026	Attend Central Oregon Homeless Forum	Built relationships to support future outreach
March	City of Bend Neighborhood Districts	Shared project announcement through neighborhood newsletters
3/30/2026	MPO temporary project webpage	Added project updates and email sign-up
4/6/2026	Online open house/project webpage	Online open house launched
4/7/2026	TSAP Project Advisory Committee (PAC) Meeting	Shared project information and online open house link
4/7/2026	City of Bend News Item	Published project announcement and open house link
4/8/2026	Press Release	Shared project announcement and open house link
4/9/2026	BMPO Facebook	Shared project announcement and open house link
4/10/2026	BMPO TAC and TSAP PAC	Shared project information and open house link for distribution
4/10/2026	City of Bend Neighborhood Districts	Shared project information and open house link for distribution
4/13/2026	Tumalo resident contacts	Shared project information and open house link
4/16/2026	Deschutes River Woods resident contacts	Shared project information and open house link
4/21/2026	Central Oregon Daily	TV interview and story about the TSAP and online open house
4/22/2026	Community organizations representing underserved populations	Shared project materials and requested help distributing outreach materials
4/22/2026	The Source Weekly	Published story about the TSAP and online open house
4/24/2026	Cascades East Transit (CET)	Distributed English and Spanish outreach materials
4/24/2026	The Giving Plate (food bank)	Distributed English and Spanish outreach materials
4/25/2026	Earth Day Festival	Community event tabling
April	Latino Community Association	Coordinated outreach with City Communications
April	Black, Indigenous, and People of Color organizations	Coordinated outreach with City Communications
4/28/2026	Latino families (contacts of Bend Park and Recreation District)	Shared outreach through Spanish-language social media and printed materials
4/28/2026	Bethlehem Inn (homeless shelter)	Distributed English and Spanish outreach materials
4/28/2026	City of Bend New Roundabout Project Open House	Community event tabling
5/1/2026	CityFest	Community event tabling

Participants

The engagement process included online and in-person opportunities, as well as making paper survey materials available at transit, homeless shelter and food bank locations to make it easy for people across the Bend area to participate. Outreach focused on meeting people where they already gather, including community events and community service locations, an online engagement site, and social media (Figure 3). All in-person outreach happened through tabling at existing community events and activities.

Figure 3: Photo of Participants at Earth Day and An Image of the Online Comment Map





Online Participants

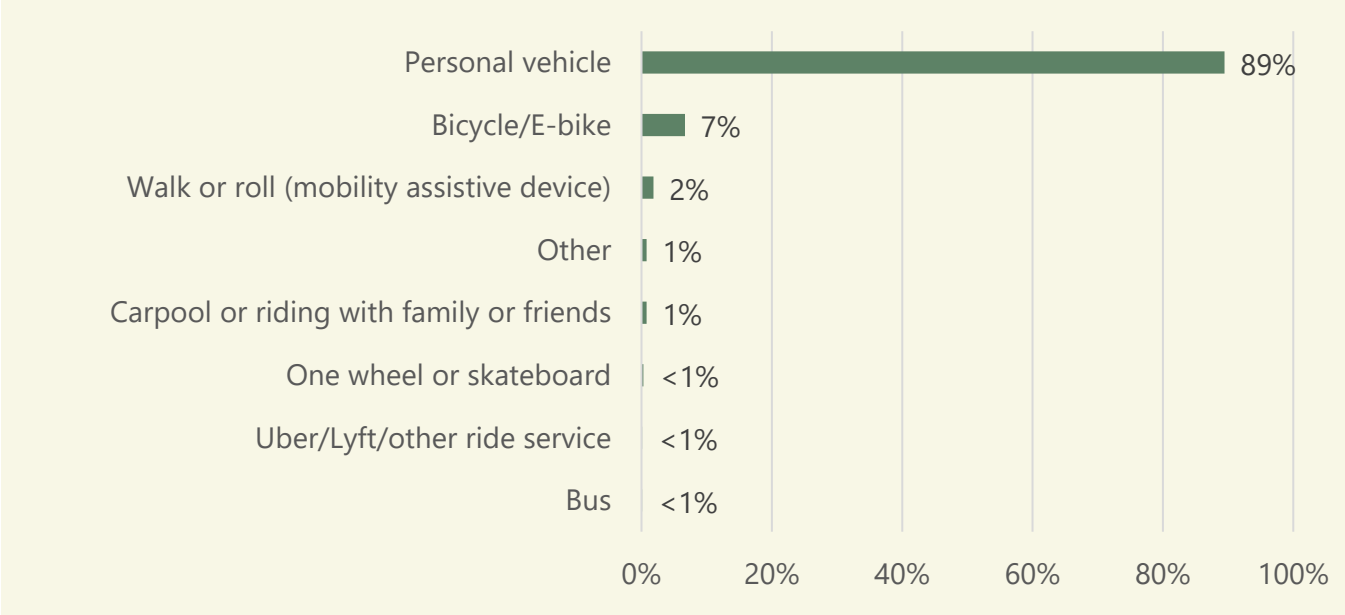
Nearly 1,100 people participated through the online survey and comments map (Table 2). Online engagement opportunities were promoted through City newsletters, social media, meeting with community organization staff, and other online outreach efforts.

Table 2: Participation in Online Engagement

Strategy	Comments	Count
Online Survey	Online survey promoted through City social media, website, and in-person events	1,053 participants
Online Comment Map	Online comment map promoted through City social media, website, and in-person events	699 comments

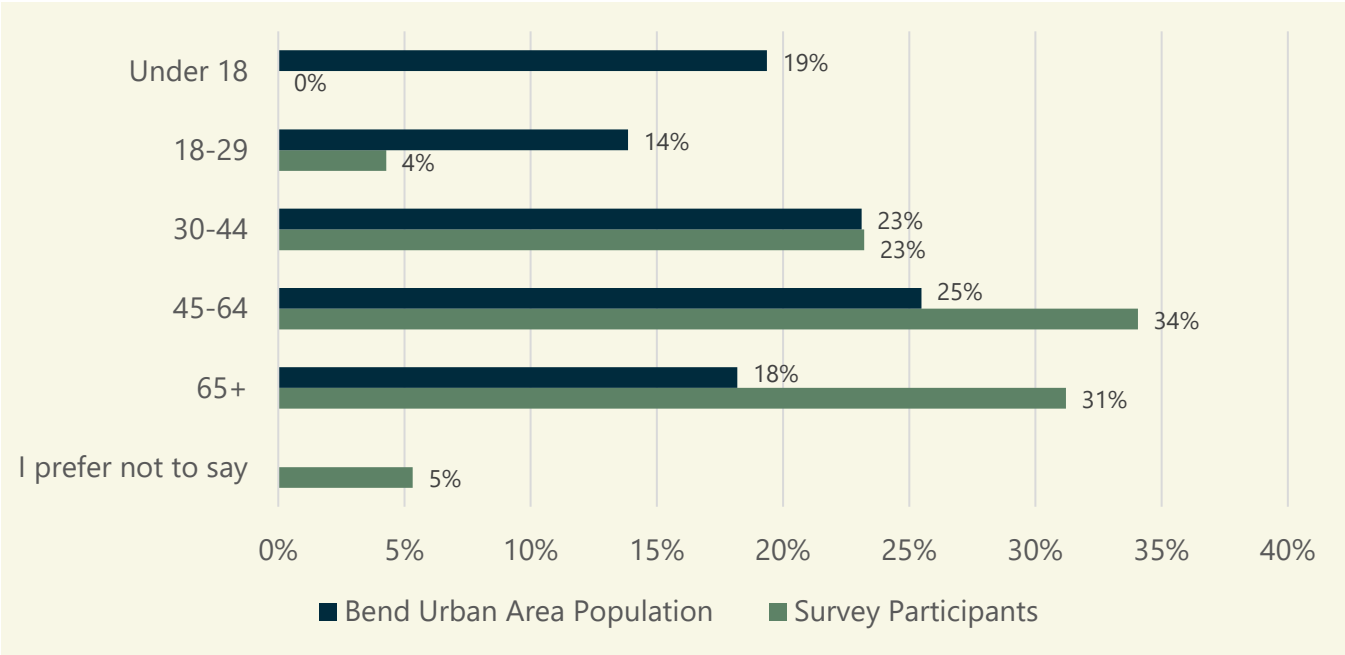
Most online survey participants (91%) said they live in Bend. Driving was the main way most respondents get around (89%), but many people also said they walk, roll, bike, or carpool for some trips (Figure 4).

Figure 4: How Online Participants Primarily Get Around Bend



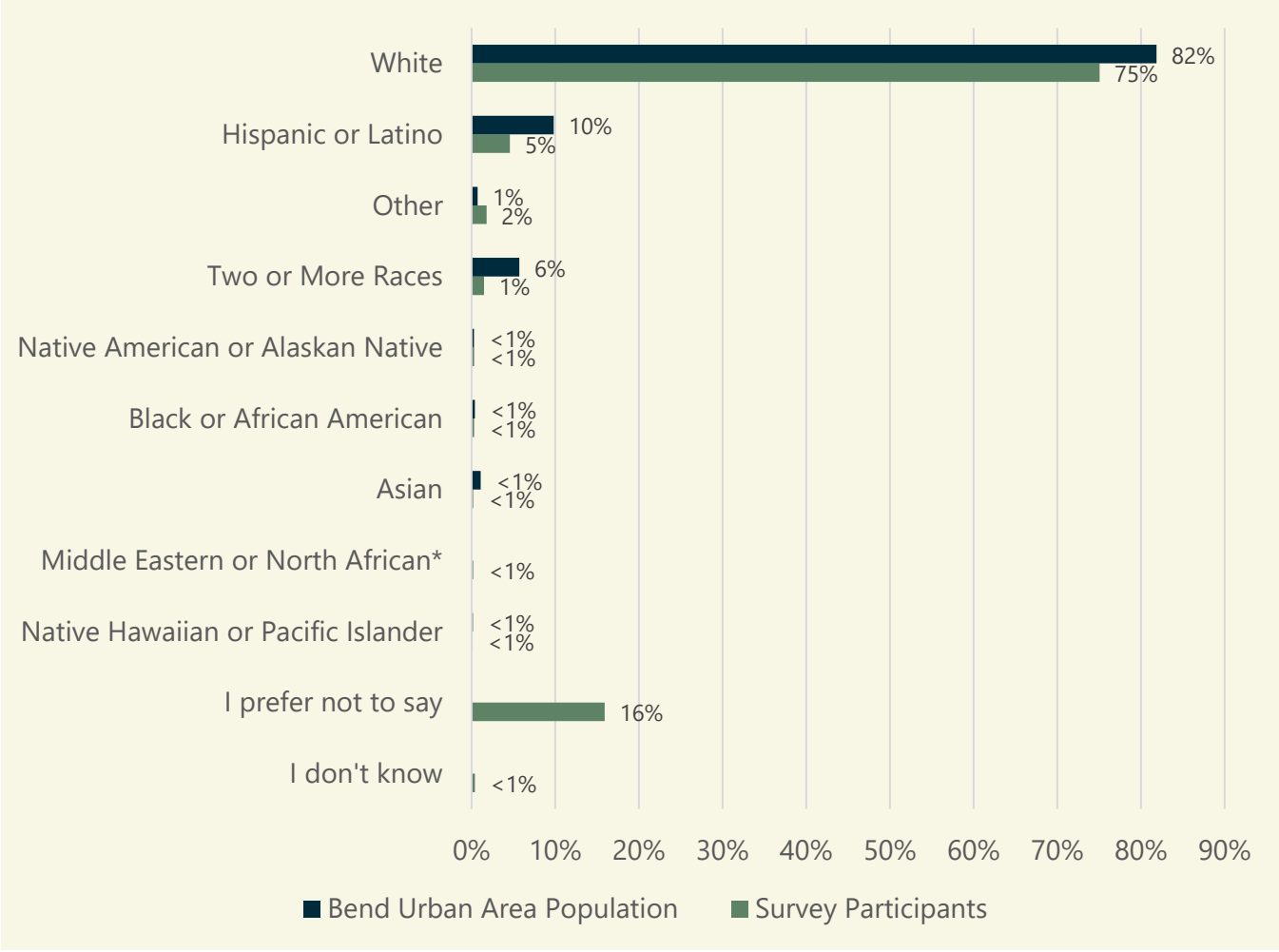
Survey participants were generally older than the overall Bend Urban Area (UA) population (Figure 5). No survey participants were under 18 years old, even though people under 18 make up about 19% of the Bend UA population. The largest age group among participants was 45–64 years old (34%), followed by people 65 years and older (31%) and people ages 30–44 (23%).

Figure 5: Age of Survey Participants Compared to Bend UA Population [2024 American Community Survey (ACS) 5-year Estimates]



Most survey participants identified as white (75%) (Figure 6). Hispanic or Latino participants made up 5% of survey respondents, compared to about 10% of the overall Bend area population. Other participants identified as some other race or ethnicity (2%) or two or more races (1%). About 9% of survey participants said they live with a disability.

Figure 6: Race and Ethnicity of Survey Participants Compared to Bend Population (2024 ACS 5-year Estimates)



*Middle Eastern or North African is not an option on the American Community Survey

In-Person Participants

Staff set up engagement tables at community events to connect with residents who might not participate through online surveys. Through these in-person conversations, the project team interacted with approximately 135 community members (Table 3). Additionally, project information and paper surveys were available at in-person events in May and April 2026 (Table 1). Only three paper surveys were completed.

Table 3: Participation at In-person Events

Dates (2026)	Community Event	Main Audience	Interactions
April 25	Earth Day Fair and Festival	Young Families	50
April 28	City of Bend Open House for 15th St and Ferguson Roundabout	Older Adults	15
May 1	CityFest	Mixed	30

Results

Community members shared detailed feedback about transportation safety and mobility challenges throughout the Bend area. Nearly 1,800 unique comments were collected through online and in-person engagement activities. Comments were reviewed and coded to identify the locations and transportation issues most frequently raised by the public. The results below summarize the roads, intersections, and transportation themes that received the most attention during the first phase of engagement and are presented next to community member quotes collected during engagement.

In addition to written comments, community members could vote to agree with comments posted by others on the online comment map. Because a vote of agreement reflects support for someone else's concern rather than an independent one, votes are tracked separately from written comments and are not included in the results below.

Locations

This section highlights the roads, intersections, and areas most frequently identified in public comments. Understanding where community members experience safety concerns related to driving a vehicle, walking, rolling, biking, and using transit can help prioritize future transportation safety solutions.

Roads

This section summarizes the roads most frequently identified in public comments. Figure 7 shows roads with ten or more comments. Roads with at least 30 comments are discussed in more detail below.

Empire Avenue

Congestion, fast-moving traffic, and difficult merging movements are major concerns on Empire Ave, especially near US 97 and nearby commercial areas. Several comments described the corridor as stressful to drive because of closely spaced intersections, heavy traffic volumes, and confusing interchange movements.

Walking and biking safety was also a recurring concern near crossings and interchange ramps. Residents pointed to the need for safer intersection design, improved traffic control, and roadway changes that can better manage continued growth in north Bend.

> *"Empire as a whole is so much worse since the 97 bypass was built. There has to be a direct exit from 20 to 97, using Empire just doesn't work."*

3rd Street

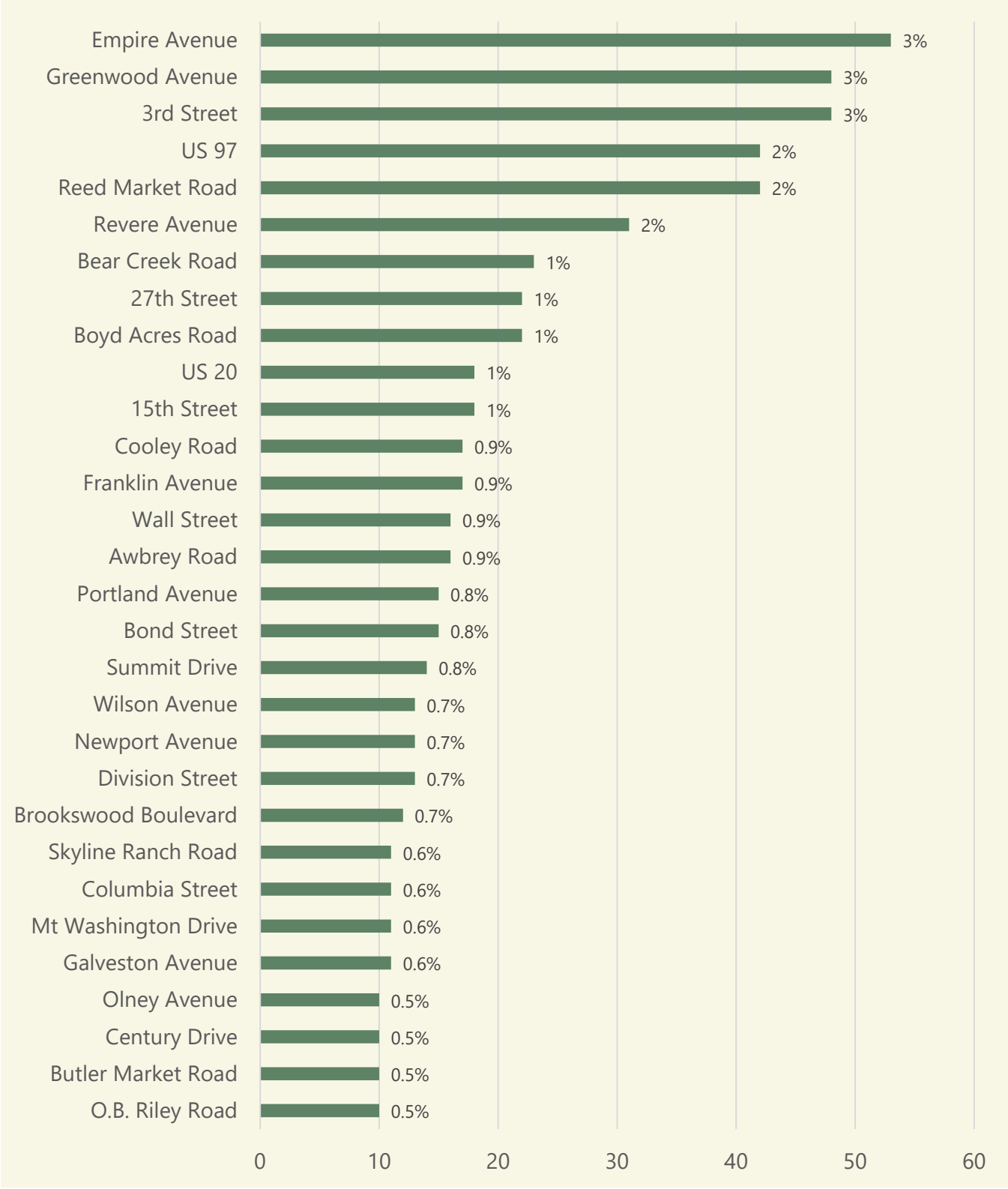
Heavy traffic, congestion, and difficult crossings are recurring concerns on 3rd St. Comments described long wait times at intersections, stressful driving conditions, and challenges crossing the street safely because drivers are focused on moving traffic quickly through the corridor.

People also described the corridor as uncomfortable for walking and biking because of traffic speeds, limited crossing opportunities, and conflicts near commercial areas. Safer crossings,

improved sidewalks and bike facilities, and traffic calming measures were common suggestions.

"Crossing 3rd Street feels unsafe because traffic moves quickly and drivers are focused on getting through the corridor."

Figure 7: Roads With 10 or More Comments Including Percent of Total Comments



Greenwood Avenue

Fast traffic, difficult crossings, and turning conflicts are the biggest concerns on Greenwood Ave. Several comments described the corridor as feeling more like a highway than a city street, especially because of long crossing distances, heavy traffic volumes, and vehicles traveling at high speeds through commercial areas and major intersections.

People also described Greenwood Ave as uncomfortable for walking and biking because of limited bike comfort, poor pedestrian visibility, and drivers failing to yield at crossings. Common suggestions included safer crossings, traffic calming, improved bike infrastructure, and redesigned intersections.

> *"Greenwood feels like a highway running through the middle of the city. It is difficult and stressful to cross, even at marked intersections."*

Reed Market Road

Speeding, congestion, and safety concerns at intersections and roundabouts are recurring themes along Reed Market Rd. Several comments described vehicles traveling well above the posted speed limit and said growing traffic volumes have made the corridor harder to safely walk, bike, and drive.

Gaps in walking and biking connections were also frequently mentioned, especially near neighborhoods, schools, and trails. Traffic calming, safer crossings, and improved bike and pedestrian access were common requests.

> *"The Reed Market corridor from the Parkway to the Bond/Reed Market/Brookswood roundabout needs traffic calming measures installed as the speeds are much above the signed 25 MPH."*

US 97 / Bend Parkway

Speeding, merging conflicts, and congestion make US 97 / Bend Parkway one of the most stressful corridors discussed in public comments. Drivers described problems entering and exiting the highway safely because of short merge distances, closely spaced ramps, and fast-moving traffic.

The corridor is also seen as a barrier between neighborhoods because it limits safe walking and biking connections across Bend. Common suggestions included safer crossings, interchange redesigns, and stronger speed enforcement.

> *"I am scared to drive on the 97 bypass. No one goes close to the speed limit. I literally fear for my life sometimes when I drive that section of highway."*

Revere Avenue

Speeding, safety concerns at intersections, and missing bike lanes and sidewalks are major concerns along Revere Avenue. Several comments called out the Bend Parkway interchange for

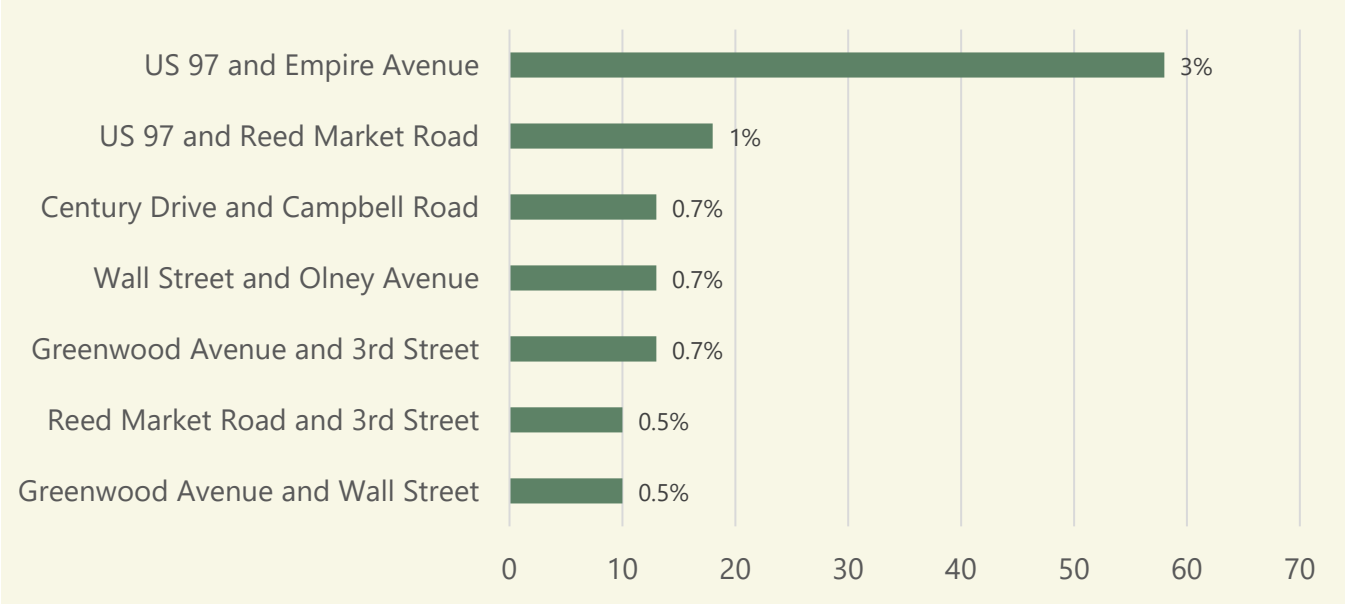
confusing turning movements and frequent crashes, while recent changes along Wall Street drew frustration from drivers experiencing new backups and restricted turns.

"There needs to be designated lights for turning [from Revere Ave to Bend Pkwy], nobody knows how to yield at this intersection."

Intersections

This section summarizes the intersections and interchange areas most frequently identified in public comments. Figure 8 shows intersections with ten or more comments. The intersections discussed most often are summarized in more detail below.

Figure 8: Intersection with 10 or More Comments including Percent of Total Comments



US 97 and Empire Avenue

Congestion, confusing traffic movements, and difficult merges are major concerns at US 97 and Empire Ave. Drivers described stressful conditions caused by closely spaced ramps, heavy traffic volumes, and fast-moving vehicles entering and exiting the highway.

The area is also seen as difficult to navigate because of limited driver awareness and pressure from continued growth on the north side of Bend. Better signage, safer turning movements, and interchange improvements were among the most common suggestions.

"Too many cars are getting onto southbound 97 at Empire and it creates dangerous merging conditions."

US 97 and Reed Market Road

Heavy traffic volumes, difficult merges, and congestion make the US 97 and Reed Market Rd interchange a common source of frustration. Several comments described the area as confusing and stressful because of closely spaced ramps, high traffic speeds, and complicated

turning movements. Improving traffic flow, reducing merge conflicts, and redesigning interchange movements were recurring themes in public comments.

"The interchange feels confusing and traffic moves too quickly for drivers to safely merge."

Greenwood Avenue and 3rd Street

Fast-moving traffic, heavy congestion, and difficult crossings are recurring concerns at Greenwood Ave and 3rd St. Drivers, pedestrians, and bicyclists all described the intersection as stressful because of multiple turning conflicts and the pressure to move traffic quickly through the area. Safer crossings, improved signal timing, slower traffic speeds, and better bike and pedestrian infrastructure were common suggestions.

"2 lanes suddenly collapsing to 1 lane causes traffic to back up into the 3rd and Greenwood intersection daily."

Wall Street and Olney Avenue

Turning conflicts, speeding, and pedestrian safety are common concerns at Wall St and Olney Ave in downtown Bend. Although several comments acknowledged recent improvements to the intersection, people said vehicles still travel too quickly through the area. Additional traffic calming, safer crossings, and changes that improve comfort for walking and biking were among the most common requests.

"New intersection design is a huge improvement but cars are still moving through this area too fast."

Century Drive and Campbell Road

Fast-moving traffic and limited crossing opportunities make it difficult to safely cross Century Dr at Campbell Rd. Several comments described challenges reaching nearby neighborhoods and the Deschutes River Trail, especially for families and recreational users. Safer pedestrian crossings and improved trail connections were common requests.

"A cross walk would be very helpful here. The neighborhood crosses Century from Campbell to get to the River Trail from here."

Greenwood Avenue and Wall Street

Heavy traffic volumes, turning conflicts, and crossing safety were recurring concerns at Greenwood Ave and Wall St. Several comments described difficulty crossing safely because of fast-moving traffic and multiple vehicle movements through the intersection. Improved signal timing, slower traffic speeds, and safer crossings were among the most common suggestions.

"Traffic moves quickly through this intersection and it feels unsafe for people walking."

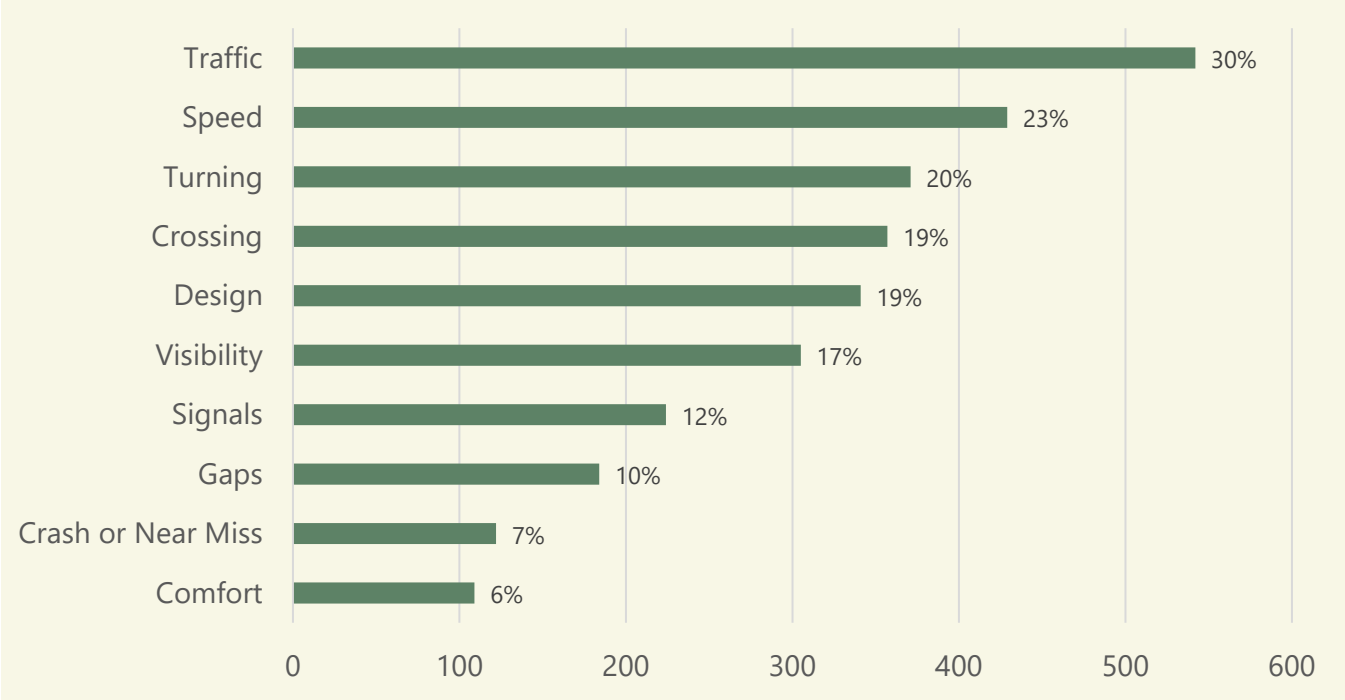
Themes

This section summarizes the transportation safety themes most frequently identified in public comments. Themes were developed by coding comments into common issue areas, such as traffic, speed, crossings, and visibility. Table 4 describes the themes. Figure 9 shows the number of comments associated with each theme that had more than 100 comments, and the most common themes are discussed in more detail below.

Table 4: Themes With 100 or More Comments

Theme	Description
Traffic	Congestion, traffic volumes, backups, queues, delay, or general traffic flow concerns.
Speed	Speeding, high vehicle speeds, speed limits, or traffic calming needs.
Turning	Turning movements, turn lanes, yielding while turning, left turns, right turns, or merging conflicts.
Crossing	Crossing streets, crosswalks, crossing signals, RRFBs, or difficulty crossing roads.
Design	Roadway design, roundabouts, intersection layout, lane configuration, medians, driveway access, or confusing geometry.
Visibility	Poor visibility, blocked sight lines, lighting, vegetation, curves, hills, or difficulty seeing other users.
Signals	Traffic signals, stop signs, signal timing, signs, flashing beacons, or traffic control devices.
Gaps	Missing sidewalks, bike lanes, paths, shoulders, trail links, or disconnected transportation facilities.
Crash or Near Miss	Comments reporting crashes, collisions, near misses, close calls, injuries, or fatalities.
Comfort	Feeling unsafe, stressed, uncomfortable, exposed, or unpleasant while traveling.

Figure 9: Themes with 100 or More Comments including Percent of Total Comments

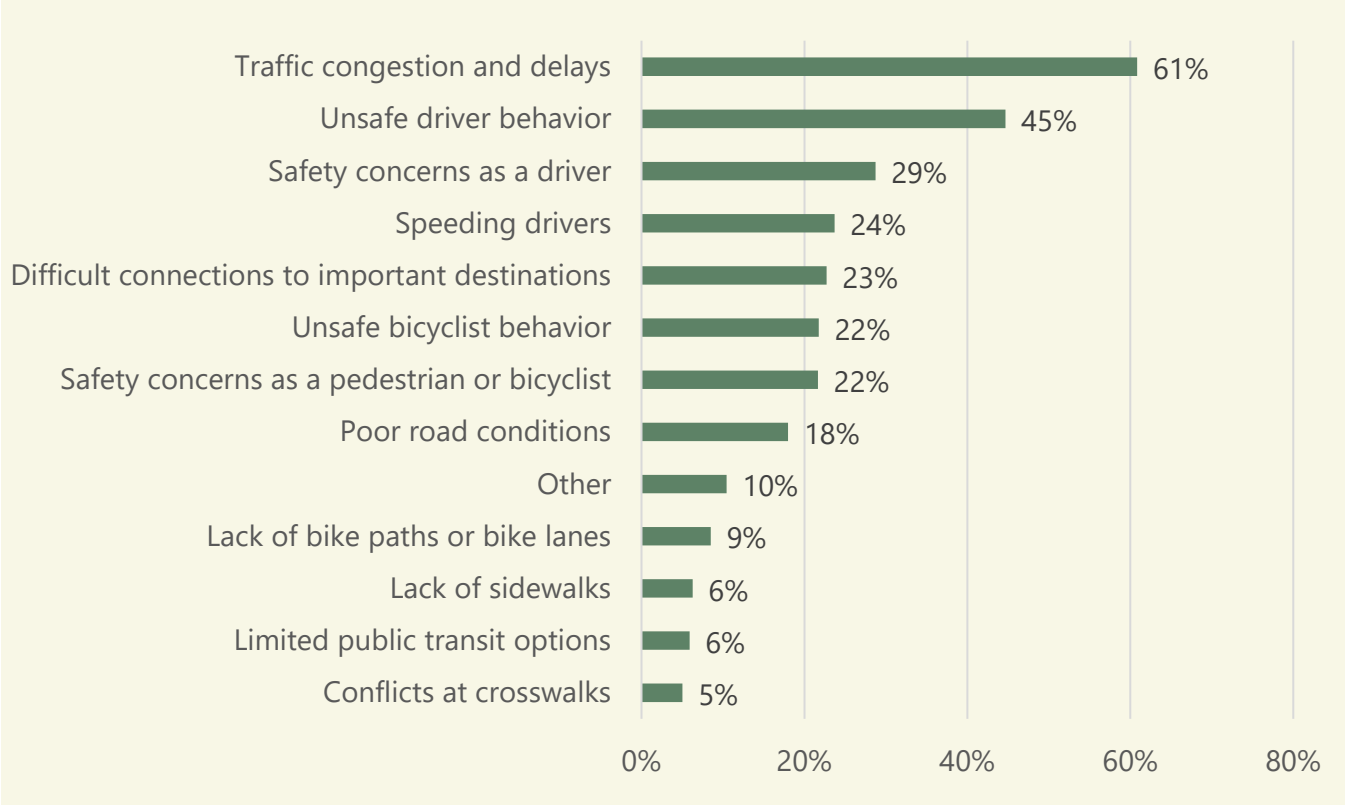


Traffic

Heavy traffic volumes, congestion, and backups were among the most common concerns raised across the Bend area transportation system (Figure 10). Drivers described long delays at major intersections, difficulty entering busy roads, and stressful travel conditions during peak periods. Comments about traffic included concerns related to congestion, traffic volumes, and delays, as well as concerns about how traffic conditions affect safety. Several comments linked congestion to difficult turning movements, aggressive driving, cut-through traffic, and challenges for people walking and biking.

"Traffic backs up through multiple intersections and makes it difficult to safely turn or merge."

Figure 10: Top Three Challenges Survey Participants Experience When Traveling Around Bend



Speed

Speeding was one of the most common safety concerns identified in public comments. Residents described vehicles traveling too fast on major roads, neighborhood streets, and near intersections and crossings, making it harder and more stressful to safely walk, bike, and drive. Traffic calming, stronger enforcement, and roadway designs that naturally slow vehicles down were recurring themes throughout the comments.

""I am scared to drive on the 97 bypass. No one goes close to the speed limit. I literally fear for my life sometimes when I drive that section of highway. It needs daily speed enforcement!"

Turning

Difficult turning movements and merge conflicts were discussed at many intersections and driveways across the Bend area. Drivers described challenges turning onto busy roads because of high traffic speeds, limited gaps in traffic, and unclear lane configurations. Protected turn signals, turn lanes, redesigned intersections, and roundabouts were among the most common suggestions.

"There needs to be designated lights for turning [from Revere Ave to Bend Pkwy], nobody knows how to yield at this intersection."

Crossing

Crossing busy streets safely is a major concern for people walking and biking throughout the Bend area. Long crossing distances, high traffic speeds, poor visibility, and drivers failing to stop were repeatedly identified as barriers to safe travel. Requests for additional crosswalks, flashing beacons, pedestrian signals, and safer crossing designs appeared throughout the comments.

"Drivers on Brookswood Blvd often dont stop for pedestrians here [at Porcupine Dr]. Adding a light up crosswalk button would help a lot!"

Design

Roadway layout and intersection design issues were discussed throughout the Bend area. Comments focused on confusing intersections, difficult lane configurations, roundabouts, and roadway designs that create conflicts between drivers, pedestrians, and bicyclists. Intersection redesigns, roundabouts, lane changes, and other improvements that simplify traffic movements and improve safety were commonly suggested.

"There was an old plan to add a roundabout here [at Galveston Ave and Harmon Blvd] to make turning movements safer. Please construct the roundabout."

Visibility

Poor visibility was frequently linked to unsafe crossings and near-misses between drivers, pedestrians, and bicyclists. Comments pointed to blocked sight lines, poor lighting, vegetation, curves, and fast-moving traffic as common problems throughout the transportation system. Several comments also described locations where drivers do not see people crossing until the last second, especially at night or during poor weather.

"Limited visibility from Tumalo Road looking left to Cook Avenue."

Conclusion

Community members shared clear and consistent concerns about transportation safety across the Bend area. The most common concerns focused on speeding, congestion, difficult crossings, visibility, and roadway design, especially on major corridors and at busy intersections. People also emphasized the need for safer walking and biking connections throughout the community.

The feedback collected during this phase of engagement will help BMPO better understand where people experience transportation safety challenges and what types of improvements the community would like to see. These results will help guide future transportation safety priorities, projects, and policies as the TSAP moves forward. The community will have an opportunity to provide input on the project team's recommended transportation safety strategies during the next round of engagement planned for Fall 2026.

Next steps for the TSAP include completing the transportation safety analysis and developing recommendations to address the issues identified through community engagement and technical review. Later in 2026, BMPO will share draft recommendations with the public and provide additional opportunities for community members to review and comment on the proposed improvements.

***Note**: Portions of the public comment coding and summarization process were supported using OpenAI ChatGPT. AI-generated outputs were reviewed, edited, and fact-checked by the consultant team from Zan Associates and the project team before inclusion in this report.*

BMPO
Bend Metropolitan Planning Organization

BEND TRANSPORTATION SAFETY ACTION PLAN PHASE 2 PUBLIC ENGAGEMENT SUMMARY

November 2026

INTRODUCTION

Bend Metropolitan Planning Organization (BMPO) is updating the Bend Transportation Safety Action Plan (TSAP) to make roads, sidewalks, crossings, and bike lanes safer for everyone. From October 13 through November 3, 2026, BMPO held the second TSAP online open house ("Phase 2") to ask the community about recommended safety improvements and prioritized projects. The recommendations are based on crash data, what we heard through Phase 1 public engagement, and roadway projects recently completed or already planned. The City of Bend shared the open house with subscribers of City of Bend Updates, on its City of Bend News webpage, and on its Facebook page (Figure 1). Bend MPO staff shared to participants of the TSAP Phase 1 public engagement and on its Facebook page. Email was the most common way people heard about it (50%).

The online open house included a survey about which safety treatments and locations people think should come first. This summary shares what we heard.

Figure 1: Screenshot of the Online Open House Promotion on City of Bend's Facebook Page



RESPONDENTS

One hundred fourteen (114) people took the survey. Most were between 45 and 64 years old (46%), followed by people ages 30 to 44 (26%) and 65 and older (23%). Two percent (2%) were

ages 18 to 29, and no one under 18 responded. More women (54%) than men (42%) took the survey, and 4% preferred not to say.

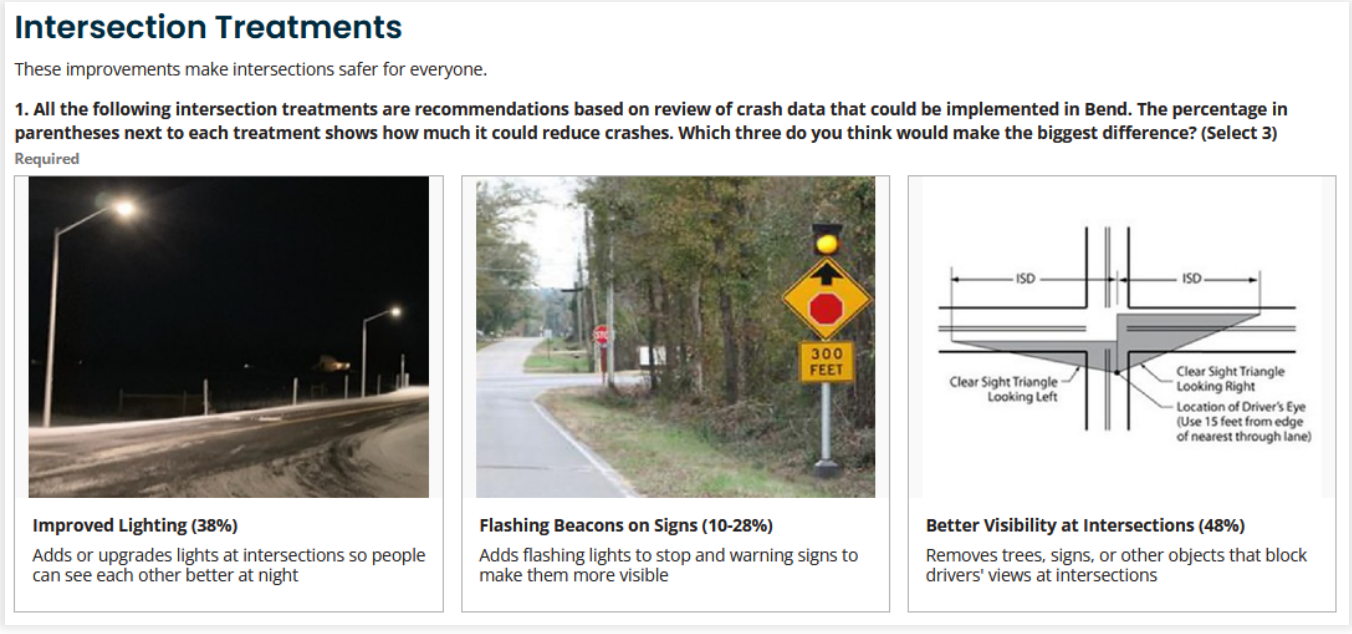
Most respondents were white (83%), and 11% preferred not to say. Smaller shares were Asian (2%), Hispanic or Latino (2%), Middle Eastern or North African (1%), or another race or ethnicity (2%). Six percent (6%) of respondents have a disability. Email was the most common way people heard about the project (50%), followed by social media (10%), community newsletters (10%), and word of mouth (9%).

These results reflect the people who chose to take the survey and do not represent everyone in Bend. Fewer people took part in Phase 2 than in Phase 1, which had more than 1,000 survey responses. This was expected because this phase asked more technical questions about specific safety treatments and locations. Even so, the responses show clear preferences that will help guide the plan.

TREATMENTS

The survey asked about four types of treatments: intersection, speed, pedestrian, and biking. For each type, participants were asked to select three treatments (of multiple available) they thought would make the biggest difference. Each answer included an example image, a short description, and a percentage in parentheses showing how much the treatment could reduce crashes (Figure 2). (Note that because all participants chose three individual treatments for each treatment category question, the results add up to more than 100%.)

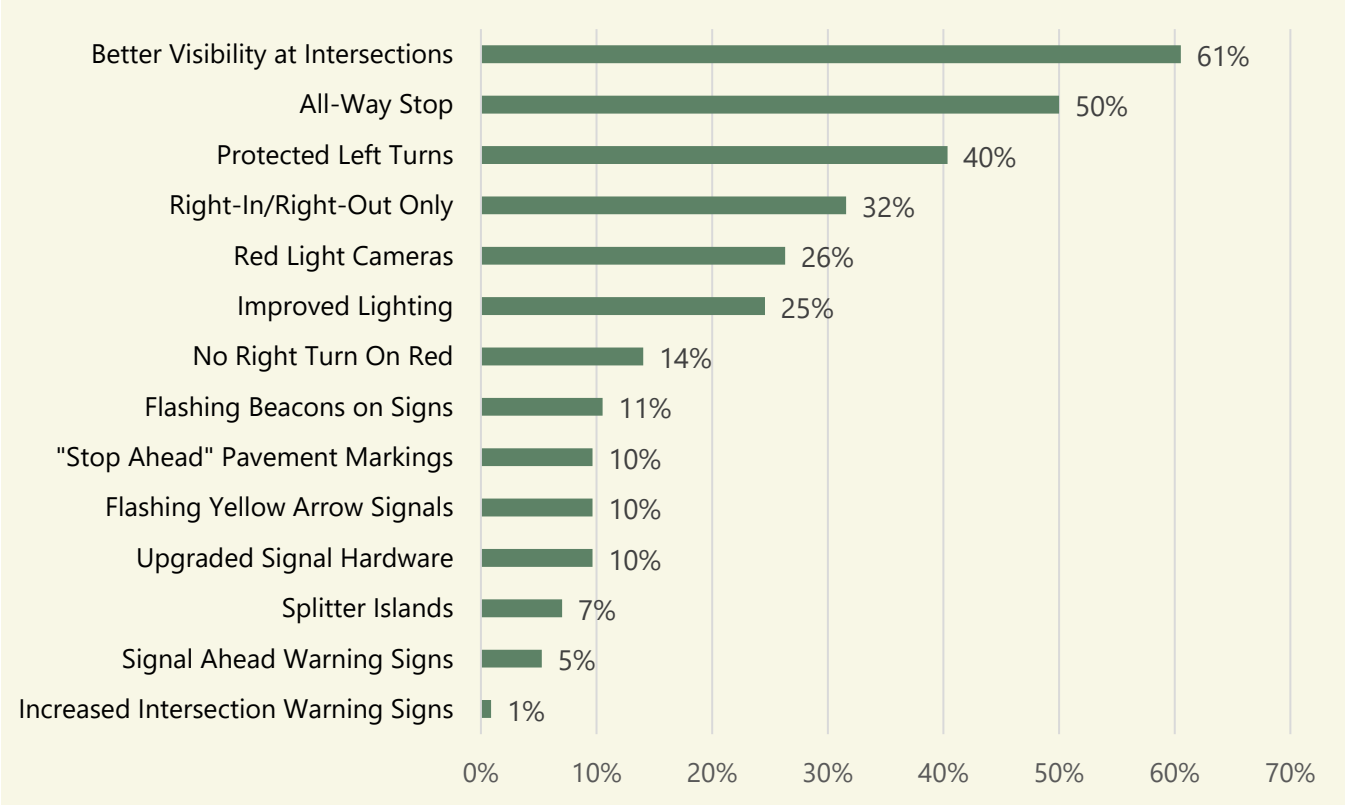
Figure 2: Screenshot of a Portion of the Intersection Treatments Survey Question



Intersection Treatments

Better Visibility at Intersections was the most popular intersection treatment, chosen by 61% of participants (Figure 3). *All-Way Stop* (50%, *Protected Left Turns* (40%), *Right-In/Right-Out Only* (32%), *Red Light Cameras* (26%), and *Improved Lighting* (25%) followed. *Splitter Islands* (7%), *Signal Ahead Warning Signs* (5%), and *Increased Intersection Warning Signs* (1%) were chosen least often.

Figure 3: Intersection Treatments Participants Think Would Make the Biggest Difference

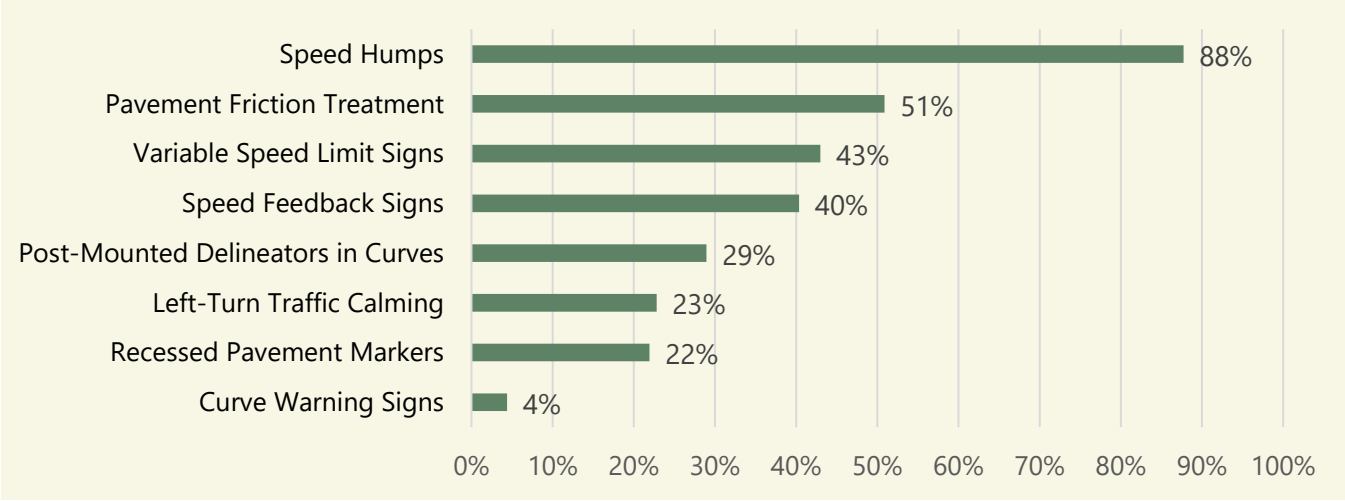


In the open comments, several people asked for better signs and markings where bike lanes end at roundabouts. Others asked for more red light cameras. A few people felt that recent signal changes and lane removals have caused more backups and made driving less safe.

Speed Treatments

Speed Humps were the clear favorite speed treatment, chosen by 88% of people (Figure 4). *Pavement Friction Treatment* (51%), *Variable Speed Limit Signs* (43%), and *Speed Feedback Signs* (40%) came next. *Curve Warning Signs* (4%) were chosen least often.

Figure 4: Speed Treatments Participants Think Would Make the Biggest Difference

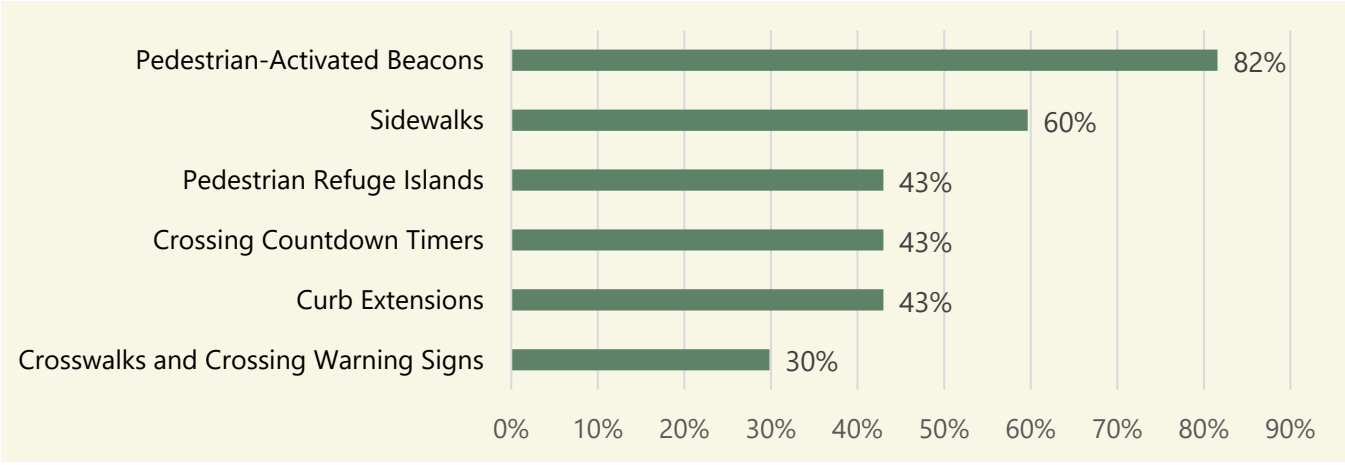


Speed was also a common topic in the open comments. Many people asked for lower speed limits and streets designed to slow down drivers. Ideas included narrower lanes, chicanes (curves in the road that make drivers slow down), and more speed humps in neighborhoods. A few people pointed to Vision Zero, a safety approach with a goal of ending traffic deaths. Several people also asked for school zone rules to be the same across Bend.

Pedestrian Treatments

Pedestrian-Activated Beacons were the top pedestrian treatment, chosen by 82% of participants (Figure 5). *Sidewalks* followed at 60%. *Curb Extensions, Crossing Countdown Timers*, and *Pedestrian Refuge Islands* were each chosen by 43% of people. *Crosswalks* and *Crossing Warning Signs* were chosen by 30%.

Figure 5: Pedestrian Treatments Participants Think Would Make the Biggest Difference



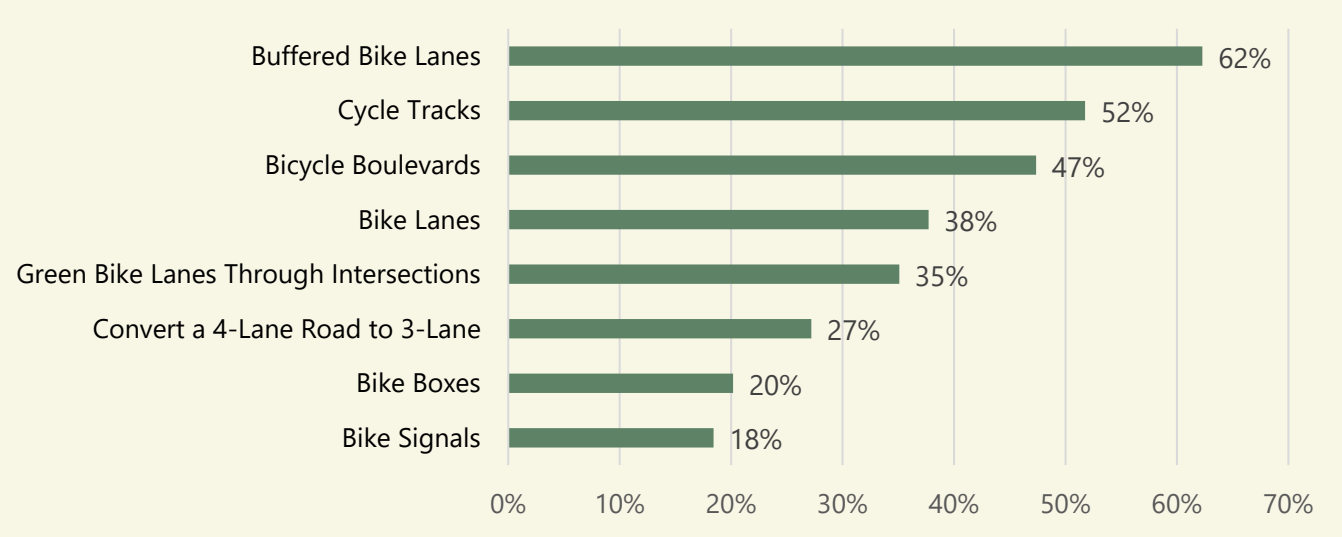
Raised crossings were the most common treatment people said were missed. These are crossings built up to the height of the sidewalk, much like a speed table or elongated speed hump, so vehicle drivers must slow down. People also asked for better lighting at crossings, more marked crosswalks, and more sidewalk connections.

Biking Treatments

Buffered Bike Lanes were the top biking treatment, chosen by 62% of participants (Figure 6). *Cycle Tracks* (52%) and *Bicycle Boulevards* (47%) came next. *Bike Lanes* (38%) and *Green Bike Lanes Through Intersections* (35%) followed. *Converting a 4-lane Road to 3-lanes* (27%), *Bike Boxes* (20%), and *Bike Signals* (18%) were chosen least often.

Many comments asked for more separation between bikes and cars, such as concrete curbs instead of flexible posts, or paths away from busy streets. Others asked for bike routes that look and work the same across the city, and for clearer bike merges at roundabouts. Some people felt bike projects make driving harder.

Figure 6: Biking Treatments Participants Think Would Make the Biggest Difference



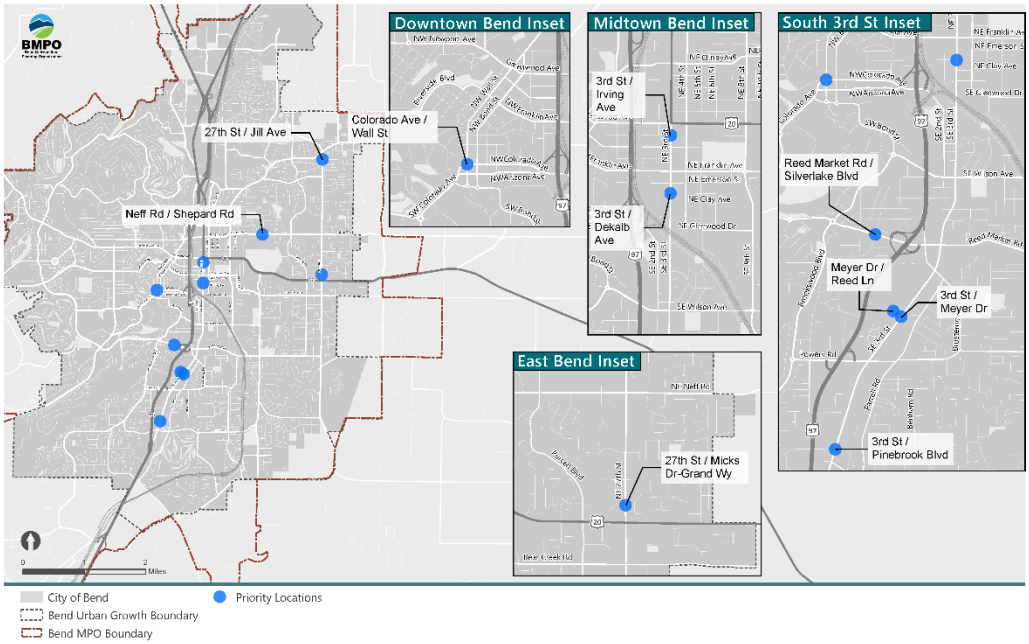
Other Treatments

Some ideas from the comments did not fit into one of treatment types. The most common was more enforcement. People asked for more police patrols, speeding tickets, speed cameras, and parking enforcement near intersections. Some asked for rules for e-bikes and for education on sharing the road and bike and pedestrian laws. Others suggested more roundabouts, traffic calming on neighborhood streets, and better winter road care at icy intersections.

PRIORITY LOCATIONS

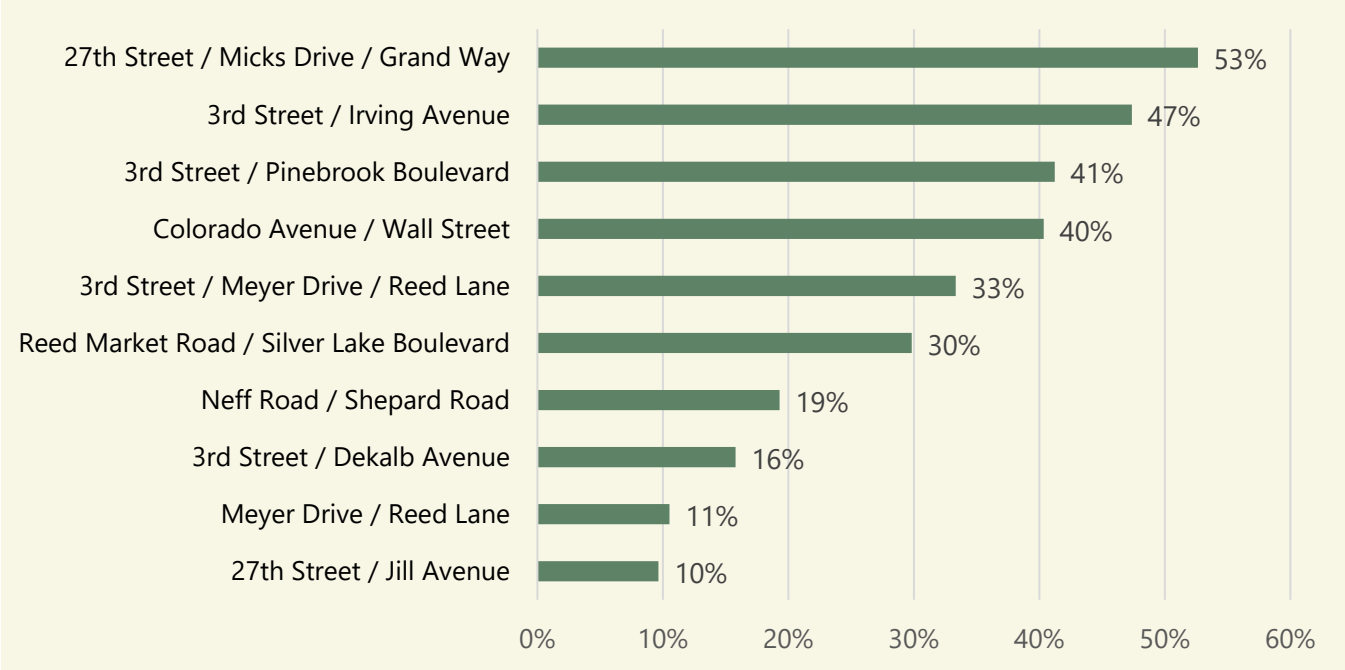
The 10 Priority Locations were chosen based on crash history, community feedback, and recent or upcoming roadway projects (Figure 7).

Figure 7: Priority Locations



The survey described each one, including how many crashes it has had, and asked participants to pick the three they thought should be addressed first. *27th Street/Micks Drive/Grand Way* was chosen most often, by 53% of people (Figure 8). *3rd Street/Irving Avenue* (47%), *3rd Street/Pinebrook Boulevard* (41%), and *Colorado Avenue/Wall Street* (40%) came next. *3rd Street/Meyer Drive/Reed Lane* (33%) and *Reed Market Road/Silver Lake Boulevard* (30%) were in the middle. *Neff Road/Shepard Road* (19%), *3rd Street/Dekalb Avenue* (16%), *Meyer Drive/Reed Lane* (11%), and *27th Street/Jill Avenue* (10%) were chosen least often.

Figure 8: Locations Participants Think Should Be Addressed First



Participants were also asked if there are other locations in Bend we should know about. Many of these were on the west side. Century Drive/Skyline Ranch Road came up most, followed by 14th Street/Galveston Avenue. Participants said these roads are hard to cross or travel along by bike or on foot.

3rd Street also came up often, including the intersections at Greenwood Avenue, Revere Avenue, Olney Avenue, Division Street, and Reed Market Road. Greenwood Avenue/Hill Street was named more than once as a dark intersection where people walking are hard to see. Other places named more than once were Reed Market Road/Pettigrew Road and the Empire Avenue and US 97 ramps.

CONCLUSION

The project team will use these results to help shape the draft TSAP, including which safety treatments and locations to recommend. Places that came up often in the comments, but are not on the priority list, will also be reviewed. The updated TSAP will be developed this fall and winter, with adoption expected in spring 2027.

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Attachment E

Bend Metropolitan Planning Organization
710 NW Wall Street
Bend, OR 97703

BMPO

MAILING ADDRESS
PO Box 431
Bend, OR 97709

PHONE
541-693-2113
Relay Users Dial 7-1-1

Fax
541-385-6676

WEB
bendoregon.gov/mpo

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Kelli Kennedy,
Program Coordinator

October 20, 2026

The Honorable Howard Lutnick
Secretary
U.S. Department of Commerce
1401 Constiution Avenue, NW
Washington, DC 20230

Re: Decennial Census of the Population of Americans; Proposed Residence Criteria and Proposed Regulations for Demographic Questions, Docket No. 260903-0005

Dear Secretary Lutnick:

I am writing on behalf of Bend Metropolitan Planning Organization (BMPO). We appreciate the opportunity to submit comments on the Census Bureau's proposed residence criteria and regulations governing demographic questions for the decennial census.

BMPO is the federally designated metropolitan planning organization (MPO) for the greater Bend area. In this role, we are responsible for carrying out the federally required metropolitan transportation planning process, including development of the Metropolitan Transportation Plan, Transportation Improvement Program, Unified Planning Work Program, Public Participation Plan, performance-based planning, and coordination with the Oregon Department of Transportation, transit agencies, local governments, special districts, and other regional partners.

BMPO shares the considerations raised by the Association of Metropolitan Planning Organizations (AMPO) in its national comments on the proposed rule. AMPO's comments address the importance of Census population and demographic data for federal funding and program requirements, transportation forecasting and modeling, MPO designations and boundary definitions, Title VI analysis, and small-area planning. We submit these comments to provide additional regional context on how the proposed changes could affect transportation planning in the Bend area.

Census population and demographic data are a foundational part of our planning work. BMPO uses these data to develop and maintain our travel-demand model, identify transportation needs, and conduct Title VI analysis.

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BMPO encourages the Bureau to enumerate and publish a complete resident-population dataset for planning purposes if the population used for congressional apportionment differs from the complete population residing in a region. Transportation systems and other public infrastructure serve the people who work, live, study, and travel in the community regardless of how they are treated for apportionment purposes. Planning agencies need population information that reflects those demands and can be used consistently at regional, local, corridor, and small-area geographies.

The proposed changes to the definition of "usual residence" may also affect regions differently. Proposed § 60.2 would use a January 3-April 1 enumeration period and consider the number of days an individual spends at a residence, together with tax records and other information. In Bend, we have seasonal residents, college students, and seasonal workers. Additional Census analysis and guidance explaining how the proposed methodology would apply to these populations would help regional planning agencies understand and account for any resulting changes.

Consistency across Census years is equally important. BMPO uses Census benchmarks to calibrate and validate travel-demand models, monitor growth trends, and determine program eligibility. Changes in Census definitions or population universes can make it difficult to distinguish actual regional growth or decline from changes caused by methodology. We encourage Census to clearly document methodology changes and, where practicable, provide comparable data that allow planning agencies to maintain continuity over time.

Census population measures may also affect transportation requirements tied to population, including MPO boundary designations, urban area population totals, funding distributions and suballocations, and program eligibility. We encourage continued coordination between Census, USDOT, and other federal agencies so transportation agencies have clear guidance regarding which population measures apply to federal programs and requirements.

BMPO also relies on demographic data for Title VI analysis, community engagement, needs assessments, travel forecasting, and grant applications. We appreciate that proposed § 70.4 would continue to allow Census to collect demographic information through the American Community Survey (ACS) and other surveys. However, the ACS is not a complete substitute for the decennial Census. The decennial Census is designed to enumerate the full population and provides a foundational population benchmark, while the ACS is a sample survey that produces estimates from a much smaller annual sample. The two products therefore serve different purposes and are not fully interchangeable, particularly for small-area analysis and long-term data continuity.

BMPO also encourages Census to clarify how proposed § 70.3 and Department Administrative Order 216-26, *Disclosure Avoidance for Statistical Products*, will operate together and what that interaction will mean for the continued availability of demographic data at the tract, block group, and other small geographic levels used in transportation planning.

Finally, nationally consistent Census data provide a common foundation that individual regions cannot easily recreate. If MPOs and other public agencies must increasingly rely on locally

developed surveys, administrative records, or independent population and demographic estimates, differences in methodology and geographic coverage could make comparisons across regions and over time more difficult. Developing replacement datasets can also require significant staff time and financial resources that would otherwise support transportation planning, project development, and implementation. Detailed data collection is expensive. For example, the Oregon Department of Transportation and the state's eight MPOs recently conducted a statewide household travel survey. The total cost of that survey was almost $5 million. The BMPO share of that cost was over $250,000, a significant sum for a small MPO.

BMPO supports the Census Bureau's efforts to establish clear and workable procedures for the decennial census. As the Bureau considers the proposed rule, we respectfully encourage the Bureau to preserve data continuity, provide a complete resident-population dataset for planning purposes, maintain reliable population and demographic products at useful geographic levels, clearly document methodology changes, and coordinate with USDOT and other federal agencies on population-based transportation requirements.

In sum, we cannot support these proposed changes because they will make the data less reliable, ultimately making our work harder and more costly. Thank you for considering these comments and the transportation planning needs of the Bend area.

Sincerely,

Signed by:
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Ariel Méndez, Chair
Bend City Councilor
amendez@bendoregon.gov

Accommodation Information for People with Disabilities & Language Assistance Services
You can obtain this information in alternate formats such as Braille, electronic format, etc. Free language assistance services are also available. Please email **accessibility@bendoregon.gov** or call 541-693-2198. Relay Users Dial 7-1-1. All requests are subject to vendor processing times and should be submitted 48-72 hours in advance of events.

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