Appendix A

Public Involvement and Communications Plan

Parametrix
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DRAFT PUBLIC INVOLVEMENT AND COMMUNICATIONS PLAN

DATE:	January 10, 2023
TO:	Casey Kaiser, City of Prineville David Amiton, ODOT
FROM:	Nadine Appenbrink, Parametrix Matt Flodin, Parametrix Ryan Farncomb, Parametrix
SUBJECT:	**DRAFT Public Involvement and Communications Plan**
PROJECT NAME:	Prineville Transportation System Plan (TSP)

Introduction

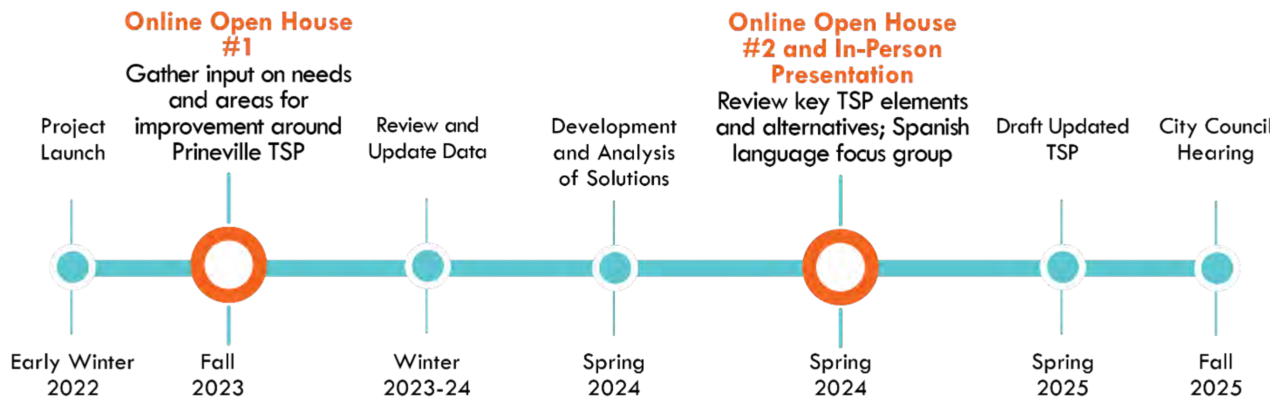
The Public Involvement and Communications Plan (PICP) summarizes public engagement goals, process, and strategies to support the Prineville Transportation System Plan (TSP) update. The PICP also ensures that project outreach and reporting is consistent with Title VI of the Civil Rights Act of 1964 and Environmental Justice Executive Order (EJEO) provisions to ensure full and fair participation by all potentially affected community members in the decision-making process.

The PICP includes specific tools and methods for effectively reaching and engaging interested parties. This memorandum also clarifies outreach timing, team roles, and responsibilities to carry out the PICP. The PICP may be updated throughout the planning process to reflect changes in community priorities or the project schedule.

Project Timeline

Figure 1 provides a high-level project schedule that summarizes project phases and highlights opportunities for public engagement at key decision points.

Figure 1. Project Timeline for Public Involvement



Public Involvement Goals

The City of Prineville and Oregon Department of Transportation (ODOT) are committed to a public engagement process that:

- **Encourages the participation of all interested parties** regardless of race, ethnicity, age, disability, income, or primary language by employing a mix of tools to reach the broadest audience possible. Outreach materials will also be translated to Spanish as necessary to encourage participation from limited-English proficiency populations.
- **Provides early and ongoing opportunities for interested parties to ask questions, raise issues, or share concerns.** Throughout the life of the project, the project website will host contact information and a comment submittal form to encourage constructive two-way communication between the project team and the public, even outside of formal public feedback periods.
- **Considers how project outcomes affect the public and vulnerable populations.** The project will ensure fair treatment so that no group of people (racial, ethnic, or a socioeconomic group) bears a disproportionate share of the negative environmental consequences resulting from a program or policy, consistent with Title VI and EJEO provisions.
- **Ensures that public contributions are considered in the decision-making process** and can influence the development of the TSP. Public feedback on TSP policies, projects, and programs will be incorporated into the planning process and reflected in relevant evaluation criteria to ensure the final TSP reflects community needs and priorities.
- **Explores trade-offs with interested parties, holds smaller-group meetings to resolve conflict if necessary, and drives toward consensus** on needs and solutions to create a lasting, well-supported TSP.

Target Audience/Participants

Participants for this project include the City of Prineville, transportation interests, neighborhood and business interests, media, emergency service providers, and the community that uses the City's transportation infrastructure. Table 1 below summarizes participants to be targeted by the public outreach process.

Table 1. Target Audience and Participants

Participant Category	Examples/Potential Contacts
Government agencies and institutions	• Prineville City Council • Prineville Planning Commission • Prineville Public Works • Crook County • ODOT • Department of Land Conservation and Development (DLCD)
Utilities	• Pacific Power • Republic Services • Prineville Water / Wastewater Department
Education and Youth	• Crook County School District • Title One and Title Six Indian Education Program • Crook County Library
Transportation providers	• Cascades East Transit • Prineville Railway • Country Cab • Prineville Taxi Company
Advocacy groups and non-profits	• Crook County VFW
Employers and businesses	• Prineville – Crook County Chamber of Commerce • Prineville Downtown Association
Medical and emergency service providers	• St. Charles Healthcare • Mosaic Medical - Prineville
Media	• KBND • Central Oregonian Newspaper • Central Oregon Daily

Participant Category	Examples/Potential Contacts
Environmental justice and equity populations	• Crook County WIC • Central Oregon Employment Solutions • St. Vincent de Paul Society of Crook County • Prineville Senior Center Charitable Trust

Environmental Justice and Title VI Compliance

Environmental Justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Consistent with the Civil Rights Act of 1964, EJEO provisions, and ODOT Region 4 *Guidelines for Addressing Title VI/EJ in Transportation Planning*, the project will actively identify Title VI populations living within Prineville and develop outreach strategies to encourage fair and meaningful participation by these populations using the following strategies:

Be inclusive of Title II, Title VI, and Environmental Justice populations within the community:

- Per ODOT Title VI Guidance, the project will identify Title II, Title VI, and EJ populations early in the planning process so demographic information can inform the public outreach planning (see demographics section below).
- The Project Advisory Committee (PAC) roster will include members from organizations that advocate for or serve low-income, minority or limited-English proficient residents.

Engage existing community organizations or advocacy groups that work with or serve Title II, Title VI, and EJ populations:

- The project will seek to partner with nonprofits and established community-based groups, in particular those that provide assistance to minorities (speak the language, are trusted spokes people, etc.), to conduct outreach as practicable. Partner organizations can co-host or promote community events (including the Spanish-language focus group) to bolster participation among traditionally underserved communities.

Meetings and Community Events (in-person and virtual/online):

- The project team will host a Spanish-language focus group to solicit feedback from Title II, Title VI, and EJ populations. Feedback will be solicited at strategic times throughout the planning process to ensure meaningful public participation in project outcomes.
- The project will collect demographic information anonymously at all public events to be added to the final report.
- Translation services and other special accommodations will be provided at all meetings upon request.

Demographics

The project team conducted a review of area demographics to inform the development of outreach strategies to reach EJ populations. Table 2 reports demographic information based on the latest American Community Survey 5-year estimates published by the U.S. Census Bureau (2016 – 2020) for the City of Prineville. Table 2 below includes demographics for environmental justice populations in Prineville, including low-income households, minority persons, older adults (65+), and youth (under 18). City demographics are compared to Crook County and Oregon. Prineville has a notably higher low-income population (44.9%) when compared with Crook County (31.6%) and the State (29.3%). Here, low income is defined as less income than 2x the federal poverty level. As well, the Hispanic/Latino percentage in the city (14.3%) is substantially higher than in Crook County overall (7.7%), and similar to Oregon (13.2%).

Table 2. Prineville TSP – Demographic Summary

Demographics	Total	%	Total	%	Total	%
	City of Prineville		Crook County		State of Oregon	
Total Population	**10,429**		**23,733**		**4,176,346**	
Minority (Not White Alone)	2,132	20.4%	2,836	11.9%	1,047,852	25.1%
Hispanic or Latino	1,487	14.3%	1,828	7.7%	552,279	13.2%
White Alone (Not Hispanic)	8,297	79.6%	20,897	88.1%	3,128,494	74.9%
Black or African American (Not Hispanic)	27	0.3%	33	0.1%	75,418	1.8%
Asian alone (Not Hispanic)	54	0.5%	70	0.3%	185,221	4.4%
American Indian and Alaska Native alone (Not Hispanic)	137	1.3%	198	0.8%	35,842	0.9%
Native Hawaiian and Other Pacific Islander alone (Not Hispanic)	58	0.6%	68	0.3%	15,614	0.4%
Some other race alone (Not Hispanic)	0	0%	0	0.0%	10,660	0.3%

Demographics	Total	%	Total	%	Total	%
Two or more races (Not Hispanic)	369	3.5%	639	2.7%	172,818	4.1%
Low-Income Population	4,644	44.9%	7,459	31.6%	1,199,723	29.3%
Youth (18 and Under)	2,380	22.8%	4,697	19.8%	867,076	20.8%
Older Adults (65+)	2,090	20.0%	5,905	24.9%	734,932	17.6%

Data Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2016-2020)

Public Advisory Committee

The City will establish and prepare committee rosters for a Public Advisory Committee (PAC) to review project materials, provide guidance to the project management team, and to provide feedback on TSP issues throughout the Project. The PAC will include a mix of technical participants and interested community members, ensuring a broad set of issues and perspectives are heard and shared across different areas of expertise. One individual may represent more than one group identified in the list of PAC members.

Meeting Schedule and Tasks

The PAC will meet four times over the course of the Project to provide input at key Project junctures that generally coincide with public involvement milestones. PAC meetings will be up to two hours in length and will be held three times virtually, with one meeting in Prineville in an ADA-accessible meeting space. Accommodations for virtual participation will be made as needed. Up to two members of the Consultant team will attend each meeting. City staff will take notes at each meeting.

Table 3 below summarizes the anticipated meeting schedule and general topics that will be covered with the PAC over the course of the project. Specific discussion agendas will be developed closer to the timing of the meetings. Agenda topics may shift depending on committee priorities and concerns.

Table 3. PAC Meeting Schedule and Agenda Topics

Meeting	Timing	Topics Discussed
PAC Meeting #1	March 2023	Introduction to the TSP process, plan goals, objectives, and outcomes
PAC Meeting #2	July 2023	Review existing and future conditions findings, discuss community needs and priorities

Meeting	Timing	Topics Discussed
PAC Meeting #3	November 2023	Review draft solutions and funding options
PAC Meeting #4	March 2024	Discuss Draft TSP, policies, and standards

Table 4 summarizes PAC meeting tasks to be carried out by the project team.

Table 4. PAC Meeting Schedule and Agenda Topics

Task	Timing	Responsible	Review
Develop draft and final technical and community rosters	6 weeks prior to first Meeting	City	ODOT and Parametrix
Schedule meetings	4 total – 1 month prior to each meeting	City	
Draft meeting materials and agenda	Due three weeks prior to each meeting	Parametrix	City and ODOT
Finalize meeting materials	Due one week prior to each meeting	Parametrix	City and ODOT
Prepare meeting summaries	4 total - Due two weeks after each meeting	Parametrix, based on City notes	City and ODOT

Table 5 lists the PAC roster by organization and name.

Table 5. Public Advisory Committee (PAC) Roster

Agency / Organization	PAC Member
City of Prineville	
City of Prineville Public Works / Engineering representatives	Casey Kaiser – Public Works Director ckaiser@cityofprineville.com Jacob Zeigler – Public Works Superintendent jzeigler@cityofprineville.com Justin Severance – Streets Supervisor jseverance@cityofprineville.com
City of Prineville City Council	Scott Smith – Prineville City Council Member scott.smith@cityofprineville.com

Agency / Organization	PAC Member
City of Prineville Police / Crook County Fire and Rescue	Russ Deboodt – Division Chief – Fire Life Safety rdeboodt@ccf-r.com
City of Prineville Planning Department	Joshua Smith – Planning Director jsmith@cityofprineville.com
County and Region	
Crook County Health Department	[City to fill out]
Crook County Planning Department	Will Van Vactor – Community Development Director
Central Oregon Intergovernmental Council (Cascades East Transit)	[City to fill out]
Oregon Department of Land Conservation and Development	[City to fill out]
ODOT	
ODOT Regional Planner / Agency PM	David Amiton David.amiton@odot.oregon.gov
ODOT Active Transportation and Transit	Chris Cheng Chris.cheng@odot.oregon.gov
ODOT Region 4 Transit	Jovi Arellano Jovi.arellano@odot.oregon.gov
ODOT Traffic	Dan Serpico Daniel.s.serpico@odot.oregon.gov David Hirsch David.hirsch@odot.oregon.gov
ODOT District	Jim Scholtes James.m.scholtes@odot.oregon.gov
ODOT Roadway	Brian Paslay Brian.d.paslay@odot.oregon.gov
ODOT Region Access Management Engineer	David Knitowski David.knitowski@odot.oregon.gov
Transportation Planning and Analysis Unit (TPAU)	Jinxiang Ren **Jinxiang.Ren@odot.oregon.gov**
Government and Institutions	
City of Prineville Railroad	Matt Wiederholt – General Manager mwiederholt@cityofprineville.com
Prineville Airport	Kelly Coffelt – Airport Manager kcoffelt@cityofprineville.com
Environmental Justice and Equity	
Transportation disadvantaged	[City to fill out]
Latino Community Association of Central Oregon	[City to fill out]
Prineville Aging and People with Disabilities (APD)	[City to fill out]
Education and Youth	
Crook County School Districts	[City to fill out]
Advocacy groups and Nonprofits	

Agency / Organization	PAC Member
Bicycle and pedestrian advocates	[City to fill out]
Local freight industry	[City to fill out]
Economic Development of Central Oregon	[City to fill out]
Agricultural community	[City to fill out]
Employers and Businesses	
Local businesses	[City to fill out]
Chamber of Commerce	Kim Daniels – Executive Director kim@prinevillechamber.com

Public Involvement Strategies, Tools, and Methods

This section of the PICP describes general strategies, tools, and methods for engaging the public as part of the TSP update process.

The PICP recognizes that people are busy. While in-person open houses are a useful engagement tool, asking people to attend traditional public meetings only attracts a small subset of residents and interested parties. Shift workers and others without 9-5 schedules can find it hard to make evening meetings and open houses. The project team will employ the following outreach strategies to maximize participation by a broad range of Prineville residents and visitors:

- **Going where people are.** The project team will target outreach to places where people are already gathering, like existing meetings and events such as the Old Fashioned Fourth celebration, farmer's market, grocery stores, the library, and schools. This strategy results in efficient engagement opportunities with the public. Passive feedback opportunities like paper fliers and mail-in questionnaires can yield valuable feedback.

- **Use technology (but not exclusively).** Many people respond well to online feedback tools like interactive maps and surveys – they're a great way to efficiently share information with a broad audience and give participants a convenient way to provide input from the comfort of home. However, the PICP also recognizes that many are unwilling or unable to participate online due to technological, language, or other limitations. The PICP will balance the use of technology with lower-tech tools like project fliers, printed surveys, phone calls, and in-person meetings.

- **Explain concepts simply.** When talking with the community, the project team will use plain language to describe transportation concepts, needs, policies, and solutions. Whenever possible, the team will utilize graphics, maps, and photographs to make transportation concepts understandable to the broadest range of interested parties possible. Plain language also helps minimize participant frustration and avoids wasted time explaining complex planning concepts.

Engagement Tools

The following tools and activities will help members of the Prineville community to learn about and provide feedback throughout the TSP update process:

Project Fliers

Parametrix will create two project flyers for use during key points in the planning process. The City will print and distribute flyers to key locations in the City; ODOT will post the flyers to the project website. The fliers will provide overview information about the project, key community issues, and information about upcoming public outreach opportunities. Parametrix will provide English and Spanish versions for both flyers.

Project Website

ODOT Region 4 Community Affairs will host a project website for the Prineville TSP update and periodically update it. The website will provide general information about the project including a project overview, outreach schedule, contact information, and opportunities for feedback, and will provide a prominent link to the virtual open houses (which will be hosted on a platform such as ESRI StoryMaps). Parametrix will help with developing content for the updates.

Virtual Open Houses

The project team will develop two virtual open houses that provide information about the project, an online feedback map, and an online survey. Parametrix will create an English and Spanish version for both open houses.

The online feedback map will be hosted on a web-based mapping platform such as ArcGIS Online StoryMaps or Wikimapping.com. The map will allow users to drop pins into a map and write comments about TSP topics of concern in Prineville.

The survey will be hosted on a similar service such as Survey123 or TypeForm.com. Surveys will consist of a mix of open-ended and multiple-choice questions about the TSP.

Links and access instructions for the virtual open house, online feedback map, and survey will be published to the project website.

Public Project Presentation

Parametrix will conduct one in-person public project presentation summarizing key Project elements and alternatives. Parametrix will prepare and present information utilizing display boards and a PowerPoint presentation (approximately 15-20 slides), and answer questions afterwards. The Public Project Presentation will be held on a weekday evening and will offer the opportunity for community members to bring their children. Up to two Parametrix staff shall attend the presentation.

Spanish Focus Group

During the same week as the public project presentation, Parametrix will hold a Spanish-language focus group to gather input from the Spanish-speaking community on needs and solutions for the City's TSP update. This may be in-person or virtual (Zoom or similar), depending on which will better attract participation. Parametrix and the City will coordinate to identify Title VI and Environmental Justice populations by reaching out to local organizations and attracting interested parties to attend presentations and participate in the focus group.

Public Presentation Summary

The project team will prepare a brief summary to document feedback after the public project presentation. The summary will be in PowerPoint format and describe findings and high-level themes emerging from the public outreach process via the virtual open house and public presentation. Public outreach findings will also be shared with the PAC to inform their discussions throughout the project.

Outreach Plan: Timing, Roles and Responsibilities

The following table describes the public outreach milestones for the project. Timing for the milestones is subject to change based on project needs. In-person meeting locations will be accessible for people with disabilities and offer opportunity for community members to bring children. Meeting notices will include an offer to make accommodations for people with disabilities with sufficient advance notice, with contact notification for such requests.

Table 6 summarizes the key outreach events.

Table 6. Outreach Events

	Virtual Open House 1	Virtual Open House 2	Public Project Presentation	Spanish Focus Group
Purpose / Topic	Engagement opportunity for community to provide input on existing conditions and project goals	Engagement opportunity for community to provide input on potential transportation solutions	Engagement opportunity for community to provide input on potential transportation solutions	Engagement opportunity for community to provide input on potential transportation solutions
Timing	Summer 2023	Late Fall 2023	Late Fall 2023	Late Fall 2023
Format	Online	Online	In-person	In-person or online
Engagement Tools	StoryMap platform: information about the TSP process;	StoryMap platform: project descriptions including maps and	Display boards, PowerPoint presentation,	Spanish-language facilitated conversation

	Virtual Open House 1	Virtual Open House 2	Public Project Presentation	Spanish Focus Group
	online feedback map; survey questionnaire	graphics; online feedback map; survey questionnaire	Spanish-language focus group, childcare	introducing potential solutions and soliciting feedback
Communications Tools	Project flyer, project website	Project flyer, project website	Project flyer, project website	Coordination with community-based organizations serving Spanish-speaking community

Table 7 details the tools that will be employed during this project and the roles and responsibilities to make the outreach milestones successful.

Table 7. Outreach Tasks and Responsibilities

Task	Timing	Responsibilities	Content Review
Project Fliers (English and Spanish)	Draft: 5 weeks prior to event Final: 3 weeks prior to event Distribute: 2 weeks prior to event	Prepare: Parametrix Spanish translation: Parametrix Distribute: City	Parametrix
Obtain Public Project Presentation venue	Venue reservation 4 weeks prior to event	Parametrix, with assistance from City	
Public Project Presentation (handouts, presentation visuals, sign in sheet, comment form)	Draft materials: 3 weeks prior to event Final: 1 week prior to event	Scheduling: City Prepare and conduct: Parametrix	City, ODOT
Public Presentation Summary	Draft: 1 week following Public Project Presentation	Parametrix	City, ODOT
Virtual Open House (#1)	Draft OOH content: 2 weeks prior to event Final: 3 days prior to event	Parametrix	City, ODOT

Task	Timing	Responsibilities	Content Review
Virtual Open House (#2)	Draft OOH content: 2 weeks prior to event Final: 3 days prior to event	Parametrix	City, ODOT
Conduct up to 4 PAC Meetings, Create Presentation Materials	Draft materials: 2 weeks prior to meeting Final: 3 business days prior to each meeting	Scheduling: City Develop materials and conduct: Parametrix	City, ODOT

Appendix B

Plans, Policy, and Funding Review

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TECHNICAL MEMORANDUM

DATE:	April 7, 2023
TO:	City of Prineville
FROM:	Ryan Farncomb, Nadine Appenbrink, Matthew Flodin – Parametrix Robin Scholetzky – UrbanLens Planning
SUBJECT:	Revised Technical Memo #1: Updated Plans, Policy, and Funding Review
CC:	David Amiton, ODOT
PROJECT NUMBER:	274-2395-121

PLANS, POLICY, AND FUNDING REVIEW

Introduction

This memorandum provides plan and policy context for the *City of Prineville Transportation System Plan* (TSP) *Update*, consistent with the most recent Oregon Department of Transportation (ODOT) *Transportation System Plan Guidelines*.[1] This review summarizes relevant regional, state, county, and local plans, policies, and documents, including where changes are needed to comply with state plans, policies, or regulations. The project team reviewed the following documents:

Local Plans, Policies, and Other Documents

- City of Prineville Transportation System Plan (2013)
- City of Prineville Land Use Code (Chapter 153) (updated 2022)
- Cascades East Transit Regional Transportation Plan (adopted 2020)
- Third Street Redevelopment Plan (2017)
- City of Prineville Standards and Specifications (updated 2013)
- OR Highway 126 Corridor Facility Plan (2012)
- Central Oregon Rail Plan (2009)
- City of Prineville Urban Area Comprehensive Plan (2007)
- Prineville / Crook County Airport Master Plan (2003)
- City of Prineville Downtown Enhancement Plan (1997)
- City of Prineville Current and Past Transportation Budget
- City of Prineville Current and Historic Funding Sources

[1] https://www.oregon.gov/odot/Planning/TSP-Guidelines/Pages/default.aspx

State Plans and Policies

- Oregon Statewide Transportation Improvement Program (STIP)
- Oregon Transportation Plan (OTP) (2006)
- Oregon Freight Plan (OFP) (2011, updated 2017)
- Oregon State Rail Plan (OSRP) (2020)
- Oregon Transportation Planning Rule (TPR)
- Oregon Highway Plan (OHP) (and amendments) (1999-2022)
- Oregon Public Transportation Plan (OPTP) (1997, updated 2018)
- Oregon Bicycle and Pedestrian Plan (OBPP) (2016) & Design Guide (2011, updated 2016)
- Oregon TSP Guidelines (2008, updated 2020)
- Oregon Highway Design Manual (2012, updated 2023)
- Oregon Transportation Safety Action Plan (TSAP) (2016, updated 2021)
- Oregon Aviation Plan (2007, updated 2018)

State Statutes and Regulations

- OAR 734-051-4010 – Access Management Standards for Approaches – General Provisions
- HB 3379 Administrative Rule (2010)

County Plans and Policies

- Crook County TSP (2005, updated 2017)
- Crook County Comprehensive Plan (last amended 2002)
- Crook County Parks and Recreation District Master Plan (2007, updated 2021)

Other Policies and Guides

- National Association of City Transportation Officials (NACTO) Small Town and Rural Design Guide
- U.S. Department of Transportation (USDOT) Policies on Environmental Justice and related policies

PLANS AND POLICY REVIEW

This section summarizes plans, policies, and other documents that have an impact on the transportation system in Prineville. The plans and policy review is presented as a series of summary tables organized by jurisdiction. The tables include an overview of a given document, a brief description on the relevance to the TSP update, and any recommended policy or planning updates to be addressed by the TSP process.

The plans and policy review is organized by jurisdiction, beginning with local plans and policies, before moving on to state, county, and national/practice-wide plans, policies, and documents. Recommended updates to the City's development code to achieve compliance with the TPR or other state statutes and regulations are addressed in the Code and Regulatory Review section of this memorandum.

Local Plans, Policies, and Other Documents

Table 1-1. Local Plans, Policies, and Other Documents

Plan, Policy, or Document	Relevance to the TSP	TSP Update Recommendation
City of Prineville Transportation System Plan (2013)	• This is the existing TSP.	• Assess projects from the 2013 TSP for inclusion or removal of the 2025 updated TSP.
City of Prineville Land Use Code (Chapter 153) (updated 2022)	• *See the Code and Regulatory Review section in the memorandum.*	
Cascades East Transit Regional Transportation Plan (adopted 2020)	• This plan provides a structure for transit provision and related services in Central Oregon through 2040. This structure will provide a baseline for further policy discussions and establish what the most pressing needs and opportunities are. • Future funding allocations are divided into near-term (2025), mid-term (2030), and long-term (2040) enhancements.	Future transit needs and desires for Prineville include: • New Community Connector route for Prineville-Redmond-Bend. • New fixed-route/deviated route service. • Vanpools to dispersed employment sites. • Common deviated fixed-route stop in Prineville. • Potential future flex-route. • Route 26 modifications: increasing frequency, adding an evening trip, re-routing to serve Redmond Airport and Central Oregon Community College, interlining with Route 24 for one-seat trip to Bend, adding weekend service, adding midday service 2-3 days a week, increasing local circulation in Prineville via Dial-A-Ride or Community Connector. • Establish small scale mobility hub in Prineville at Thriftway or Ray's by 2030. • Expand maintenance facility to store 2 vehicles by 2040. • Add 5 transit stops by 2025 and 5 more by 2030. • Modify development code to require coordination from developers on provision of transit stops, orientation of building features towards transit, and parking measures to increase transit access.
Third Street Redevelopment Plan (2017)	• This plan provides a framework for redeveloping Third Street from the Crooked River to the east City limits to form a cohesive appearance and function that capitalizes on the historic buildings and open spaces. • Amenities to be constructed include and are not limited to: sidewalks, street lights, and bicycle racks.	• Improvements on Third Street should concurrently incorporate mandated and recommended enhancements.

Plan, Policy, or Document	Relevance to the TSP	TSP Update Recommendation
City of Prineville Standards and Specifications (updated 2013)	• These standards establish guidelines and regulations for public works improvements in the City of Prineville. • Guidelines pertaining to this TSP update include roadway standards such as slope, sight distance, road crown, curb return radii, street striping, and storm sewer design.	• Final design and implementation of projects in the TSP update should adhere to the Standards and Specifications for design and construction.
OR Highway 126 Corridor Facility Plan (2012)	• "Establishes a long-term vision for OR Highway 126" by addressing congestion, improving safety, supporting economic development and population growth, and serving statewide mobility needs.	• Refer and conform to recommendations in the Facility Plan if changes to OR 126 are carried out. Projects within Prineville include: ➢ Airport Road / Millican Road – Reroute to Tom McCall Road ➢ Tom McCall Road – Interchange ➢ Tom McCall Road to Prineville "Y" – Widen highway to four lanes ➢ O'Neil Highway – Reroute to US 26 ➢ Prineville "Y" – Signal or multilane roundabout
Central Oregon Rail Plan (2009)	• This plan addresses "various rail related safety, congestion, freight mobility, and economic development issues for Central Oregon." Also notes the importance of maintaining rail service by Class 1 haulers to preserve regional economic strength. • Recommends using City of Prineville's railroad to enhance freight mobility, centralize pick-up and drop-off locations, and coordinate trucking to rail transfers.	• Incorporate relevant goals from Central Oregon Rail Plan for changes to rail procedures and related infrastructure as appropriate. These goals include strategies to improve utilization and take advantage of unique benefits of the City of Prineville Railroad: ➢ Take advantage of and maximize opportunities with the area's shortline railroad, City of Prineville Railroad. ➢ Prioritize and encourage support of trucking freight to COPR Freight Depot for transfer to rail mode. ➢ Identify support infrastructure which will be needed to support rail-served sites and begin to incorporate this infrastructure in transportation system plans. ➢ Investigate terminal development and grant funding opportunities (which would include multimodal) at Prineville Junction.

Plan, Policy, or Document	Relevance to the TSP	TSP Update Recommendation
City of Prineville Urban Area Comprehensive Plan (2007)	• Provides direction for "directing and managing growth" in Prineville; establishes that "community goals become the foundation" for local government's decision-making. • Contains guidance on downtown revitalization, urban land use policies, enhancing local economic growth, creating a functional, efficient, and safe transportation system, strengthening all residential areas through proximate access to amenities with inclusion of multimodal facilities, and coordinating public services with provision for urban facilities.	• Align the TSP with the policies, problems, and recommendations of the Urban Area Comprehensive Plan in developing updates to the Prineville transportation system. ➢ Create a functional transportation system to maximize and extend the life of transportation facilities and improve livability throughout the Prineville community. ➢ Create a supportable method for determining and monitoring street capacity and service levels needed for a safe and efficient transportation system. ➢ Create a supportable method for determining adequate and consistent transportation impact analyses, mitigation procedures, and transportation improvement options. ➢ Develop a supportable and sustainable financing method for funding necessary transportation system master plan improvements.
Prineville / Crook County Airport Master Plan (2003)	• This plan details the role the Prineville Airport plays in the region's transportation network and economic vitality. • Recommends improving airport facilities and adjacent roads, as well as forecasting aviation activity to determine future facility needs.	• Integrate Plan's recommendations for improvements to aviation-related facilities, ranging from access roads to new buildings. Goals include: ➢ Enhancing safety and security ➢ Preserve and protect investment ➢ Support economic growth ➢ Accommodate demand
City of Prineville Downtown Enhancement Plan (1997)	• Identifies existing plans that affect the downtown core and recommends improvements to increase comfort and safety for those walking and bicycling, establish guidelines for sidewalk width, and provide access for those traveling by car while limiting vehicle access where applicable.	• Ensure construction of TSP projects conforms to guidelines and demonstrates progress towards fulfilling established goals in Downtown Enhancement Plan. ➢ Focus on improving sidewalks, crossings, access management and driveways.
City of Prineville Current and Past Transportation Budget	• *See Table 1-2 City Transportation Revenue.*	• Current budget provides guide for current transportation budget and likely future funding for projects in the updated TSP.
City of Prineville Current and Historic Funding Sources	• *See Table 1-3 City Transportation Fund Revenues by Source.*	• Note historic funding patterns and reconcile desired transportation projects to adopted budgets.

Table 1-2. City Transportation Revenue

	FY 17-18	FY 18-19	FY 19-21	FY 21-22	FY 22-23	Current Balance (May 2023)
Transportation SDC Fund Resources	$1,055,005	$1,866,752	$4,060,653	$1,804,245	$2,151,745	$11,042,659
Transportation SDC Fund Expenditures	$99,419	$365,999	$4,060,653	$1,804,245	$2,151,745	N/A
Transportation Fund Resources	$1,825,901	$2,396,790	$3,821,758	$2,116,292	$3,975,392	N/A
Transportation Fund Expenditures	$1,494,543	$2,007,489	$3,821,758	$2,116,292	$3,975,392	N/A

Source: City of Prineville Adopted Biennial Budget, July 2021 – June 2023

Table 1-3. City Transportation Fund Revenues by Source

	FY 17-18	FY 18-19	FY 19-21	FY 21-22	FY 22-23
Inter-governmental	$968,081	$1,315,073	$1,962,700	$1,037,600	$2,116,700
Franchise Fees	$173,000	$430,000	$665,000	$349,000	$709,000
Interest	$3,185	$5,778	$10,000	$1,000	$2,000
Miscellaneous	$11,878	$14,581	$28,000	$19,000	$38,000
Transfers from Other Funds	$400,000	$300,000	$700,000	$400,000	$800,000

Source: City of Prineville Adopted Biennial Budget, July 2021 – June 2023

State Plans and Policies

Table 2. State Plans, Policies, and Statutes

Plan, Policy, or Document	Relevance to the TSP	TSP Update Recommendation
Oregon Statewide Transportation Improvement Program (STIP 2021-2024)	• Oregon's four-year transportation capital improvement program. The STIP documents funding sources and implementation schedules for transportation improvement projects and programs throughout the state. • The STIP divides projects and programs into two broad categories: Fix-it and Enhance. Fix-it activities fix or preserve the transportation system, while Enhance activities enhance, expand, or improve the transportation system.	Prineville's current projects in the 2021 - 2024 STIP include: • Constructing approximately 3.7 miles of multi-use trail in Barnes Butte Recreational Area. ➢ Funding through "Other" phase for total of $469,642. ➢ "Other" phase to take place in 2022; scheduled completion in early Fall 2023. • Designing future construction of ADA-compliant curb ramps along OR 126 and U.S. 26. ➢ Funding through "Prelim. Engineering" phase for total of $4,642,700. ➢ "Construction" is last phase to take place; scheduled for 2024. • Installing upgrades on U.S. 26 from Meadow Lakes Dr – Combs Flat Rd which include signs, signals, storm system, pavement preservation, and sidewalk/crosswalk and ADA improvements. ➢ Funding through "Prelim. Engineering," "Right of Way," "Utility Relocation," and "Construction" phases for total of $10,584,301. ➢ "Construction" is last phase to take place; scheduled for 2023 following PS&E completion. • Projects not completed before the TSP update should be included in the updated Prineville TSP to ensure synchronicity.
Oregon Transportation Plan (OTP) (2006)	• A 25-year plan that provides policy direction and a framework for prioritizing transportation improvements in Oregon. • Seeks to meet transportation challenges of the state through maintaining assets, investing in technology, integrating transportation and land use, and integrating transportation system across jurisdictions	• The OTP is currently being updated and is scheduled to be adopted in early 2023. The Prineville TSP should adhere to the policies and direction of the updated OTP.
Oregon Freight Plan (OFP) (2011, updated 2017)	• Identifies challenges facing Oregon's freight system including system operation and development, safety, communications, environmental considerations, and funding. • Implementation actions to improve the freight system include working with cities and counties to consider the freight system in transportation planning, as well as developing performance measures to prioritize investments in freight improvements.	• Consider strategies for better coordinating land use and transportation planning decisions with freight needs.

Plan, Policy, or Document	Relevance to the TSP	TSP Update Recommendation
Oregon State Rail Plan (OSRP) (2020)	• One of several statewide transportation mode and topic plans that refine, apply, and implement the long-range vision of the OTP. • Addresses needs in the statewide rail system, including both passenger and freight rail modes. Also includes example projects, organized by type.	• Consider the goals, policies, and example projects established by the OSRP. • Consider needs and conditions of the Prineville Railway as relates to transportation and industrial development.
Oregon Transportation Planning Rule (TPR)	• *See the Code and Regulatory Review section below for more information.*	
Oregon Highway Plan (OHP) (and amendments) (1999-2022)	• A functional element of the OTP. The OHP establishes policies and investment strategies for Oregon's state highway system over a 20-year period and refines the goals and policies found in the OTP. • Emphasizes efficient management of the highway system to increase safety and to extend highway capacity, partnerships with other agencies and local governments, and the use of new techniques to improve road safety and capacity.	• Policies in the OHP must be considered for any improvements, modifications, or policies that would affect U.S. 26, OR 126, OR 370, and OR 380 in the City of Prineville. OHP policies provide guidance in developing recommended improvements that would impact the accessibility, mobility, or function of each highway. • OHP mobility standards are applicable to U.S. 26, OR 126, OR 370, and OR 380. OR 27 is not under OHP mobility standards because it is owned by the City of Prineville within the City Limits. • The OHP will be updated as soon as the new Oregon Transportation Plan is adopted, anticipated in early 2023.
Oregon Public Transportation Plan (OPTP) (1997, updated 2018)	• One of several statewide transportation mode and topic plans that refine, apply, and implement the long-range vision of the OTP. • Establishes goals for public transportation in Oregon. • Provides guidance for the development of transit, rideshare, and transportation demand management services over a 20-year period. • Provides technical information on public transportation standards and needs that assist communities preparing the TSPs required under the TPR and responds to TPR requirements for per capita reductions in vehicle miles traveled in Oregon's metropolitan communities.	• Consider the public transportation goals of the OPTP in developing policies and plans for the public transportation system.
Oregon Bicycle and Pedestrian Plan (OBPP) (2016) & Design Guide (2011, updated 2016)	• Adopted in 2011 as an appendix to the *Oregon Highway Design Manual* and serves as a modal element of the OTP. Provides guidance for planning, design, and operation of facilities for bicycle and pedestrian travel. • Contains standards and designs for bicycle and pedestrian facilities on state highways, as well as for a variety of roadway types and land uses.	• Consider standards and designs within the OBPP when proposing pedestrian and bicycle projects on state facilities within Prineville.
Oregon TSP Guidelines (2008, updated 2020)	• Step-by-step guidance for TSP preparation emphasizes the linkage between local needs, the availability of transportation funding, and conformity with the applicable elements of the TPR and the OTP.	• Conform to the recommendations and guidance provided in the updated 2020 TSP guidelines.

Plan, Policy, or Document	Relevance to the TSP	TSP Update Recommendation
Highway Design Manual (2012, updated 2023)	• Provides guidance for the design of new construction, major reconstruction, resurfacing, restoration, and rehabilitation of state roadways. • Sets guidance and design standards for urban transportation facilities, including vehicle and multimodal facilities. • Supports better modal integration in urban contexts through urban design guidance.	• Conform to the recommendations and guidance provided in the Highway Design Manual Update for state highways within the City – U.S. 26, OR 126, OR 370, and OR 380. • Urban design guidance may support greater flexibility for improving modal integration on U.S. 26, OR 126, OR 370, and OR 380. The TSP update will consider the appropriate urban contexts and corresponding guidance for these roadways. • If needed, consider alternative roadway standards and coordinate with ODOT to obtain necessary approvals, if practicable.
Oregon Transportation Safety Action Plan (TSAP) (2016, updated 2021)	• An element of the OTP that provides the long-term vision of zero deaths and life-changing injuries and provides goals, policies, and strategies to work toward this vision.	• Consider TSAP long-term goals and policies for transportation safety. • Consider the TSAP Emphasis Areas framework to help characterize safety issues in Prineville.
Oregon Aviation Plan (2007, updated 2018)	• A comprehensive overview of Oregon's aviation system that assesses existing airport infrastructure, economic benefits of the aviation industry, and significance of each airport.	• Consider and comply with standards in OAP when evaluating Prineville Airport.

State Statutes and Regulations

Table 3. State Statutes and Regulations

Plan, policy, or document	Relevance to the TSP	TSP Update Recommendation
OAR 734-051-4010 – Access Management Standards for Approaches – General Provisions	• Applies to approaches to state highways. Cross references relevant standards for infill development, redevelopment, interchange construction, modernization, or other roadway projects. • Includes provisions for private approaches and cross references standards for spacing distance, sight distance, safety, and other considerations (-4020).	• Comply with rule when considering changes to U.S. 26, OR 126, OR 370, and OR 380.
HB 3379 Administrative Rule (2010)	• An administrative rule that establishes an application process that local governments can use for economic development projects if unable to meet funding or timing requirements of the Transportation Planning Rule (TPR) related to state highways.	• This rule provides flexibility in meeting state obligations for local projects. Options Prineville could apply for include time extensions to meet TPR requirements, alternate means of funding, and adjustable traffic performance measures.

County Plans and Policies

Table 4. County Plans and Policies

Plan, Policy, or Document	Relevance to the TSP	TSP Update Recommendation
Crook County Comprehensive Plan (last amended 2002)	• The comprehensive plan guides management of growth, implementation of regulations, and balancing of resources within Crook County. • Provides policies to provide public facilities that support urban expansion.	• Consider comprehensive plan goals and policies as applicable, for example: ➢ Supply more bicycle paths in Prineville to facilitate recreation. ➢ Encourage pedestrian and bicycle movement as an alternative to motor vehicle travel. ➢ Provide access to arterials and collectors for developments where none exists.
Crook County Parks and Recreation District Master Plan (2007, updated 2021)	• Details the desired vision for parks and recreation in Crook County, with a focus on how public recreation facilities and programs can stimulate healthy lifestyles, a strong economy, and a cohesive identity. • Recommends strategies to augment existing assets based on key community needs, including park acquisition and natural areas and trails.	• Evaluate relevant projects that build proposed parks and natural area system and enhance residents' recreational needs, such as: ➢ Shared-use trails to connect parks to downtown. ➢ Expansions to singletrack mountain biking network.
Crook County TSP (2005, updated 2017)	• This TSP establishes goals for Crook County's transportation needs through 2036 and provides a framework to both manage current facilities and plan for new ones. • Outlines a variety of objectives and funding mechanisms for projects related to roadways, freight, safety, pedestrians, bicycling, transit, bridges, and air, rail, water, and pipelines.	• County roadways that are changed within the UGB should maintain consistency with Prineville's roadway standards. • Crook County's transportation infrastructure should provide linkages to key destinations in Prineville and surrounding counties. • Projects include expanding access to rural residential areas, analyzing reconstruction of U.S. 26 railroad bridge, widening roads and constructing multiuse trails to expand bicycle access, installing wayfinding signage, and raising transit service frequency and length.

Other Policies and Guides

Table 5. Other Policies and Guides

Plan, Policy, or Document	Relevance to the TSP	TSP Update Recommendation
National Association of City Transportation Officials (NACTO) Small Town and Rural Design Guide	• Provides design information for a variety of multimodal facility types applicable to small town and rural settings, categorized by their degree of separation from the motor vehicle travel lanes. • Defines facility design standards based on prevailing speeds and volumes of motor vehicle traffic. • Not all design features are currently approved for use in the 2009 *Manual on Uniform Traffic Control Devices* (MUTCD), but the Federal Highway Administration (FHWA) intends to include NACTO's design features in the next version of the MUTCD.	• Consider the guide during development of bicycle and pedestrian improvement projects. • Consider the guide when updating city design standards.
U.S. Department of Transportation (USDOT) Policies on Environmental Justice and related policies: • Title VI of the Civil Rights Act (1964) • Title 49 of the Code of Federal Regulations (CFR) Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964 • Executive Order 12898 – Federal Actions to Address Environmental Justice to Minority Populations and Low Income Populations • Executive Order 13166 – Improving Access to Services for Persons with Limited English Proficiency • USDOT Order 5610.2 – Order to Address Environmental Justice in Minority Populations and Low -Income Populations	• USDOT environmental justice (EJ) policies are found in the USDOT *Final Order to Address Environmental Justice in Minority Populations and Low Income Populations* (59 FR 7629) which mandates that transportation projects or programs that are public do not disproportionately impact low -income or minority populations. These policies also ensure fair participation in project processes by low income and minority populations and fair distribution of project benefits. • Additional guidance is provided in FHWA Order 6640.23A, *FHWA Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, as well as in the FHWA 2015 *Environmental Justice Reference Guide*.	• The public involvement and communications plan for this TSP update will ensure compliance with EJ rules through the following actions: ➢ Identify EJ populations residing and working within Prineville. ➢ Target outreach to EJ populations using translated materials and accommodations, a targeted Latino Community event, and accessible print and web materials. ➢ Collect anonymized demographic information at all public input junctions to track representation of EJ populations in the public process. ➢ Partner with non-profits and community-based organizations that directly serve or work with EJ populations. ➢ The Project Advisory Committee will seek to represent issues and needs specific to EJ populations.

CODE AND REGULATORY REVIEW

City of Prineville Development Code Audit

This section compares Oregon's Transportation Planning Rule (OAR 660-012-0060) to the relevant policies in the Prineville Land Use Code to determine whether current code language complies with the TPR. This review also includes areas for City discussion and, where necessary, recommendations for amending the City's code to address TPR requirements.

This audit is focused on specific sections of the City's code and identifies sections that should be addressed in code updates later in the planning process, and builds on the recommendations completed in the previous TSP update in 2013.

City of Prineville Land Development Code, Chapter 153

Chapter 153 is the Zoning, Subdivision, Partitioning and Land Development Ordinance for the City of Prineville, Oregon. This ordinance implements the goals and policies of the City's Comprehensive Land Use Plan and establishes zoning districts within the City. When adopted, the TSP update will be incorporated by reference into the ordinance. The TSP update will consider code amendments pertaining to transportation facilities, access, and procedural requirements as part of the update process.

Transportation Planning Rule

The TPR implements Statewide Planning Goal 12 (Transportation), which is intended to promote the development of safe, convenient, and economic transportation systems designed to maximize the benefit of investment and reduce reliance on automobiles.

Summary of Prior Code Changes from 2013 Transportation System Plan Update

The City of Prineville completed a full update of its Land Development Code in 2011. The highlights of these changes as reported as part of the November 2013 Transportation System Plan update included the following:

1. A Mix of Uses

- Allowing and encouraging mixed uses via the development of a mixed-use zone with both an employment mixed-use zone (with a focus on industrial development with commercial and residential development scaled to support it) and a commercial mixed-use zone (focus on mixing residential and commercial development).
- Requiring transit stops to be considered in the newly created high density and mixed-use zones.
- Additional provisions included flexibility for upper-level residential in commercial areas and the ability to provide for home occupations in residential areas located along collector and arterial streets.

TPR Reference(s): None; although all of these provisions contribute to opportunities for convenient development, which can reduce reliance on automobiles and encourage multimodal opportunities.

2. Providing for Alternative Modes

- Requiring bike parking with new commercial and industrial development and providing some vehicle parking relief for additional bike parking. Although a covered bicycle parking area is required for new development in the R-5 zone, the City should also consider adding required bicycle parking for multifamily development. (See Section 153.049.C.9)

- Requiring sidewalks in industrial areas. (See Section 153.060.H)

TPR Reference: OAR 660-012-0045(3)(a)

3. Requirements for a Transportation Impact Study/Analysis

- The 2013 Transportation System Plan update noted that the City does reference Transportation Impact Analyses within its Land Development Code when applying the Mixed Use Zone. However, the requirements of the traffic impact analysis (TIA) were located in the Transportation System Plan.

TPR Reference: OAR 660-012-0045(2)(b)

4. Permitting of Transportation Improvements

- The City has included transportation improvements within the Land Development Code (Section 153.121 Exception, Public Street/Highway Improvement). This includes a wide range of highway improvement activities as permitted outright in all zones which are exempt from local permit requirements, including the installation of additional lanes and pedestrian and/or bikeways within a highway right-of-way. The City also included the provision for a *consolidated review* in Section 153.012. For this TSP update in 2023, the City may also want to consider establishing a difference between Minor and Major (Transportation) Improvements.

TPR Reference(s): OAR 660-012-0045(1)(a) (improvements) OAR 660-012-0045(2)(d) (coordinated review)

Suggested Code Changes to Bring Forward

Additionally, there are several suggestions in the 2013 Transportation System Plan which were not brought forward into the City's Land Development Code as part of the TSP process that will likely be recommended for implementation as part of this project. These suggestions from the 2013 TSP are still relevant as they reflect Transportation Planning Rule requirements or expected work within the TSP process. These recommended changes are reiterated herein and include the following:

1. Street standards. The City should establish standards for local streets and access ways that minimize pavement width and total ROW consistent with the operational needs of the community and transportation facilities. Standards can include street widths and classifications, pedestrian access, and circulation requirements. Vehicle parking requirements should be sized for City of Prineville.

   Current standards note that: *When design review is required, streets and public facilities shall be required in accordance with section 153.194 and the City's Standards and Specifications. These improvements include but are not limited to right-of-way dedication, streets, stormwater management, sidewalks, waterlines, sewer lines, access management and the like.*

It is recommended that the City modify the above language to include a threshold and more definitive language.

2. Access management. The City's code includes language regarding multiple access management techniques (153.195.B(1)) but should consider adding language to clarify when redeveloping double frontage and/or corner lots to prioritize access to/from a lower-classification street.

3. Transportation impact analysis. Add the requirements for a Transportation Impact Analysis directly within the City's Land Development Code and cross-reference as applicable.

4. Pedestrian and bicycle connections. Current language references that an "easement may be required" for pedestrians and bicycles (153.092) and that, in conjunction with Site and Building Design Review "where appropriate" (153.020.G.2(f)): *Where appropriate, the design includes a parking and circulation system that encourages pedestrian and bicycle traffic*.

   The TPR requirement for pedestrian and bicycle connections will be addressed through the TSP planning process. Existing conditions for pedestrian and bicycle circulation will be inventoried and assessed in Task 5, Transportation System Inventory and Needs Analysis. The City should consider opportunities to facilitate pedestrian and bicycle travel by <u>requiring</u> accessways between residential areas and neighborhood activity centers (community destinations) in developed areas. Code amendments in conjunction with pedestrian and bicycle connections could include:

   a. Require walkways, bicycle paths or other pedestrian ways internal to campus developments to provide direct and convenient routes to/from building entrances, parking areas and transit stops (Section 153.020 Site Plan and Building Design Review Provisions and Section 153.157-159 Subdivisions and Planned Unit Developments).
   b. Require infill sidewalks even for single family development and change of use along routes specifically designated for high pedestrian use such as arterials, collectors, safe routes to schools, etc. (Section 153.045-153.062 Specific Zone Requirements).
   c. Require pedestrian-scale lighting along major bike and pedestrian corridors (Section 153.020 Site Plan and Building Design Review Provisions and Section 153.157-159 Subdivisions and Planned Unit Developments).
   d. Explore adopting a transportation demand management (TDM) program that would allow larger employers the opportunity to potentially reduce trip counts in their transportation impact analysis through use of TDM measures (section 153.020 Site Plan and Building Design Review Provisions)

TPR Reference(s): OAR 660-012-0045(2)(b) (TIA reference) OAR 660-012-0045(3)(b) (bicycle access) OAR 660-012-0045(3)(d) (safe and convenient) OAR 660-012-0045 (5) (ped and bicycle circulation plan) OAR 660-012-0045 (6) (streets and accessways)

Additional Considerations

Based on the scope of work proposed under the West Side Refinement Task, the City may want to consider the following:

1. Consider implementing an overlay map as part of the West Side Refinement task (Task 7) that encourages or requires higher density development near the downtown and other commercial nodes or adjacent to trails, paths and other bike and pedestrian routes that conveniently access downtown or other commercial areas.
2. Access management and access spacing standards (noted in Section 153.195) should be reviewed again to determine if they are appropriate for all areas of the City or if area-specific standards should be developed as part of the West Side Refinement. Specific areas could include: U.S. 26/NW Madras; Oneil Highway (OR 370), and NW 3rd Street.
3. The access management and access spacing standards do not currently include provisions for application of conditions of approval to protect transportation facilities. Consider a minor amendment to ensure the City can place conditions via a development decision.
4. For land use application noticing, the City should add ODOT to the list of those to provide notice to in Section 153.251.015.
5. Consider alternatives to system development charge (SDC) fees as an incentive to encourage mixed use and employment development.
6. Review requirements for infill sidewalks and bike lanes in approved industrial subdivisions which did not include sidewalks at time of approval and consider requiring sidewalks with any new development (153.194 Streets and Other Public Facilities).

TPR Reference(s):
OAR 660-012-0045(2)(a) access control
OAR 660-012-0045(2(e) conditions for development
OAR 660-012-0045(2)(f) notice

7. Current code does not include language regarding changes to a site's zone and their 'significant effect' on transportation facilities for any zone other than the Mixed Use Zone in Section 153.063.G.4.
8. Suggest an amendment to Section 153.231.A to include transportation facility criteria/threshold for a Transportation Impact Analysis requirement. This amendment would increase the incentives for mixed-use development, support bicycle, transit, and pedestrian programs, and consider alternative mitigation strategies that may include improvements to parallel routes or alternative modes. In addition, increase requirements for interconnectivity between parcels and further limit direct access to higher-order facilities. The amendments would also develop language that permits the use of Alternate Mobility Standards.
9. As part of the TPR changes associated with the adoption of the Climate Friendly Equitable Communities in 2022, the requirements associated with OAR 660-012-0060 have been amended to provide for flexibility when addressing transportation changes associated with zone changes, including transportation demand management. These are important options for the City to include in their Land Development Code.
    a. For example, when evaluating a zone change or Comprehensive Plan or Map amendment, all communities may apply transportation demand management techniques in order to mitigate for increases in traffic generation. (OAR 660-012-0060(1)c)
    b. Additionally, for transportation facilities outside of interchange areas, improvements to other modes of transportation may be provided as mitigation if certain provisions are met (OAR 660-012-0060(2)e)
    c. There is additional flexibility for approval based on the land uses, with provisions available for industrial lands, multi-modal, mixed-use areas (OAR 660-012-0060 (10 and 11))

TPR Reference(s): OAR 660-012-0045(2)(g) OAR 660-012-0060 Plan and Land Use Regulation Amendments

10. The City has a high ratio of required auto parking for all types of uses. These quantities could be reviewed in light of development patterns that have happened since the 2013 Transportation System Plan update.

TPR Reference(s): None; although requiring higher-than-needed parking ratios can result in less efficient uses of land; can limit new or infill development and reduce opportunities for mixed-use projects, which can result in higher vehicle miles travelled and other transportation-adjacent effects.

11. Definitions. The Climate Friendly Equitable Communities updates to the TPR have amended some of the definitions. Review with City's Land Development Code to ensure compatibility.

TPR Reference: OAR 660-012-0005: Definitions

Suggested definitions to include based on review of TPR:

(1) "Access management" means measures regulating access to streets, roads and highways from public roads and private driveways. Measures may include but are not limited to restrictions on the siting of interchanges, restrictions on the type and amount of access to roadways, and use of physical controls, such as signals and channelization including raised medians, to reduce impacts of approach road traffic on the main facility.

(4) "Accessway" means a walkway that provides pedestrian and or bicycle passage either between streets or from a street to a building or other destination such as a school, park, or transit stop. Accessways generally include a walkway and additional land on either side of the walkway, often in the form of an easement or right-of-way, to provide clearance and separation between the walkway and adjacent uses. Accessways through parking lots are generally physically separated from adjacent vehicle parking or parallel vehicle traffic by curbs or similar devices and include landscaping, trees, and lighting. Where accessways cross driveways, they are generally raised, paved, or marked in a manner that provides convenient access for pedestrians.

(9) "Bicycle boulevard" means bicycle facilities on streets with low motorized traffic volumes and speeds, designated and designed to give bicycle travel priority. Bicycle boulevards use signs, markings, traffic diverters, or other measures to discourage through trips by motor vehicles. A bicycle boulevard may also include traffic control features to create safe, convenient bicycle crossings of intersecting streets.

(18) "Local streets" means streets that are functionally classified as local streets to serve primarily local access to property and circulation within neighborhoods or specific areas. Local streets do not include streets functionally classified as collector or arterials.

(24) "Minor transportation improvements" include, but are not limited to, signalization, addition of turn lanes or merge/deceleration lanes on arterial or collector streets, provision of local streets, transportation system management measures, modification of existing interchange facilities within public right of way and design modifications located within an approved corridor. Minor transportation improvements may or may not be listed as planned projects in a TSP where the improvement is otherwise consistent with the TSP. Minor transportation

improvements do not include new interchanges; new approach roads within the influence area of an interchange; new intersections on limited access roadways, highways, or expressways; new collector or arterial streets, road realignments or addition of travel lanes.

(31) "Pedestrian facility" means a continuous, unobstructed, reasonably direct route between two points that is intended and suitable for pedestrian use. Pedestrian facilities include but are not limited to sidewalks, walkways, accessways, stairways and pedestrian bridges. On developed parcels, pedestrian facilities are generally hard surfaced. In parks and natural areas, pedestrian facilities may be soft-surfaced pathways. On undeveloped parcels and parcels intended for redevelopment, pedestrian facilities may also include rights of way or easements for future pedestrian improvements.

(38) "Reasonably direct" means either a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for likely users.

(43) "Separated or protected bicycle facilities" means bicycle facilities that are physically separated or protected from motor vehicle traffic by barriers that inhibit intrusion into the bicycle facility. Protection may include parked motor vehicles. Separated or protected bicycle facilities may be unidirectional or two-way. Separated or protected bicycle facilities are designed to address conflicting traffic at intersections and other vehicular accesses to the street or highway.

(44) "Shared parking" means parking spaces used to meet the parking mandates for two or more uses, structures, or parcels of land, to the extent that the owners or operators show the overall demand for parking spaces can be met by the shared parking.

Existing city definitions are included below:

Road or Street. A public or private way that is created to provide ingress or egress for persons to one or more lots, parcels, areas or tracts of land, excluding a private way that is created to provide ingress or egress to the land in conjunction with the use of the land for forestry, mining or agricultural purposes. (O.R.S. 92.010(13))

Alley. A narrow street through a block primarily for vehicular service access to the back or side of properties abutting on another street.

Arterial. A street referring to "major" and "minor" classifications unless specifically stated, of considerable continuity which is primarily a traffic artery for transportation among large areas, and so designated by the Transportation Systems Plan as may be amended.

Bicycle Route. A right-of-way for bicycle traffic.

Collector. A street referring to "major" and "minor" classifications unless specifically stated, supplementary to the arterial street system and a means of transportation between this system and small areas; used to some extent for through traffic and to some extent for access to abutting properties and so designated by the Transportation Systems Plan as may be amended.

Cul-de-sac. A short street having only one end open to traffic and being terminated by a vehicle turnaround.

Half Street. A portion of the width of a street usually along the edge of a subdivision, where the remaining portion of the street could or is planned to be provided for in another subdivision adjacent thereto.

Local Street. A street intended primarily for access to abutting properties.

Marginal Access Street. A minor street parallel and adjacent to a major arterial street providing access to abutting properties but protected from through traffic.

Stubbed Street. A street having only one outlet for vehicular traffic and which is intended to be extended or continued to serve future subdivisions or development on adjacent lands.

Roadway. That portion of a street or road right-of-way developed for vehicular traffic.

Appendix C

Existing Conditions

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

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TECHNICAL MEMORANDUM

DATE:	December 4, 2023
TO:	Prineville TSP Team
FROM:	Natalie Chavez, Matthew Flodin, Emily Welter, PE, Sara Urbina, Ryan Farncomb, Kate Bradbury, PE, Nadine Appenbrink
SUBJECT:	Technical Memo #3A: Existing Conditions
PROJECT NUMBER:	274-2395-121
PROJECT NAME:	Prineville TSP

INTRODUCTION

This memorandum summarizes the current state of Prineville's transportation system and includes an analysis of transportation system performance. This inventory and analysis, including current safety and mobility conditions for drivers, cyclists, and pedestrians, will guide development of solutions for the Prineville Transportation System Plan (TSP) Update.

NEEDS AND ISSUES SUMMARY

Motor Vehicle System

U.S. 26/3rd Street

U.S. 26/3rd Street is the main commercial thoroughfare in Prineville and provides access to highways such as Oregon (OR) 370, OR 126, and OR 380 while providing access to local destinations, including businesses and schools. Third Street consistently has the highest annual average daily traffic (AADT) count with the exception of a small spur to the south of its junction with OR 126 and OR 370 as shown in Figure 16. Other notable factors for 3rd Street include:

- It has the most crashes in Prineville.
- Is the primary commercial corridor in Prineville, and the only east-west through arterials.
- From OR 126 to NE Juniper Street, 3rd Street has the highest percentage of households without a motor vehicle.
- Pavement condition is rated as poor by the Oregon Department of Transportation (ODOT).
- Possesses the only ODOT TripCheck camera in Prineville at its intersection with NW Harwood Avenue.
- Designated as a Truck Route and Reduction Review Route to support freight movement.

- From NE Juniper Street to east city limits does not meet the suggested pedestrian crossing standard of 500 to 1,000 feet as described in ODOT's *Blueprint for Urban Design*.[1]

Safety

Between 2016 and 2020, there were 534 crashes in Prineville. Nearly all incidents involved only motorists as parties to the crash. The primary contributing factor to crashes was a failure to yield/disregarding the signal, which comprised approximately 32% of all crashes. Inattention ranked as the second highest contributing factor to crashes and comprised approximately 17% of all crashes. Figure 20 shows the locations and density of crashes in this time period. Crash highlights include:

- Thirteen crashes affected pedestrians and seven crashes affected cyclists.
- Two crashes resulted in fatalities; both occurred on OR 126 just west of OR 126's junction with 3rd Street. One crash occurred from a failure to yield the right of way when entering the intersection of OR 126/3rd Street, and the second crash occurred from a daytime collision with a boulder due to inattention on a curve of OR 126.
- Intersections were the most common locations for crashes. The primary causes of crashes at intersections included angled and turning movements. The second most common location for crashes was on sections of straight roadway. The primary causes of crashes along straight roadways included rear-end collisions or collisions with a fixed object.
- The most crashes occurred on 3rd Street between OR 126 and NE Combs Flat Road.

Intersection Crash Analysis

Crashes at intersections were measured against the critical crash rate, calculated from all similar Prineville intersection types in the study sample. Two intersections exceeded the critical crash rate. These intersections were flagged as having a higher degree of risk than others:

- NW Deer Street and NW 2nd Street
- SE Combs Flat Road and SE Lynn Boulevard

Four intersections had an excessive proportion of angled crashes:

- NW Deer Street and NW 2nd Street
- OR 126 and U.S. 26
- NE Combs Flat Road and NE 3rd Street
- SE Combs Flat Road and SE Lynn Boulevard

Two intersections had an excessive proportion of fixed object crashes:

- OR 126 and S Rimrock Road
- N Main Street and NW 9th Street

One intersection had an excessive proportion of turning crashes:

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[1] https://www.oregon.gov/odot/projects/pages/project-details.aspx?project=HWY-UDI

- OR 126 and OR 370

Three intersections had an excessive proportion of rear end crashes:

- SW Tom McCall Road and OR 126
- OR 126 and U.S. 26
- SW George Millican Road and OR 126

Three highway segments within Prineville city limits have crash rates higher than the statewide crash rate of similar facilities:

- OR 27
- U.S. 26 east of OR 126
- U.S. 26 west of OR 126

Traffic Volumes

The highest AADT occurs along OR 126 north of O'Neil Highway/OR 370. On average, the 2022 peak hour intersection volumes are 40% higher than the peak hour intersection volumes shown in the 2013 City of Prineville TSP.

Intersection Operations Analysis

The study intersections were evaluated against mobility targets established by the City, Crook County, and ODOT depending on the jurisdiction. For the unsignalized intersections, v/c ratios and delay were reported for the worst movement and for signalized intersections, the reported v/c ratios and delays represent the overall intersection operations. Five of the 24 intersections exceed the mobility target for either volume-to-capacity (v/c) ratio or level of service (LOS), including NW Harwood Avenue/NW 3rd Street (U.S. 26), N Main Street/3rd Street (U.S. 26), EB OR 126/EB U.S. 26, OR 126/O'Neil Highway (OR 370), and SW Tom McCall Road/OR 126.

Queue lengths in the 95th percentile exceed the storage length or the space between intersections at four of the 24 intersections analyzed, including N Main Street/NE 10th Street, NW Harwood Avenue/NW 3rd Street (U.S. 26), N Main Street/3rd Street (U.S. 26), and WB OR 126/WB U.S. 26. All of these queue lengths exceed the storage length or the space between intersections by less than 200 feet, or about eight vehicles.

Two-Lane Highway Capacity Analysis

Tube counts were collected at five locations near the study area limits, which were analyzed using Highway Capacity Software. All five of the roadway segments that were analyzed operate at LOS A or better.

Bicycle and Pedestrian System:

- The sidewalk network is not complete. Multiple local and collector streets are missing sidewalks, which are a typical element required of all new local streets in Prineville. Adding sidewalks to legacy streets can be prohibitively expensive, and alternative approaches, such as expanded shoulders, should be considered during solutions identification. Sidewalk network gaps make it difficult to walk from one neighborhood to another or to reach key destinations like schools and businesses throughout the city.

- Enhanced mid-block or signalized crossings are located along the length of U.S. 26/3rd Street, which is a barrier to north-south pedestrian and bicycle traffic. Enhanced or signalized crossings are on average 1,200 feet apart. Pedestrian crossings are on average 330 feet apart, which meets ODOT's *Blueprint for Urban Design* standards for crossing frequencies in the "Traditional Downtown/CBD" context, but still presents hazards for pedestrians.
- The intersection of U.S. 26 and OR 126 is a major barrier for pedestrians and cyclists with very few facilities present. The facilities that do exist provide a narrow shoulder for cyclists and pedestrians, which can result in high stress due to proximal fast-moving traffic. New bicycle and pedestrian facilities would likely spur greater active transportation demand through this intersection.
- There are neighborhoods along Rimrock Road west of the Crooked River and south of OR 126 that lack a safe pedestrian and bike connection to downtown. Additionally, the Tom McCall area and neighborhoods north of U.S. 26/3rd Street are not connected to the rest of Prineville with pedestrian and bike facilities due to the significant grade differential and geographic limitations.
- Marked or enhanced crossing infrastructure on OR 126, OR 370, and U.S. 26 west of the intersection of U.S. 26 and OR 126 is nearly nonexistent. One crossing exists at the roundabout at SW Tom McCall Road and OR 126.
- OR 380 possesses only one crossing south of U.S. 26/NE 3rd Street to Prineville city limits.
- A rapid reflecting flashing beacon is present on U.S. 26/NE 3rd Street near NE Mason Drive.

Transit

Transit needs in and around Prineville were recently identified as part of the *Cascades East Transit 2040 Transit Master Plan*.[2] Notable improvements from this plan that will affect Prineville are listed below. These planned improvements should be considered in developing pedestrian and bicycle solutions that provide first/last mile access to transit and solve identified transit needs.

- Community Connector Route 26
  - Re-route to serve the Redmond Airport and Central Oregon Community College.
  - Combine Route 26 with Route 24 to create a one-seat ride to Bend.
  - Increase peak period trip frequency and add an evening trip.
  - Add midday service as a shopping/medical shuttle trip.
  - Increase local circulation in Prineville via local Dial-A-Ride and/or Community Connector vehicles.
  - Add weekend service.
- Add new, midday shopping/medical shuttle service from Prineville to Redmond.
- Add small-scale transit center/mobility hub near the Thriftway or Ray's.
- Expand maintenance facilities to include storage for two vehicles.
- Amend the development code to:

[2] https://cascadeseasttransit.com/wp-content/uploads/2022/12/2040-Master-Plan-with-Mobility-Hub-Final.pdf

- Require coordination between Prineville and Cascades East Transit development application review on sites adjacent to transit stops.
- Enhance development standards to promote connections between buildings and transit stops.
- Add parking-related requirements to enhance pedestrian and bicycle connections, increase rideshare access, and reduce car parking spaces related to transit access.

Other Issues and Needs

The neighborhood along Rimrock Road south of OR 126 is not well connected to the rest of Prineville. New connections for people driving, walking, and cycling would reduce trip distances, make walking and cycling more viable for short trips, and provide alternative access in the case of an emergency.

System Inventory

Lands and Population

Prineville is in Crook County, Oregon, about 36 miles northeast of Bend. Several state highways run through the city, including U.S. 26 (locally, 3rd Street), OR 126 (Ochoco Highway), OR 27 (locally, Main Street/Crooked River Highway), OR 370 (O'Neil Highway), and OR 380 (locally, Combs Flat Road/Paulina Highway). The Prineville TSP update must address state requirements for all affected facilities within its urban growth boundary (UGB).

Current Land Use

Zoning in Prineville consists of residential, industrial, and commercial uses. The remaining land within the UGB primarily consists of open space and parks. Figure 1 displays current zoning.

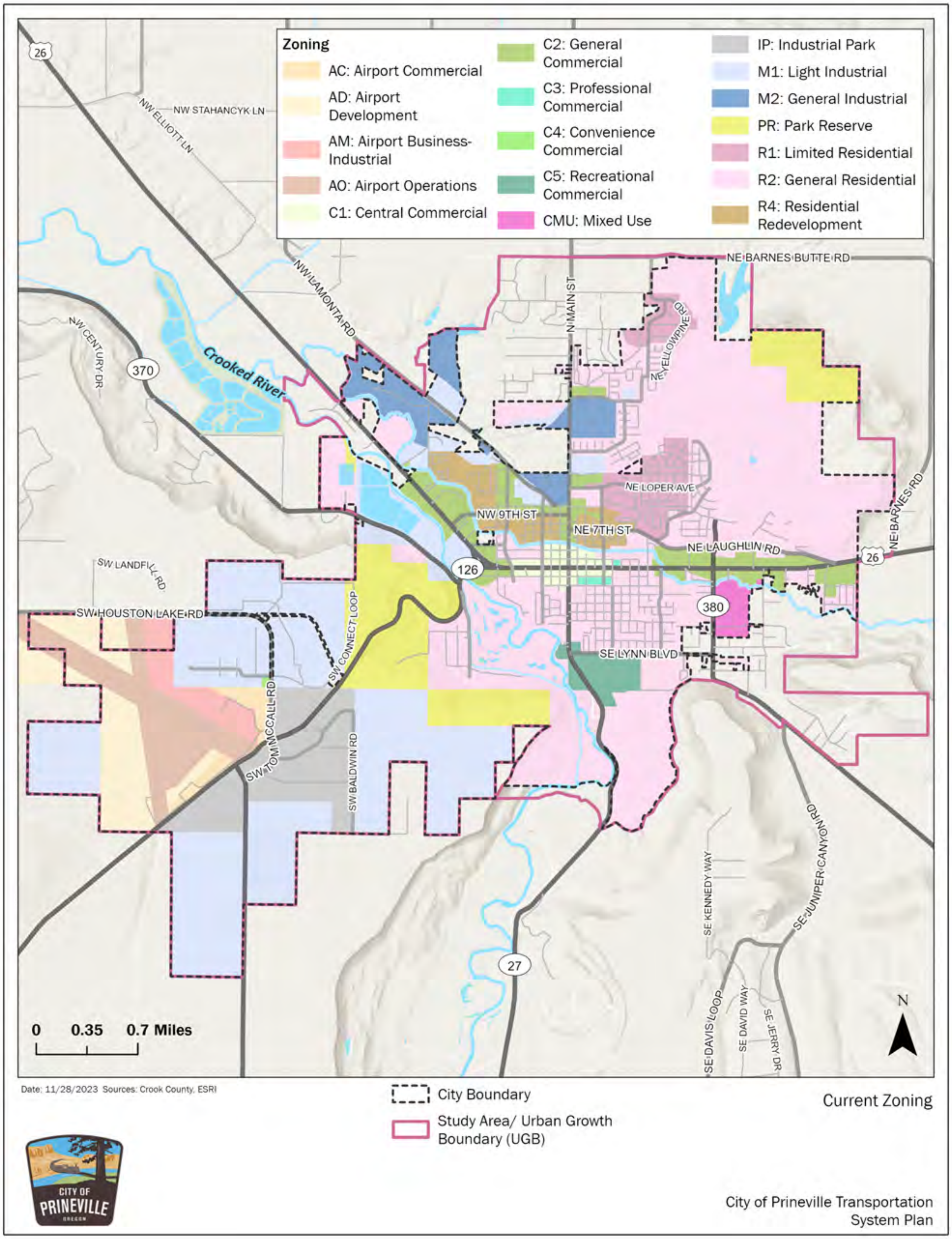

Figure 1. Current Zoning

Zoning and Land Use

- Most of Prineville's residential land is zoned for low to medium density single-family residences. Zoning that allows for higher-density housing of more than 10 units includes R5 (outright) and R2/R4 (conditional use with required hearing). No areas are currently zoned R5. Prominent R2 zoning areas are located from approximately zero to two blocks south of U.S. 26/3rd Street to the Prineville city limits, bordered on the east and west by SE Combs Flat Road and SW Park Drive, respectively, and west of Barnes Butte to approximately N Main Street. Prominent R4 zoning areas are located approximately three blocks north of U.S. 26/3rd Street around Harwood Park and Ryegrass Ditch. A Commercial Mixed Use (CMU) zone permitting medium- to high-density residential uses on the Ochoco Lumber Site surrounds St. Charles Medical Center. Multifamily housing areas are generally close to commercial areas, schools, and parks, meaning walking or cycling is potentially viable for short trips.
- U.S. 26/3rd Street is the main commercial corridor in Prineville, with businesses concentrated between the interchange at the west end of town and the east city limits. Additional commercial areas are located along U.S. 26 in the northwest section of town, as well as in the vicinity of the Prineville Airport.
- Institutional land uses are located throughout the core of the city (Figure 3). The sole library in the city, Crook County Library, is located on NW 2nd Street/SW Meadow Lakes Drive near U.S. 26/3rd Street. Nine educational facilities are located within the UGB, with the majority in the southeast portion of the city.
- Industrial land uses within the UGB are generally located on the fringes of the city. The largest industrial area is southwest of Prineville, near the Prineville Airport (the Tom McCall area). There has been a major expansion of data centers and industrial uses near the airport since the prior TSP was completed.
- Prineville has many parks throughout the city (Figure 3). Ochoco Wayside State Park is west, near the industrial area bisected by OR 126 (Ochoco Highway) (#19 in Figure 11). Ochoco Creek Park on 4th Street is the most popular park in the city; a 1.2-mile-long paved multiuse trail goes along Ochoco Creek (#9 in Figure 11). Stryker Park is also located along Ochoco Creek and west of Ochoco Creek Park (#8 in Figure 11). Crooked River Park on Crooked River Highway (OR 27) and Davidson Field on Main Street (OR 27) are smaller parks with playgrounds and athletic facilities (#15 and #12 in Figure 11, respectively). Barnes Butte is a recreation destination located in the northeast corner of the city (#7 in Figure 11).

Natural Resources

Known natural resources are shown in Figure 2. Known wetlands are generally found along the Crooked River, Ochoco Creek, and other drainages. These natural resources are an important consideration for future transportation investments, especially for the U.S. 26 and OR 126 interchange and new roadway connections proposed in the vicinity of these resources.

Community Destinations

Community destinations are shown in Figure 3. These destinations are important drivers of travel demand and represent essential locations people often travel to within Prineville.

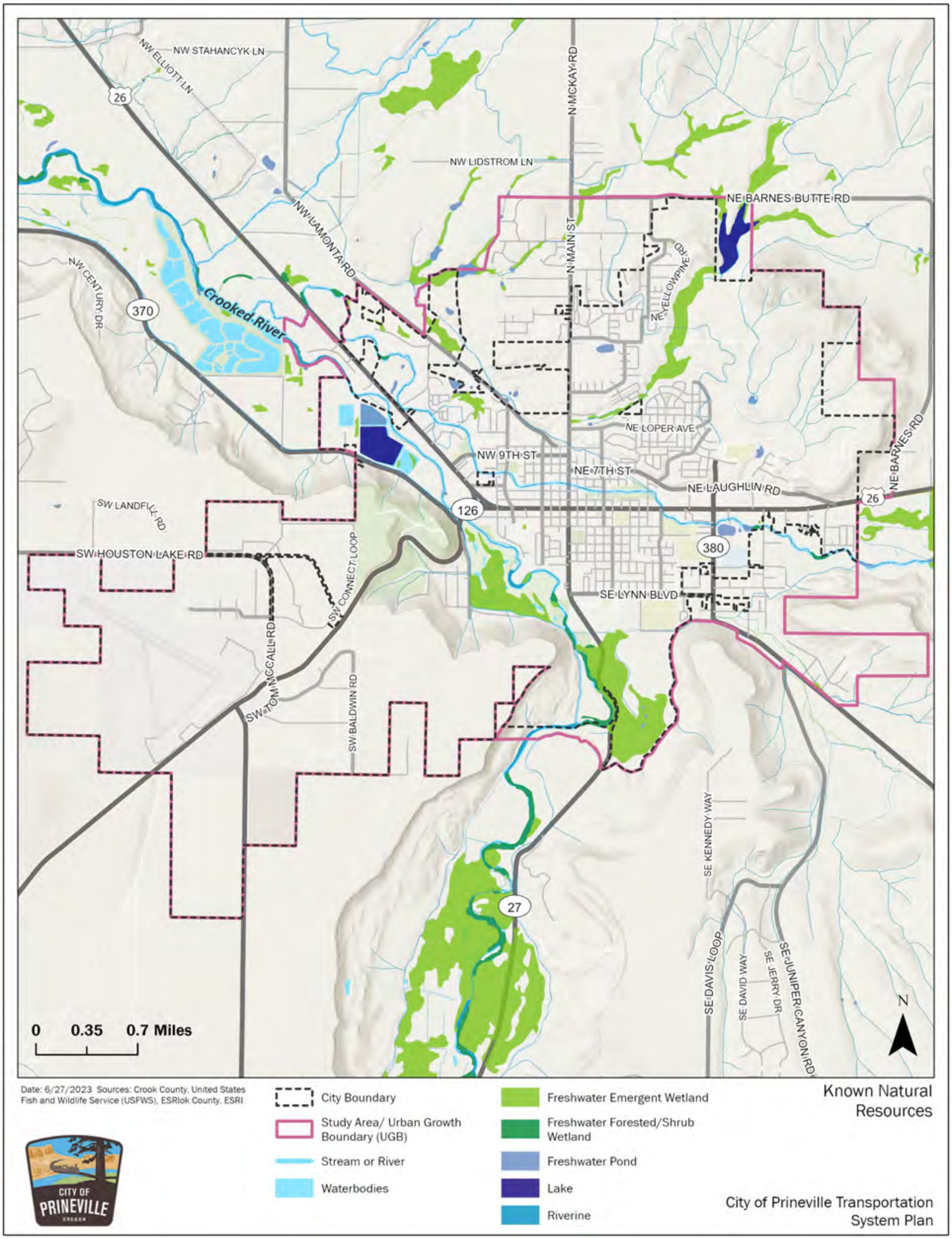

Figure 2. Known Natural Resources

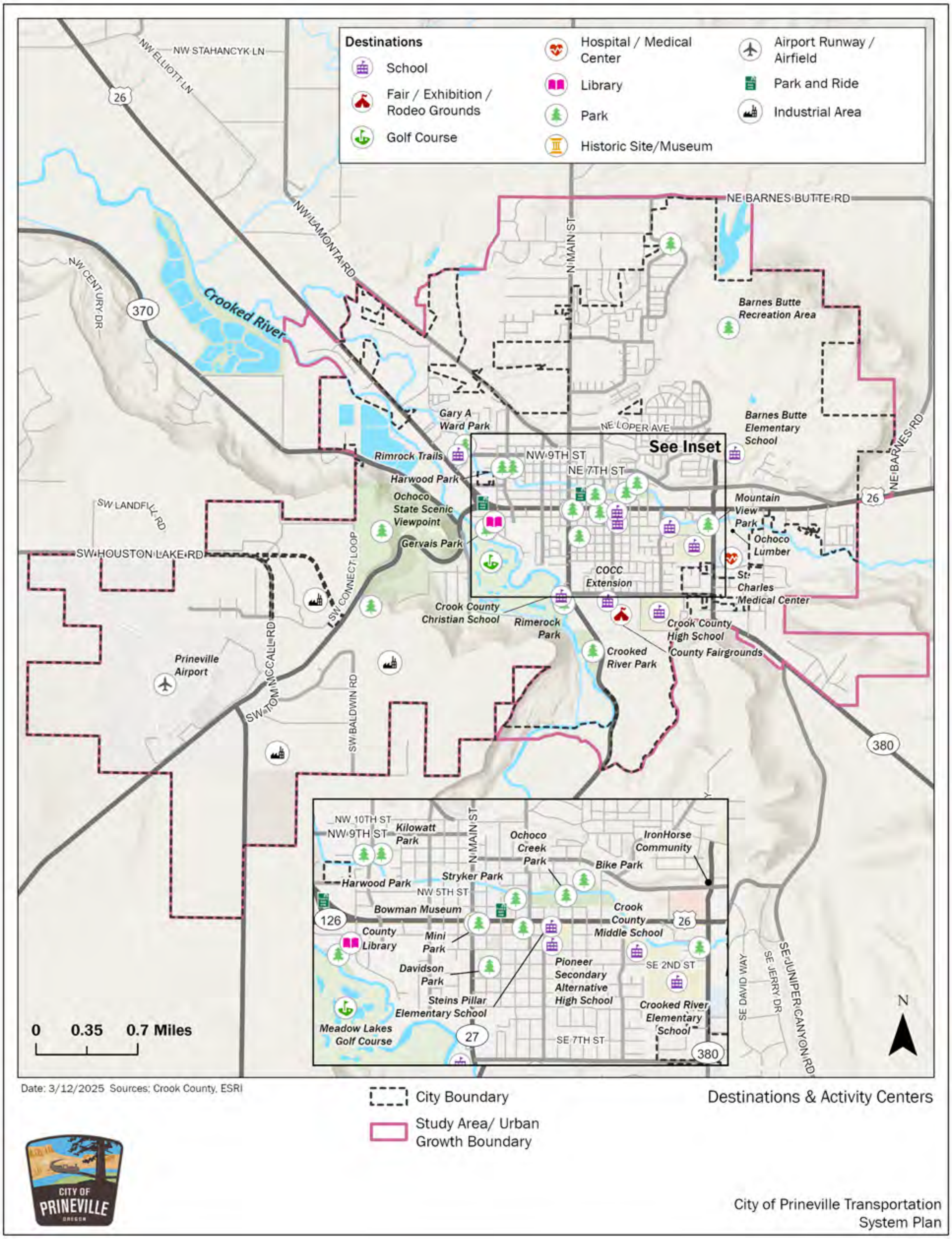

Figure 3. Destinations and Activity Centers

Future Land Use

The City's UGB provides future development capacity for the next 20 years of growth in Prineville. Figure 4 shows the Comprehensive Plan land use designations.[3] The following areas in Prineville may see substantial growth that could influence transportation system needs:

1. Tom McCall area/Prineville Airport
2. Barnes Butte and the area east of NE Combs Flat Road, north of U.S. 26/NE 3rd Street
3. Iron Horse site
4. Ochoco Lumber site
5. Area along U.S. 26 between NW Lamonta Road and NW O'Neil Highway, southeast of the Crooked River Wetlands
6. Area around NW Lamonta Road and NW Lon Smith Road and the area east near N Main Street and NE Peters Road
7. Along S Main Street/S Crooked River Highway near the Crook County Fairgrounds and south to the Juniper Flood Control Canal

Many large properties within the city have been master planned before the previous TSP. Two significant developments on the city's east side have influenced growth in Prineville over the planning period. The Ochoco Lumber site and Iron Horse continue as key redevelopment sites within Prineville given their size and location. The TSP update accounts for planned growth in these areas and other employment lands. Iron Horse is zoned for residential use and is expected to continue to support residential development. The Ochoco Lumber site is zoned as mixed-use, and supports medical office space, mixed-use retail, and residential development. Development of the Ochoco Lumber and Iron Horse properties will require strong multimodal connections between the downtown and the city's east side.

[3] https://www.cityofprineville.com/sites/default/files/fileattachments/community_development/page/2454/comprehensive_plan_through_ordinance_1269.pdf

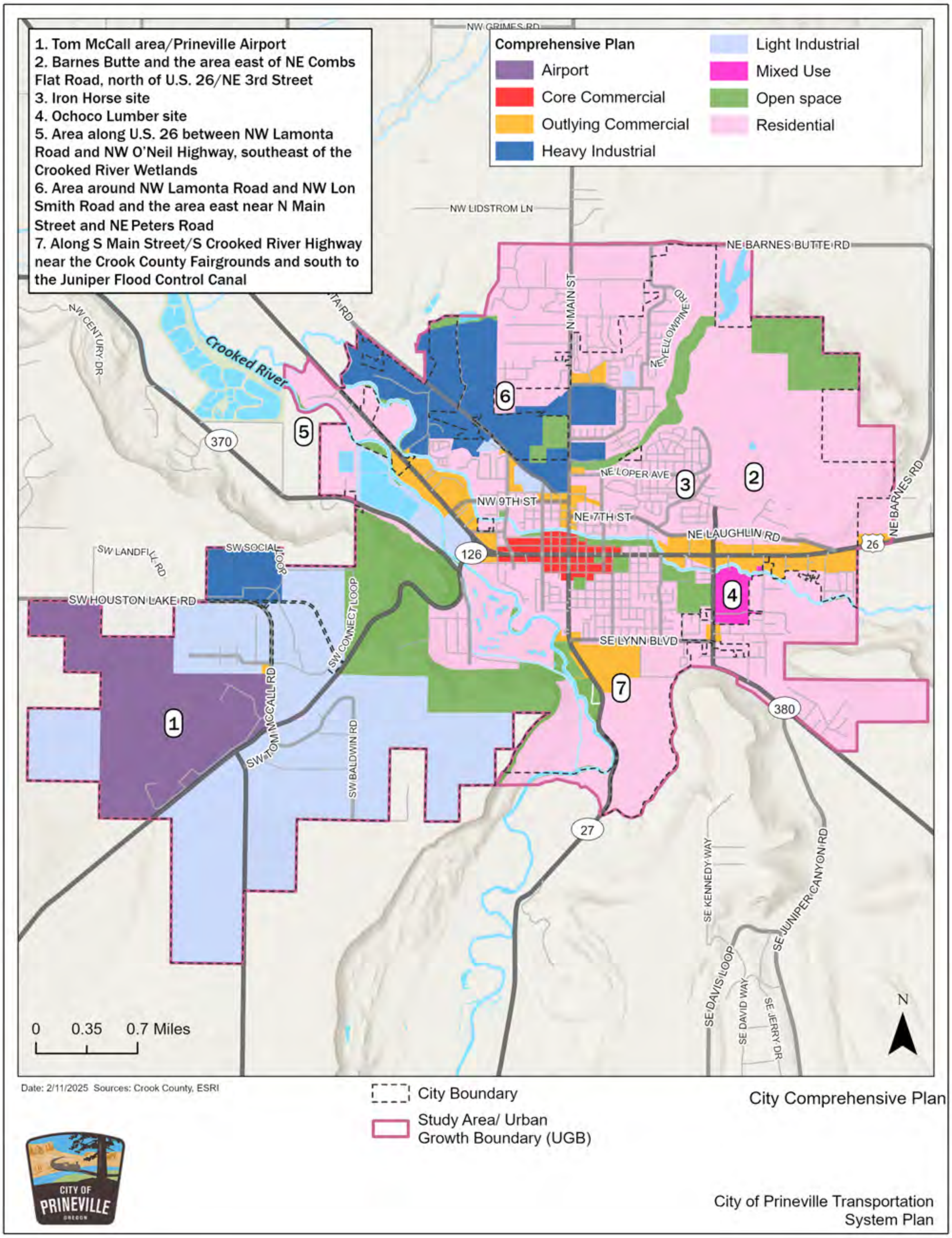

Figure 4. Comprehensive Plan Land Use Designations

Population

Prineville's population has grown from approximately 9,253 as of the 2010 Census to 11,513 as of 2022 according to the Portland State University Population Research Center (nearly 25% growth). The City has grown rapidly in recent years. The Population Research Center forecasts that Prineville's population will be 17,188 by the year 2045, representing continued strong growth into the future. Table 1 provides details about the demographics of Prineville, and Table 2 forecasts Prineville's population growth.

Table 1. Community Characteristics

	Prineville	Crook County	Oregon
Population	10,429	23,733	4,176,346
Age			
Youth (under 18)	23%	20%	21%
Older adults (65 years+)	20%	25%	18%
Income Characteristics			
Median household income	$42,298	$59,000	$65,667
Low income population (Less than 2x federal poverty level)	45%	32%	29%
Race and Ethnicity			
American Indian and Alaska Native alone	1 %	1 %	1%
Asian alone	1 %	0 %	4 %
Black or African American alone	<1 %	<1 %	2 %
Hispanic or Latino alone	14 %	8 %	13 %
Native Hawaiian and Other Pacific Islander alone	1 %	<1 %	<1 %
White alone	80 %	88 %	75 %
Some other race alone	<1 %	<1 %	<1 %
Two or more races	4 %	3 %	4 %
Limited English-Speaking Households	<1 %	1 %	2 %
Persons with Disabilities	22 %	19 %	14 %
Transportation Characteristics			
Households with zero vehicles available	7 %	3 %	7 %
Drove alone	83 %	83.5 %	70 %
Carpool	11 %	9.8 %	9 %
Public transportation	<1 %	<1 %	4 %
Walked	2 %	1.3 %	4 %
Other means	<1 %	<1 %	1 %
Worked at home	4 %	5 %	9 %

Source: American Community Survey (ACS) 2016 – 2020. ACS 5-Year Estimates Data Profiles: *Means of Transportation to Work; Economic Characteristics.*
Title VI and EJ Communities

Table 2. Prineville Population Forecast

UGB	2025	2030	2035	2040	2045
Prineville UGB	13,972	14,622	15,274	16,091	17,188

Source: Portland State University Population Research Center, 2022

Notable demographic findings that influence transportation planning include:

- Prineville has a lower median household income compared to Crook County ($16,702 deficit) and the State of Oregon ($23,369 deficit). Prineville has a significantly higher percentage of people meeting the federal poverty threshold (45%) compared to Crook County (32%). These households are most concentrated in the central tract of the city and may face difficulties with transportation costs.
- Prineville has a higher Hispanic/Latino population compared to Crook County and Oregon overall. The tract with the highest percentage of communities of color is to the west of Barnes Butte, in the northeast section of the city.
- Prineville has a higher percentage of people with disabilities compared to both Crook County and Oregon, creating greater importance on accessible transportation infrastructure.
- Prineville has a lower percentage of workers who work from home compared to Crook County and Oregon overall.
- Prineville has a lower percentage of adults over 65 years old (20%) compared to Crook County (25%).
- Prineville has a higher percentage of households with zero vehicles available compared to Crook County. Figure 5 displays the percentage of households without vehicles by location in Prineville.

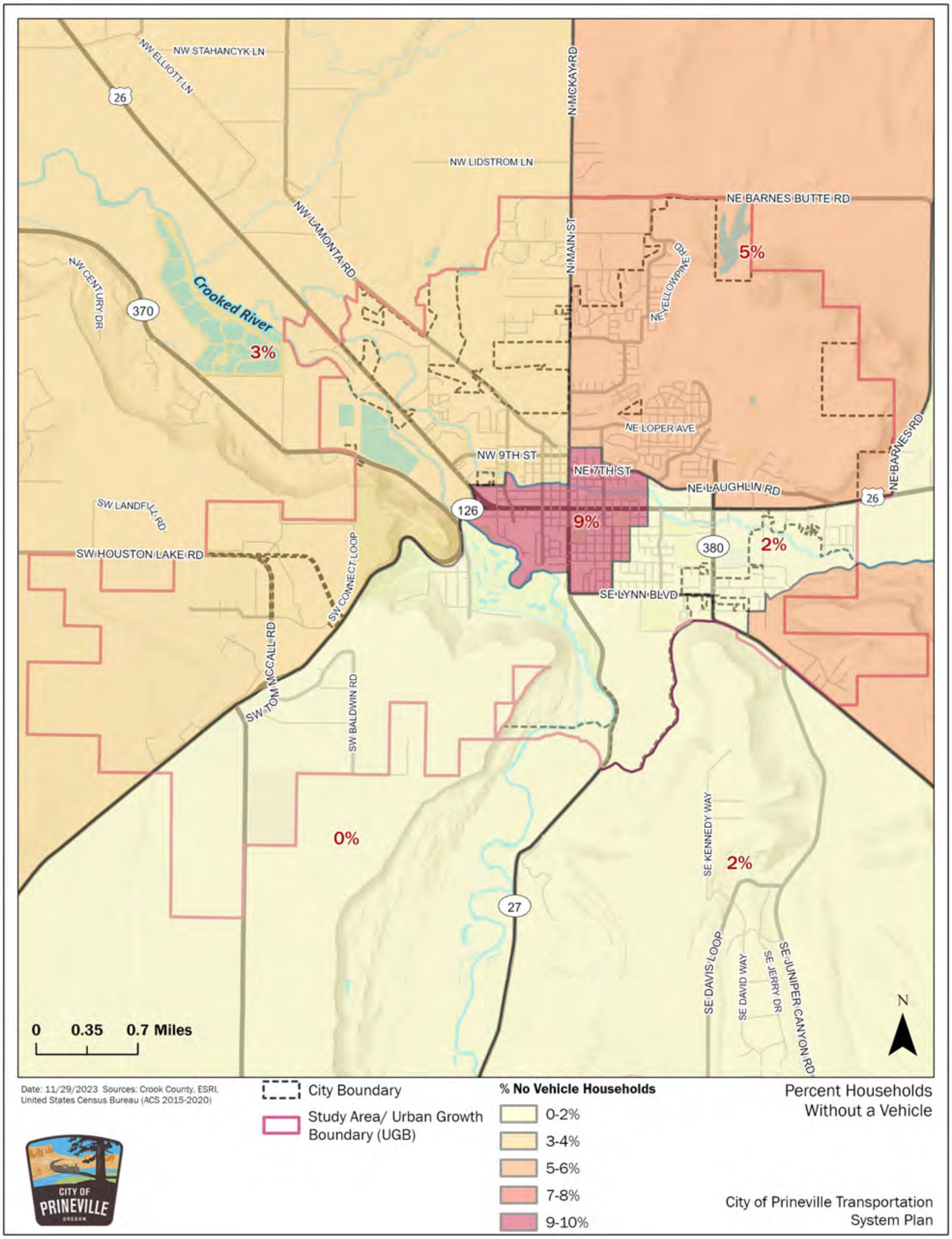

Figure 5. Percent Households Without a Vehicle

TRANSPORTATION SYSTEM INVENTORY

Road System

State and Regional Facilities

Prineville is situated at the junction of a few highways, and state and interstate highways serve as the main arterials in town. U.S 26, OR 370, and OR 126 converge on the west side of Prineville and continue through the downtown core as U.S. 26 / 3rd Street. The City is dependent on these regional connections for much of its inbound and outbound travel, as well as trips internal to the city.

The classifications of the state highways that travel through Prineville are summarized in Table 3. Oregon 126 and U.S. 26 are the city's primary linkage to surrounding Central Oregon cities; they converge at the Prineville "Y" and then serve as the major east-west route through downtown Prineville. Oregon 27 (Main Street) and OR 380 (SE Combs Flat Road/SE Paulina Highway) are also ODOT facilities that connect Prineville to other areas of Crook County. Within downtown, 3rd Street is classified by ODOT as a Special Transportation Area with an emphasis on local business access and multimodal travel. Commercial uses front the corridor between the U.S. 26 and OR 126 junction and Combs Flat Road and rely on the highway for primary access. No separated bicycle facilities are present along this corridor, and the 7-foot multiuse path does not meet the minimum width specified in the ODOT Highway Design Manual. Figure 6 shows the typical cross section on 3rd Street in downtown, from NW Harwood Avenue to NE Juniper Street.

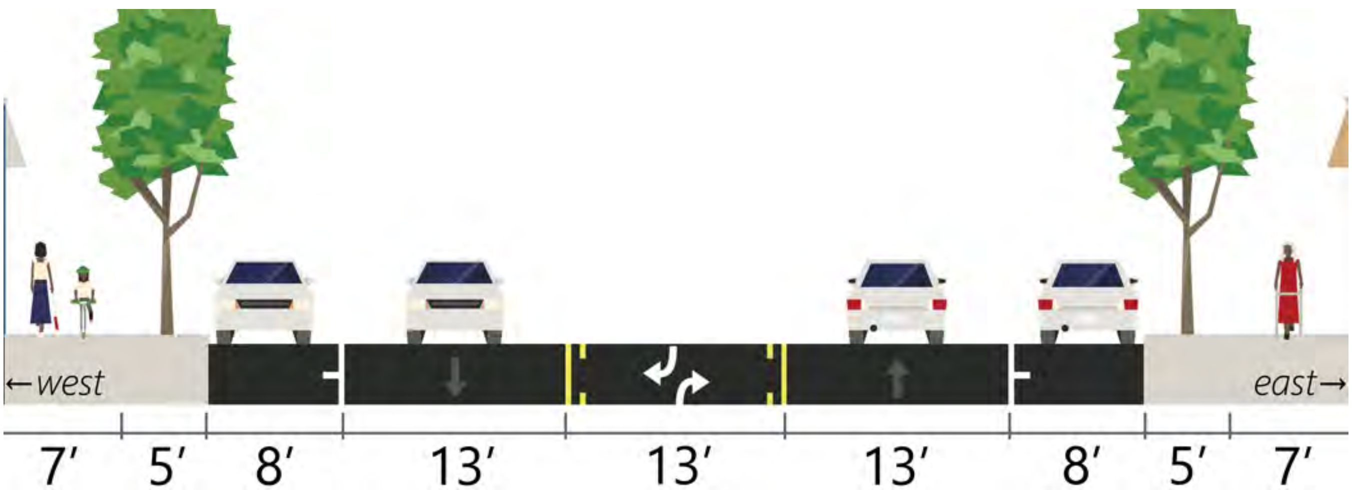

Figure 6. Cross Section of 3rd Street from NW Harwood Avenue to NE Juniper Street

Table 3. State Highway Classification

Route Name (Hwy #)	Description	Highway Classification	NHS	Freight/ Truck Route	Special Designations
US 26					
Ochoco Hwy (41)	East of Prineville "Y"	Statewide	Yes	No	STA[1]
Madras Hwy (360)	West of Prineville "Y"	Regional	No	Yes	None
OR 27, Crooked River Hwy (14)	Outside City Limits	District	No	No	None
OR 126, Ochoco Hwy (41)	Entire Segment	Statewide	Yes	Yes	Expressway[2]
OR 370, O'Neil Hwy (370)	Entire Segment	District	No	No	None
OR 380, Paulina Hwy (380)	Entire Segment	District	No	No	None

NHS = National Highway System
[1] STA= Special Transportation Area – from Milepost 18.24 (Locust Avenue) to 19.38 (Spruce Lane)
[2] EXP= Expressway - from Milepost 1.37 to 17.92

Urban Context of State Facilities

This section used guidance from the ODOT *Highway Design Manual*[4] (and the ODOT *Blueprint for Urban Design*, which has been incorporated into the *Highway Design Manual*) to identify the appropriate urban context for each state highway in Prineville. The evaluation, which built on the ODOT Urban Context Matrix (Table 2-2 in the *Blueprint for Urban Design*), considered existing land use characteristics, zoning, and expected future development. These urban contexts are important because they help define what street elements should be based on the surrounding building setbacks, land use, block structure, and building, sidewalk, and parking coverage. Table 4 describes the urban context for each state highway. The TSP will consider the *Blueprint for Urban Design's* preferred future for these state highways, and the urban context will guide the recommended improvements.

Table 4. Urban Context of Prineville Highways

Highway	Street Boundaries	Urban Context	Land Use Elements Consistent with Urban Context
NE 3rd Street (U.S. 26)	NW 2nd Street to NE Juniper Street	Traditional Downtown/CBD	• Shallow to no building setbacks. • Many buildings that can be accessed from the sidewalks along a pedestrian path. • Primarily core commercial. • High building coverage. • Parking is on-street and shared in back. • Small, consistent block structure.

[4] https://www.oregon.gov/odot/engineering/pages/hwy-design-manual.aspx

Highway	Street Boundaries	Urban Context	Land Use Elements Consistent with Urban Context
NE 3rd Street (U.S. 26)	NE Juniper Street to east city limits	Commercial Corridor	• Medium to large building setbacks. • Sparse buildings that can be accessed from the sidewalks along a pedestrian path. • Primarily commercial (with some residential). • Low building coverage. • Parking is off-street/in front with parking lots. • Large blocks, not well defined.
U.S. 26	NW Locust Avenue to northwest city limits	Commercial Corridor	• Medium to large building setbacks. • Sparse buildings that can be accessed from the sidewalks along a pedestrian path. • Primarily commercial. • Low building coverage. • Parking is off-street/in front with parking lots. • Large blocks, not well defined.
Main Street/ Crooked River Highway (OR 27)	NE 3rd Street to south city limits	Residential Corridor	• Shallow building setbacks. • Some buildings that can be accessed from the sidewalks along a pedestrian path. • Residential (with commercial). • Medium building coverage. • Parking varies. • Small to medium blocks (with large blocks in the outer lying commercial area).
SE Combs Flat Road/SE Paulina Highway (OR 380)	NE 3rd Street to south city limits	Residential Corridor	• Shallow building setbacks. • Some buildings that can be accessed from the sidewalks along a pedestrian path. • Primarily residential (with some mixed-use and recreational area). • Medium building coverage. • Parking varies. • Small to medium blocks (with large blocks in the mixed-use and recreational area).

CBD = central business district

Roadway Functional Classification

Roadways are classified using arterial, collector, and local designations, depending on the intended function and the adjacent land use needs. Figure 7 shows the functional classification of each roadway in Prineville.

Principal Arterials primarily provide mobility particularly between large population centers or activity generators. Mobility is emphasized over local access connections. Within Prineville, all principal arterials are ODOT facilities. U.S. 26 and OR 126 are examples of principal arterial facilities. Their main function is to provide an east-west connection through town as well as to connect Prineville with nearby communities.

Minor Arterials are also intended to serve mobility needs over access needs in town. However, minor arterials provide important connections through town rather than connecting Prineville to other communities. Main Street is an example of a minor arterial in Prineville. Its main purpose is to connect the north and south areas of Prineville.

Major Collectors provide connection between local streets and the arterial street system. Trip lengths are generally shorter than on arterials. Collectors provide a link between local traffic generators and more regional facilities. An example of a major collector in Prineville is NE 2nd Street. NE 2nd Street's primary function is to connect residential areas with Main Street and OR 126, regional facilities.

Minor Collectors are similar to major collectors in their purpose of linking local and regional traffic facilities. However, minor collectors typically provide access to and circulation within neighborhoods and industrial and commercial areas. SE 5th Street is an example of a minor collector. It connects all residences in the area to local schools and other residential areas.

Local Streets provide direct access to land. Shorter trips are common and through trips are discouraged. Travel is generally at lower speeds than in other road classifications. Prineville's local streets generally connect to collectors. Roadways that are not labeled as a collector or arterial streets on Figure 7 are designated as local streets.

Pavement Condition

In Prineville, most principal and minor arterials' surface conditions are poor or fair. Figure 8 displays the pavement condition of major roadways in Prineville.

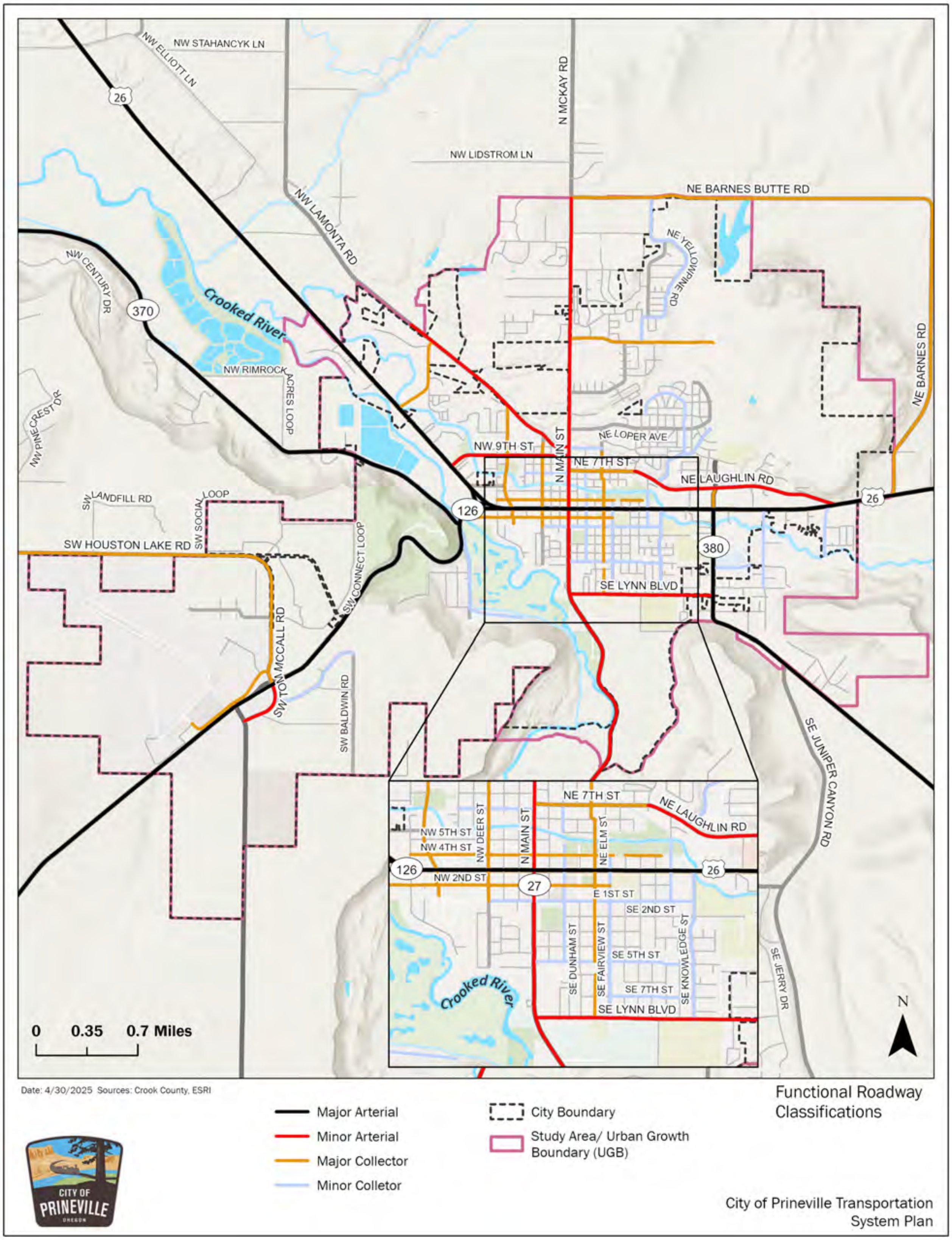

Figure 7. Functional Roadway Classifications

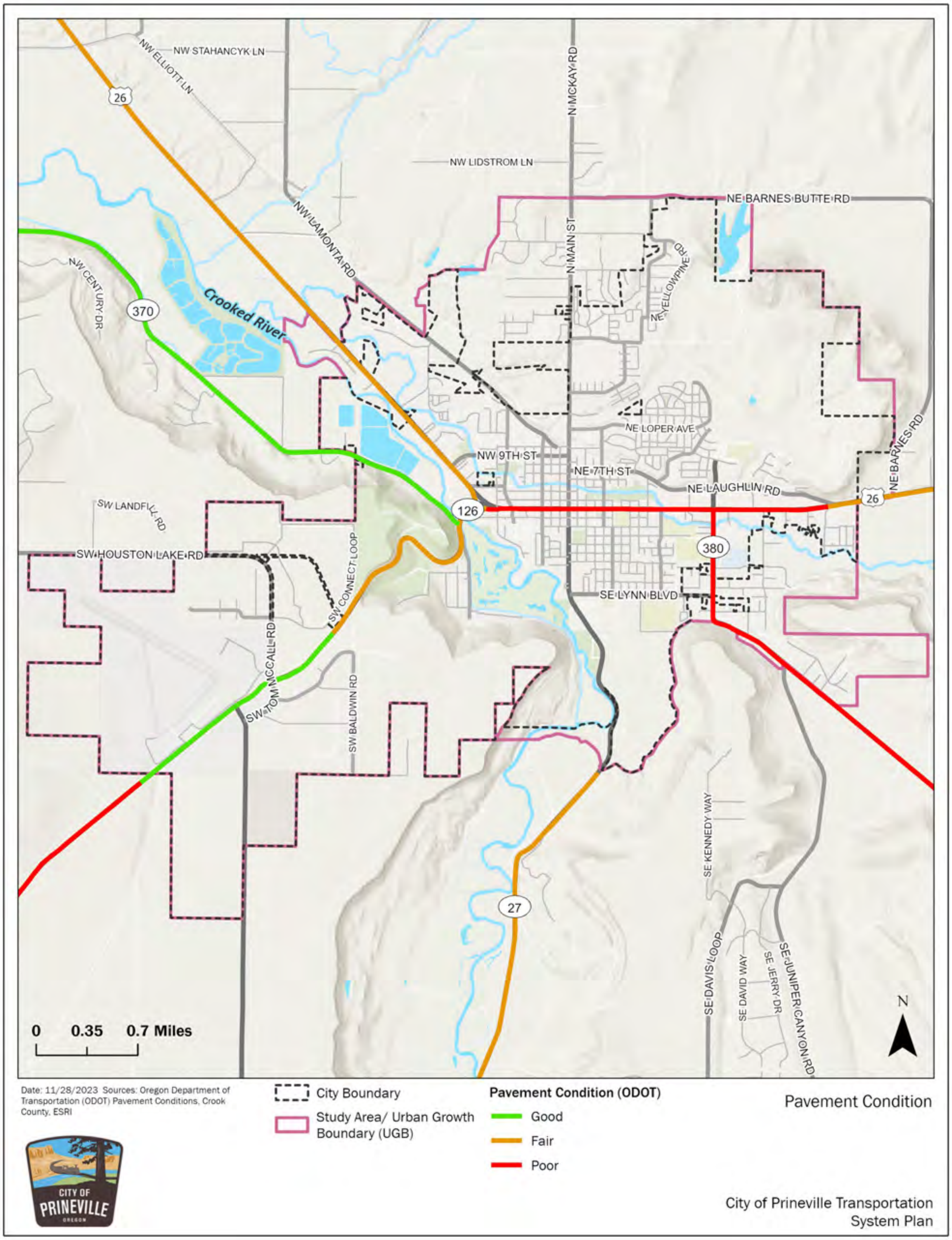

Figure 8. Pavement Condition

Access Spacing Guidelines

Access spacing guidelines help the City identify the minimum desired distance between private and public access points along major roadways. Implementing access spacing guidelines helps the City to minimize the potential for vehicular conflicts between closely spaced accesses as well as conflicts between vehicles, pedestrians, and cyclists.

In general, local streets are intended to provide access to adjacent lands, and therefore access spacing policies for these facilities allow for the most closely spaced accesses of all of the roadway classifications. Conversely, one of the primary functions of arterials is to provide through-traffic mobility, which necessitates the most restrictive access spacing standards.

Section 153.195 of the City of Prineville Land Use Code provides guidelines for access management for streets under City of Prineville jurisdiction. The standards are presented as guidelines that the reviewing authority shall consider in the review and approval of new development:

- Major arterials require 500 feet between driveways and/or streets and 1/4 mile between intersections.
- Minor arterials require 300 feet between driveways and/or streets and 600 feet between intersections.
- Collectors require 50 feet between driveways and/or streets and 300 feet between intersections.

This section of code also identifies other techniques and considerations for restricting access to arterials and collectors, but does not include any requirements for their use.

Additional requirements for access management are provided by specific zoning requirements. The airport zones, commercial zones, and industrial zones include a requirement that new development be designed so that traffic does not require backing maneuvers within a public street right of way while entering or exiting a particular development. In the Park Reserve zone, there is a general requirement that access points from public streets must be located to “minimize traffic congestion, noise and dust pollution and to protect scenic views and vistas.” In the industrial zones, there is a similar standard for access to “minimize traffic congestion, noise and dust pollution,” and “…avoid directing traffic onto residential streets or onto streets passing directly through residential, school, hospital or other noise sensitive use areas and safety zones.” The zoning ordinance gives the City the ability to require access to lower-order streets (when there are multiple options for access) for residential, commercial, or industrial development in any zone.

The *Oregon Highway Plan* Policy 3A, Classification and Spacing Standards, in Division 51 of OAR 734-051 defines access spacing standards for the location, spacing and type of road and street intersections and approach roads on state highways.[5] Access management spacing guidelines for Prineville highway segments are shown in Table 5.

[5] https://www.oregon.gov/odot/Planning/Documents/OHP.pdf

Table 5. Access Management Spacing Standards for Highway Segments[6]

Route Name		Description	Functional Classification	2012 AADT	Posted Speed (mph)	Access Spacing Standard (feet)
U.S. 26	Madras Hwy	East of Prineville “Y”	Statewide Highway[7]	>5,000	30	500
	Ochoco Hwy	City Limits to Prineville “Y”	Regional Highway	>5,000	55, 40, 30	990, 500, 350
OR 27, Crooked River Hwy		Outside City Limits	District Highway	<5,000	45	360
OR 126, Ochoco Hwy		Entire Segment	Statewide Highway[8]	>5,000	55, 45, 30	2,640, 800, 500
OR 370, O’Neil Hwy		Entire Segment	District Highway	<5,000	55	650
OR 380 Paulina Hwy		Entire Segment	District Highway	<5,000	35, 45	250, 360

Site-specific constraints may require deviations to these access standards. Where these guidelines cannot be implemented, justification of an alternative should be prepared that demonstrates how safety for all modes will be provided, or how the change will better meet the roadway function. Self-imposed constraints are not justification for an access deviation.

Street Design Standards

Existing streets will be upgraded and new streets constructed over time through both public and private investment. When such upgrades are provided (or construction of new facilities takes place), the roadway construction should follow Prineville’s roadway design standards, balancing the context of built and natural environments. These standards are generally applicable to streets owned by Prineville; design standards for state-owned highways are discussed in the prior sections. Updates to local design standards may be considered during development of the TSP Update. Table 6 presents the dimensional standards for the four functional classifications in Prineville. Major arterial standards are not shown as these only include state facilities that are managed and maintained by ODOT.

6 https://www.cityofprineville.com/sites/default/files/fileattachments/community_development/page/232/transportation_system_plan_volume1.pdf

7 STA=Special Transportation Area – from Milepost 18.24 (Locus Avenue) to 19.38 (Spruce Lane)

8 EXP=Expressway – from Milepost 1.37 (Veteran’s Way) to 17.92 (O’Neil Highway)

Table 6. Roadway Cross-Section Standards

Functional Classification	Features/Dimensions (Each Direction)					Left Turn Lane/Median	Total Paved Width	Total Right of Way Width
	Travel Lane	Bike Lane	On-Street Parking	Sidewalk	Planter Strip			
Minor Arterial	12’ – 14’*	6’	None	6’ – 10’	Optional; Varies	14’	50’ – 54’	100’
Major Collector	12 - 14’*	6’**Error! Bookmark not defined.**	None	6 - 10’	Optional; Varies	None	36’**Error! Bookmark not defined.** - 40’	80’
Minor Collector	12’	None	8’	6’	Optional; Varies	None	40’	80’
Local Residential Street	10’	None	8’	6’	Optional; Varies	None	36’	60’

Source: City of Prineville

Intelligent Transportation System Facilities

Prineville has one TripCheck camera at U.S. 26/NE 3rd Street and NW Harwood Street. This camera is currently connected via cellular modem and has limited bandwidth. An overview of intelligent transportation system facilities is shown in Figure 9. Additionally, ODOT Region 4 has planning efforts in place that detail Intelligent Transportation facilities throughout the region. ODOT also maintains a Broadband Policy that details connections to long haul fiber.

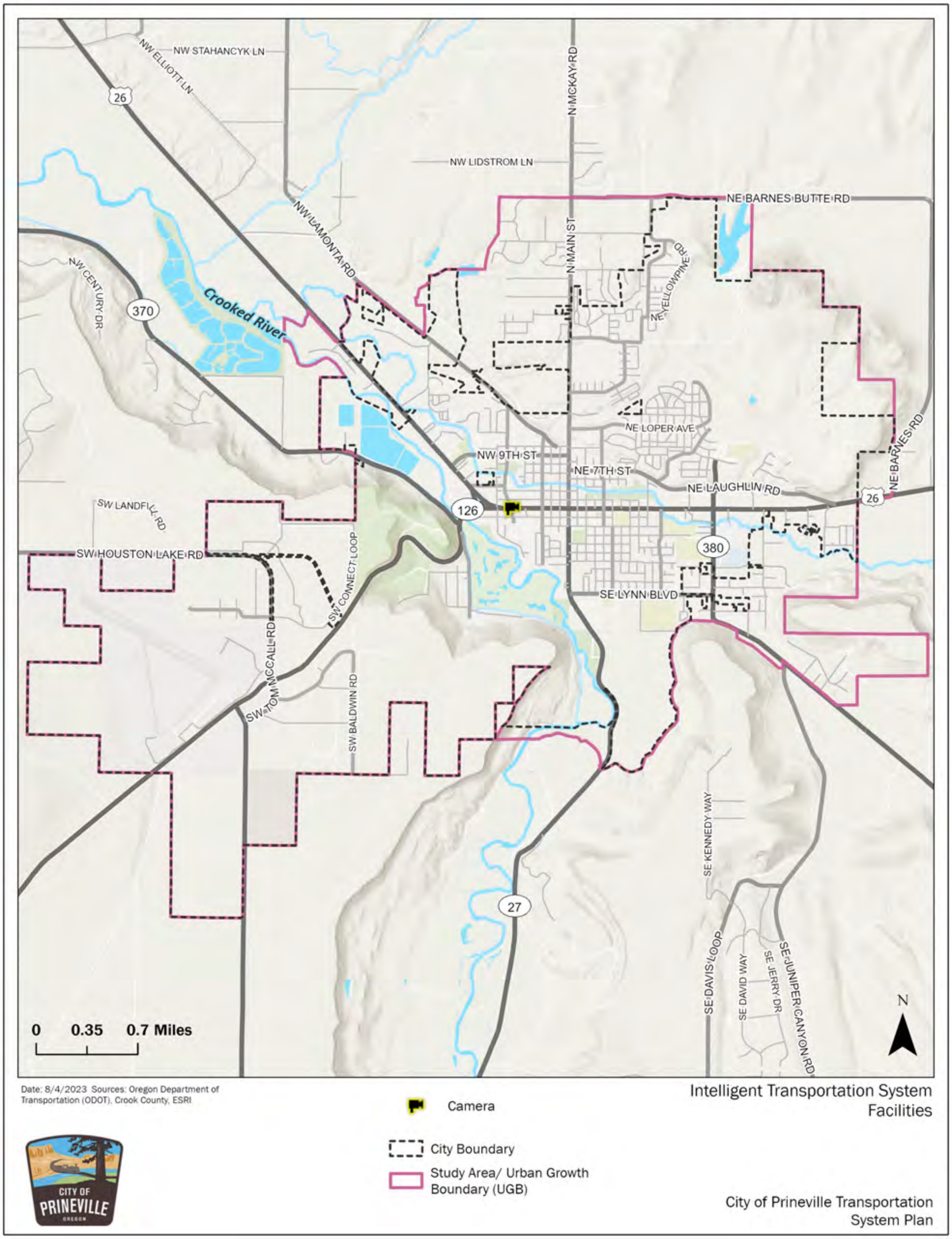

Figure 9. Intelligent Transportation System Facilities

Public Transportation Inventory

Transit within Prineville includes fixed-route and Dial-A-Ride service provided by Cascades East Transit (CET) and shuttle service provided by Grant County People Mover. CET published its *2040 Transit Master Plan* (2020) that includes planned improvements to transit; these improvements are discussed in Technical Memo #1: Plan and Policy Review.[2]

Fixed Route

Cascade East Transit operates Community Connector fixed routes that connect to communities within Crook County, Deschutes County, and Jefferson County. CET operates Route 26 service between Redmond and Prineville, with three stops in Prineville (see Table 7). This service is open to the public and operates Monday through Friday. Weekend service is not currently provided. The annual ridership from Route 26 in 2017 was 16,067. Route 26 has a moderately strong ridership and productivity compared to other CET routes. CET has suspended fare collection until further notice on all CET services except recreation services.

Table 7. Cascade East Transit Service

Service	Service Description	Service Hours	Fare Zone	Service Stops in Prineville
Route 26: Prineville to Redmond	Connecting to Prineville, Powell Butte, and Redmond.	Monday–Friday at 6 a.m.–6 p.m. (5 trips each day)	Suspended fare collection until further notice.	• Crook County Library • 3rd and Harwood • Stryker Park

Rural Dial-A-Ride

Cascade East Transit offers a Rural Dial-A-Ride within Prineville. This service is open to the public and does not have any eligibility requirements. Riders must call the day before service is needed to reserve a ride. Ride times are scheduled based on availability. The travel patterns from 2018 in Prineville include the Stryker Park bus stop as a key location since passengers can transfer to the CET Route 26 and the Prineville Senior Center.

Other Transit Services

There are public transportation services offered within the CET service area that are provided by other operators that are independent of CET services. The other transit provider that connects with CET's network is People Mover in Grant County, a shuttle service that provides connections to several Central Oregon communities (see Table 8). There are two Catch-A-Ride services offered: Monument to Bend and Prairie City to Bend. The transit services allow for statewide travel and are located with 1/4 to 1/2 mile of one or more CET bus stops.

Table 8. Grant County People Mover Services

Service	Service Description	Service Hours	Fare	Connecting Service Stops within 1/4 to 1/2 mile of Prineville
Monument to Bend	Connecting to Monument, Dayville, Mitchell, Prineville, Redmond, and Bend.	• Wednesday and Friday • Reservations required	-	Prineville McDonald's

Service	Service Description	Service Hours	Fare	Connecting Service Stops within 1/4 to 1/2 mile of Prineville
Prairie City to Bend	Connecting to Prairie City, John Day, Mount Vernon, Dayville, Mitchell, Prineville, Redmond, and Bend.	Monday, Wednesday, and Friday at 9:35 a.m. and 5:15 p.m.	• Adult: \$7.75–\$18.50 • Senior: \$6.00–\$15.75 • Child: \$5.75–\$10.25 Based on the Prineville location.	Prineville McDonald's

Park-and-Ride Locations

- Prineville Park-and-Ride at 305 NW Madras Highway. There are 12 available spaces.

Active Transportation Facilities

Bicycle Facilities

Prineville's bicycle network is currently comprised of painted bicycle lanes and paved roadway shoulders that are wider than 5 feet. Painted bike lanes are present on:

- U.S. 26/3rd Street from NE Juniper Street to NE Barnes Butte Road
- SE Combs Flat Road from U.S. 26/3rd Street to SE Bull Boulevard
- NW 9th Street from U.S. 26 to N Main Street
- OR 380 from U.S. 26/3rd Street to NE Mason Drive
- NE St. Charles Way south of U.S. 26/3rd Street
- N Main Street from E 9th Street to Juniper Haven Cemetery and from SE 3rd Street to approximately SE Fairgrounds Access Road
- SE Lynn Boulevard from SE Combs Flat Road to S Main Street
- OR 126 from NW 2nd Street to SW Deer Street

Shoulders wider than 5 feet are present on:

- U.S. 26 from NW 9th Street to NW Gardner Road
- OR 370 from OR 370/OR 126 to the Les Schwab facility
- OR 126 from NW Locust Street to milepost 16.7

Multiuse paths are present on:

- Ochoco Creek from NW Harwood Avenue to U.S. 26/3rd Street
- U.S. 26 from NW 9th Street to approximately Riverland Drive
- Land to the north of the Ochoco Pointe community
- NE 10th Street to NE Combs Flat Road

Existing and proposed bicycle facilities and multiuse paths in Prineville are displayed in Figure 10.

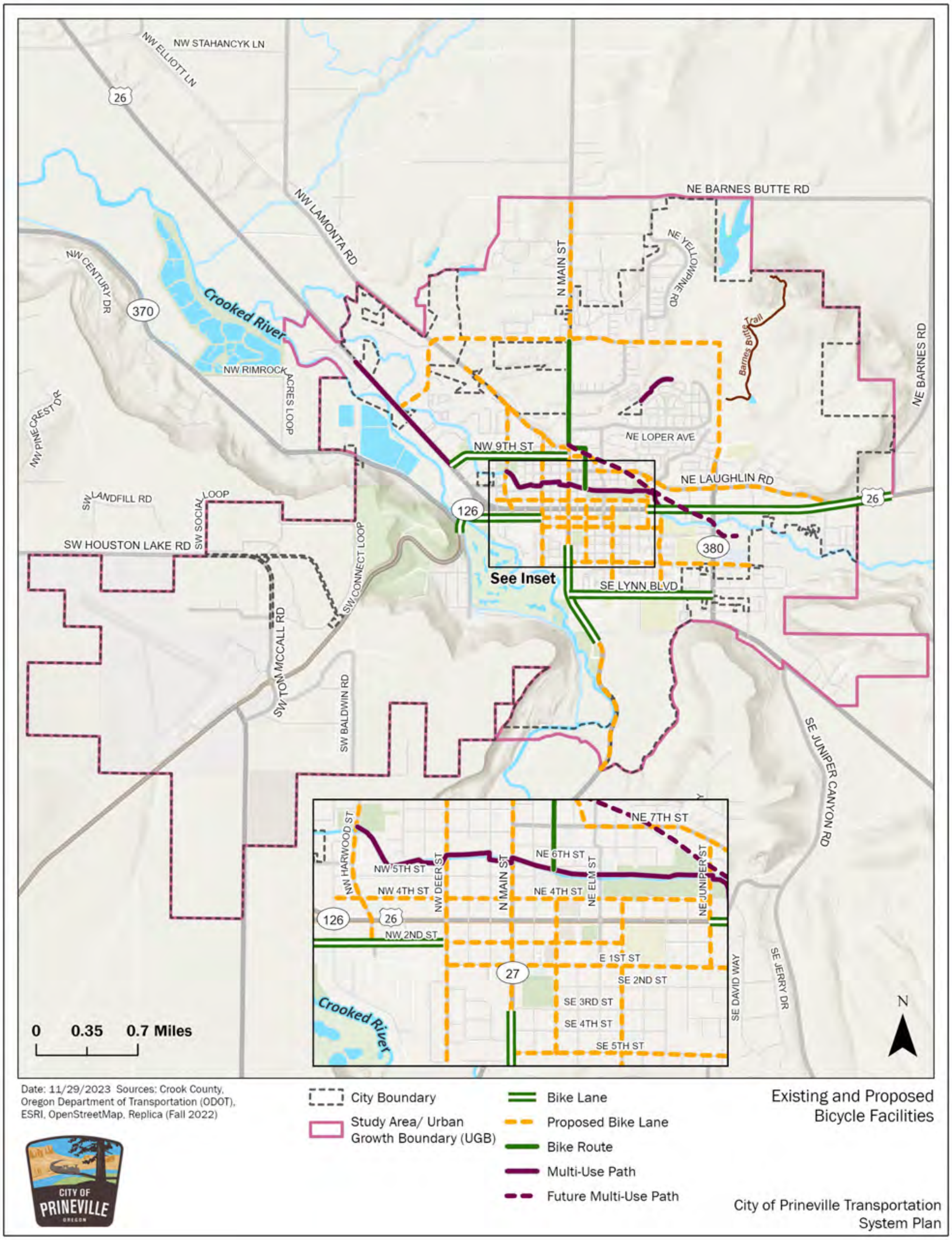

Figure 10. Existing and Proposed Bicycle Facilities (2013 TSP)

Shared-Use Path Facilities

Shared-use paths are physically separate from roads and provide users with a traffic-free traveling experience, excluding road crossings. Planned and future shared-use paths and parks in Figure 11 reflect work from the *Unified Parks and Recreation System Plan* (2021), created by the City of Prineville, Crook County Parks and Recreation District, and Crook County.[9] Paths' locations reflect the key needs and vision voiced by the Prineville community.

Difficult Bicycle Crossings

There are several locations where bicycle facilities end without a signalized crossing, creating a difficult connection. These locations include:

- The Ochoco Creek Bike Path at NE Elm Street
- The Ochoco Creek Bike Path at NE Juniper Street
- The Ochoco Creek Bike Path at NE Knowledge Street

Pedestrian Facilities

Pedestrian facilities are the elements of the network that enable people to walk safely and efficiently between neighborhoods, retail centers, employment areas and transit stops. These include facilities for pedestrian movement (e.g., sidewalks, mixed-use trails) along key roadways as well as for safe roadway crossing locations (e.g., crosswalks, crossing beacons, pedestrian refuge islands). Each plays a role in developing a comprehensive pedestrian network.

Today, pedestrian facilities within Prineville are not fully interconnected, and outside of the downtown area are incomplete and sporadic. Pedestrian facilities that do exist often include utility encroachments, numerous driveway conflicts, or inadequate width. These conditions limit the comfort, safety, and utility of the pedestrian facilities. In the future, as arterials and collector streets are improved to urban standards, improvements to existing pedestrian routes (as sidewalks and/or multiuse pathways) will be provided. New roadways require pedestrian infrastructure.

Prineville specifies that sidewalks must be a minimum of 5 feet wide, while ODOT specifies that that sidewalks must be a minimum of 6 feet wide. Both entities follow Americans with Disabilities Act (ADA) requirements for design to accommodate all users, including adequate clear widths for people using wheelchairs, sidewalk ramps at all pedestrian crossings, and detectable warnings for the vision-impaired on all public roads. Pedestrian facilities, existing and proposed as of the 2013 TSP, are displayed in Figure 11.

[9] https://www.ccprd.org/_files/ugd/a31422_5b62f2a8c1904f18a227fd85dc018037.pdf

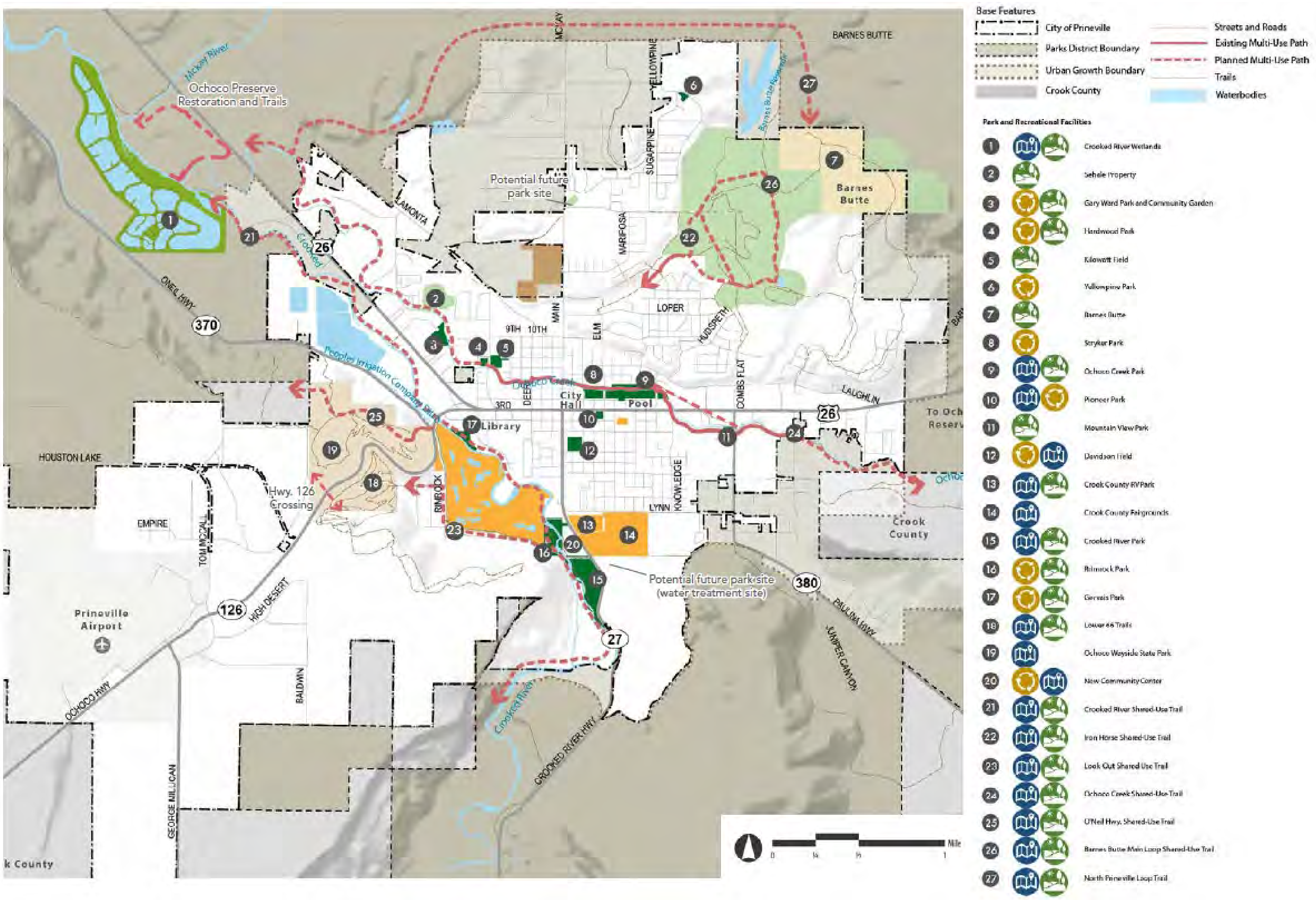

Figure 11. Planned and Existing Parks and Shared-Use Paths

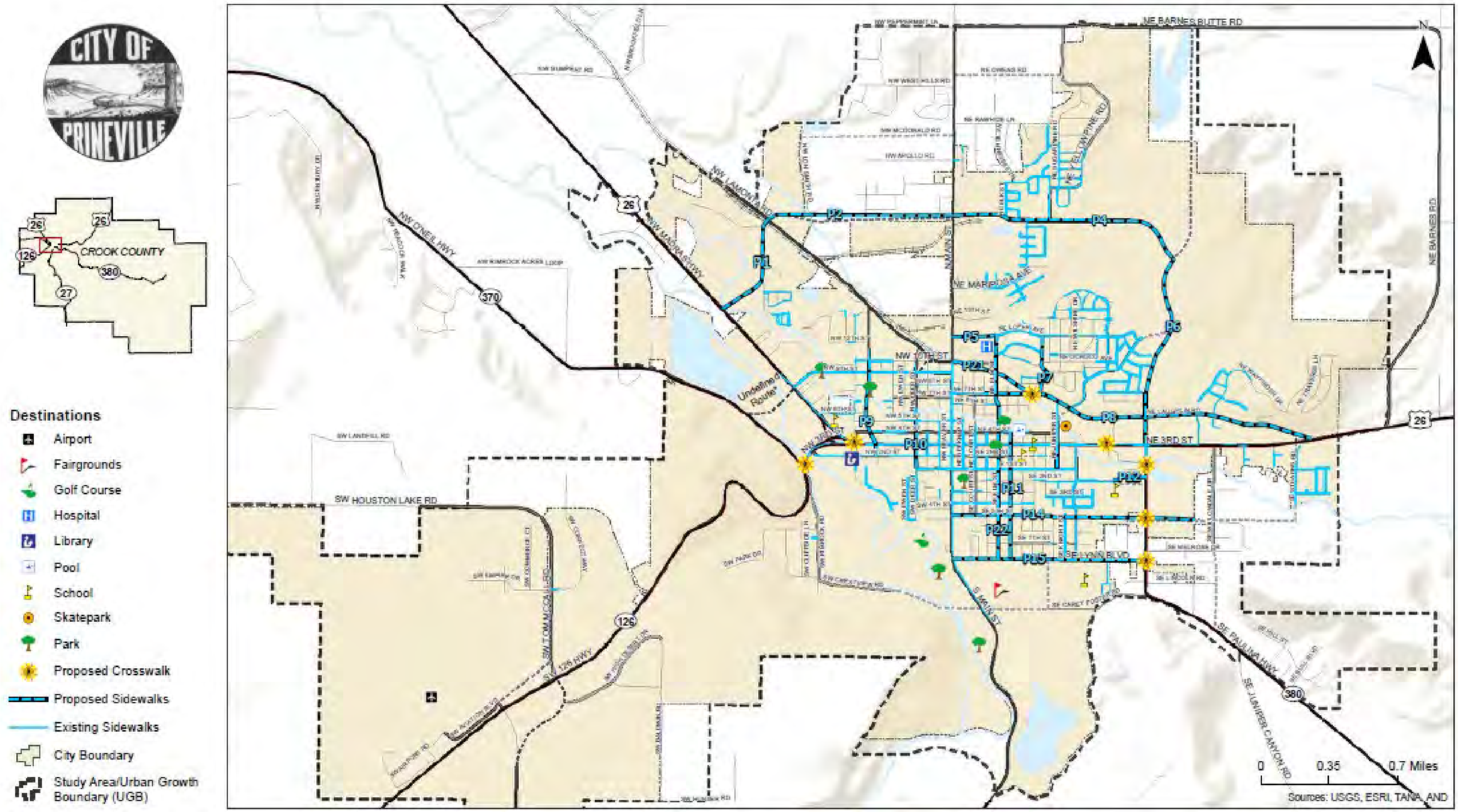

Figure 12. Pedestrian Improvement Projects from Prior TSP

Pedestrian Crossings

Crossing facilities enable walkers to safely cross streets, railroad tracks, and other transportation facilities. Planning for appropriate pedestrian crossings requires the community to balance vehicular mobility needs with providing crossing locations that are along the desired routes of walkers. Within Prineville, the major roadway facilities such as U.S. 26, Main Street, and Combs Flat Road are crossing barriers.

Oregon law considers all roadway intersections to be legal crossing locations for pedestrians regardless of whether a painted crosswalk is provided unless they are closed through a closure process. At crosswalks, drivers are required to yield the right of way to pedestrians to allow them to cross. Driver compliance to yielding is often inconsistent, and pedestrians often have difficulty crossing higher-volume and higher-speed roadways. Observations in Prineville show much higher yielding west of Knowledge Street where the posted speeds are lower and urban densities are higher.

Despite being legal crossings, infrastructure in downtown Prineville, and especially on NW 3rd Street, lead to high levels of stress for pedestrians. No bulb outs or enhanced features are present, and high traffic volumes at high speeds reduce safety. A more detailed discussion of gaps in the pedestrian crossing network are discussed in the System Gap Analysis section.

Freight Inventory

Local Truck and State Freight Routes

To serve industrial properties and support future economic development efforts, the City of Prineville has designated several roadways as local Truck Routes (see Figure 13). These roadways include:

- NW 3rd Street
- S Main Street
- NW Lamonta Road
- NW Gardner Road
- NW 9th Street and NW 10th Street
- NE Laughlin Road
- SE Combs Flat Road
- SW George Millican Road

The designation of these facilities as Truck Routes does not prohibit local delivery trucks from using other roadways, but it is intended to encourage the use of these routes for regional freight needs through design and signage.

OR 126 and U.S. 26 are specified as reduction review routes subject to ORS 366.215. These highways are subject to review if a project or other action would affect the freight-carrying capacity of the highways. This designation is an important consideration for transportation planning; any potential improvements will need to consider the provisions of this rule.

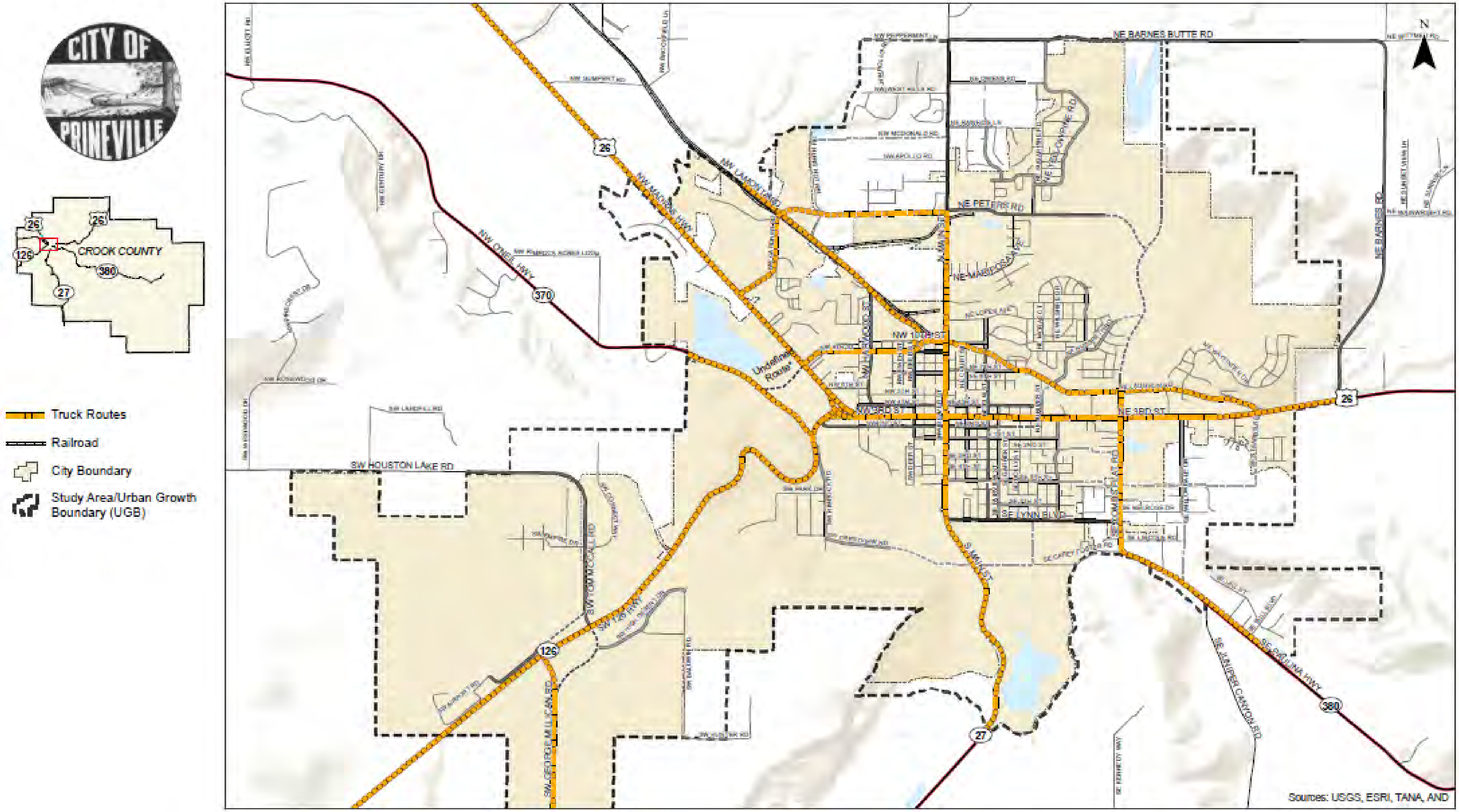

Figure 13. Truck Routes

Freight Volumes

Truck volumes form a considerable component of the highway traffic in Prineville, comprising between 11% and 26% of the overall traffic volumes as illustrated in Table 9.

Table 9. Freight Truck Percentages on Prineville Freight Routes (2021)

Route	Milepost	AADT	Truck Percentage
U.S. 26	26	5,833	26.9% (overall)
OR 126	15.75	14,032	26.5% (overall)
NE 3rd Street	18.77	11,370	26.5% (overall)
NW 9th Street	0.39	2,954	11.1% (single-unit trucks)
NW Gardner Road	0.54	1,763	18.6% (single-unit trucks)
N Lamonta Road	0.27	2,963	18.6% (single-unit trucks)
NE Laughlin Road/NE 7th Street	0.49	3,939	19.3% (single-unit trucks)
S Main Street	0.8	900	24.1% (single-unit trucks)

Source: ODOT TransGIS, 2021

AADT = annual average daily traffic

Rail and Air Inventory

The following sections address the rail and air systems in Prineville.

Rail

The City of Prineville Railway (COPR) provides a primary freight connection between the Prineville and the Class 1 BNSF mainline in Redmond. Formed in 1918, the COPR directly serves industries in Crook County. This 18-mile railroad includes daily switching operations at Prineville Junction located north of Redmond along the U.S. 97 corridor. Trains consist of two EMD GP 20’s and one EMD GP 9. Figure 14 displays the rail inventory in Prineville.

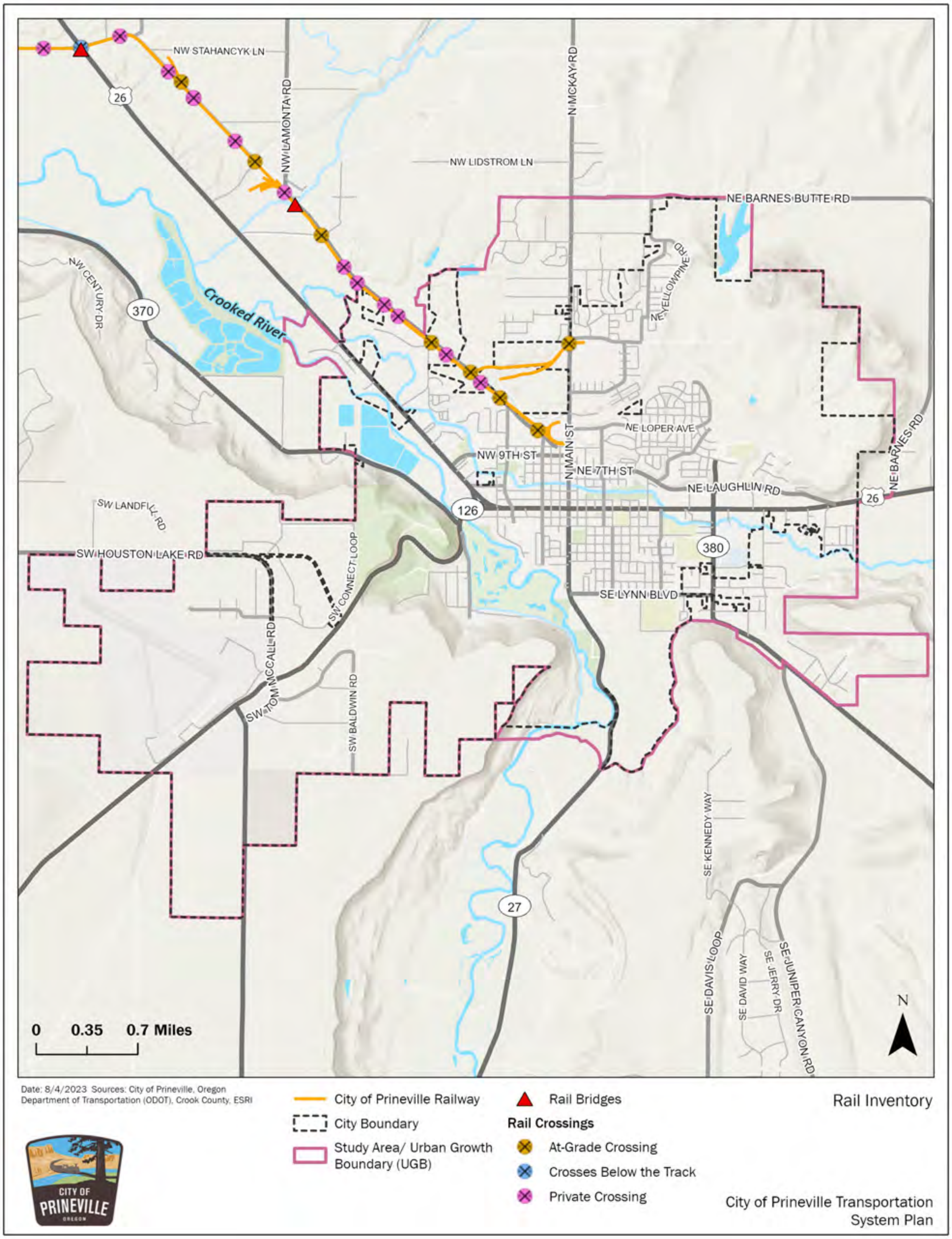

Figure 14. Rail Inventory

The City increased its investment in the COPR short line service to Prineville Junction in 2010 and built a freight depot with assistance from Connect Oregon grants. The freight depot provides warehousing space, equipment ramps, freight to rail intermodal service, and bulk product storage. The freight depot's goal is to provide a regional multimodal transportation hub that provides the Central Oregon region with these services. It is a more than 30-acre- site along Bus Evans Road between Lamonta Road and U.S. 26, 3 miles west of the city and adjacent to the COPR mainline.

The location of this site and its intermodal infrastructure further justifies the City freight route designation of Lamonta Road, which provides access to Bus Evans Road. Coordination with Crook County should be pursued to similarly classify the portion of Lamonta Road located outside the city limits.

Air Service

The Prineville Airport is owned by Crook County, managed by the City of Prineville, and is the sole provider of air service within the city of Prineville. There is no commercial air service, only general aviation. The airport is located in the southwest corner of Prineville, near the junction of OR 126 and Airport Way, and it provides both day and nighttime operations. Typical users include private individuals, corporations, the U.S. Forest Service, and the Bureau of Land Management. The airport contains two runways, RWY 10-28 and RWY 15-33. RWY 10-28 is 5,751 feet long, and 75 feet wide, while RWY 15-33 is 4,054 feet long and 40 feet wide. Both are made of bituminous pavement, with RWY 10-28's condition rated as good and RWY 15-33's condition rated as very poor.

Figure 15 illustrates the Final Preferred Alternative for the Prineville Airport, derived from the *Prineville/Crook County Airport Master Plan Update* (2017). The airport has a variety of zoning designations applied to it to preserve and enhance aircraft use and access, including Airport Approach Overlay (AA), Airport Development (AD), Airport Business-Industrial (AM), and Airport Commercial (AC). There is also an Aircraft Landing Field Overlay Zone to restrict land uses or heights that interfere with airport operations. Intersection upgrades such as the roundabout at OR 126 and Tom McCall Road aim to improve access to and from the airport, integrate business parks with the airport, and spur development of further uses that are compatible with aviation.

The airport currently generates low surface traffic volumes, which are anticipated to continue in the future. Industrial or commercial development occurring near the airport at OR 126 and Tom McCall Road, SW George Millican Road and Tom McCall Road, or the surplus property west of SW George Millican Road would generate additional traffic and could negatively impact surface transportation travel times. The Final Preferred Alternative will expand development and increase travel demand while maintaining the current ease of access by shifting taxiway expansion to the west and freeing up the existing apron area for immediate development, relocating the U.S. Forest Service office to a location more easily accessible from OR 126 and maintaining the design speed of SW Houston Lake Road.

Figure 15. Prineville Airport Final Preferred Alternative

EXISTING SYSTEM CONDITIONS ANALYSIS

Traffic Analysis

Traffic Volumes

Annual average daily traffic data collected in 2021 is available from ODOT TransGIS at several locations in the study area. Within the study area, the highest AADT occurs along OR 126 north of O'Neil Highway/OR 370. Figure 16 shows the AADT recorded at key intersections. AADTs were also collected in November 2022 at five locations near the study area limits to be used in the travel demand modeling, as shown in Figure 17.

Study intersections were identified for this TSP update from the 2013 City of Prineville TSP with an additional intersection that has experienced significant growth since 2012 when the intersection volumes were collected (N Main Street and N 7th Street), as shown in Figure 17. Sixteen-hour traffic counts were collected at twelve study intersections and four-hour traffic counts were collected at five study intersections in November 2022. These counts were collected on weekdays and included both vehicle and pedestrian volumes. The full traffic counts are provided in Appendix A, Traffic Counts.

Counts were not collected at four of the 23 study intersections (intersections #5, #11, #12, and #20), so intersection volumes were developed be calculating an average growth rate between 2012 and November 2022 for the surrounding study intersections and applying that growth rate to the peak hour intersection volumes from the 2013 City of Prineville TSP. These four intersections are shown in green in Figure 17. Additionally, construction activity near the intersection of SW Tom McCall Road and OR 126 (#22) has varied greatly in the last few years. To account for these varying levels of traffic, traffic counts from May 2022 were used in the development of the 2022 intersection volumes.

Existing conditions for traffic operation were analyzed for the study intersections using 2022 30th highest annual hour of traffic (30 HV) conditions. Because the traffic counts may have been collected during a period where traffic volumes were lower than the 30 HV conditions, a seasonal adjustment factor was calculated as outlined in the ODOT *Analysis Procedures Manual*.[10] ODOT maintains Automatic Traffic Recorder location 07-001 near Prineville. Reviewing the percentages of weekday average daily traffic for the count month (November) and peak months (June and July) suggests using a seasonal adjustment factor of 52%. According to Section 5.5 of the APM, seasonal factors greater than 30% should be avoided. In coordination with ODOT, a seasonal adjustment factor was calculated by comparing the November 2022 counts to adjusted counts from May 2022 in the study area. Based on this review, a seasonal adjustment factor of 1.10 was applied to the November 2022 counts when developing the 2022 30 HV intersection volumes.

An overall system peak hour of 3:45 p.m. to 4:45 p.m. was determined from the maximum hourly total intersection volumes. Additional information regarding analysis procedures is documented in Tech Memo #3: Analysis Methodology. The peak-hour intersection volumes for the 23 study intersections are shown in Figure 18 and Figure 19. On average, the 2022 peak-hour intersection volumes are 40% larger than the peak-hour intersection volumes shown in the 2013 City of Prineville TSP.

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[10] Analysis Procedures Manual Version 2, Oregon Department of Transportation, March 2016. https://www.oregon.gov/odot/planning/pages/apm.aspx

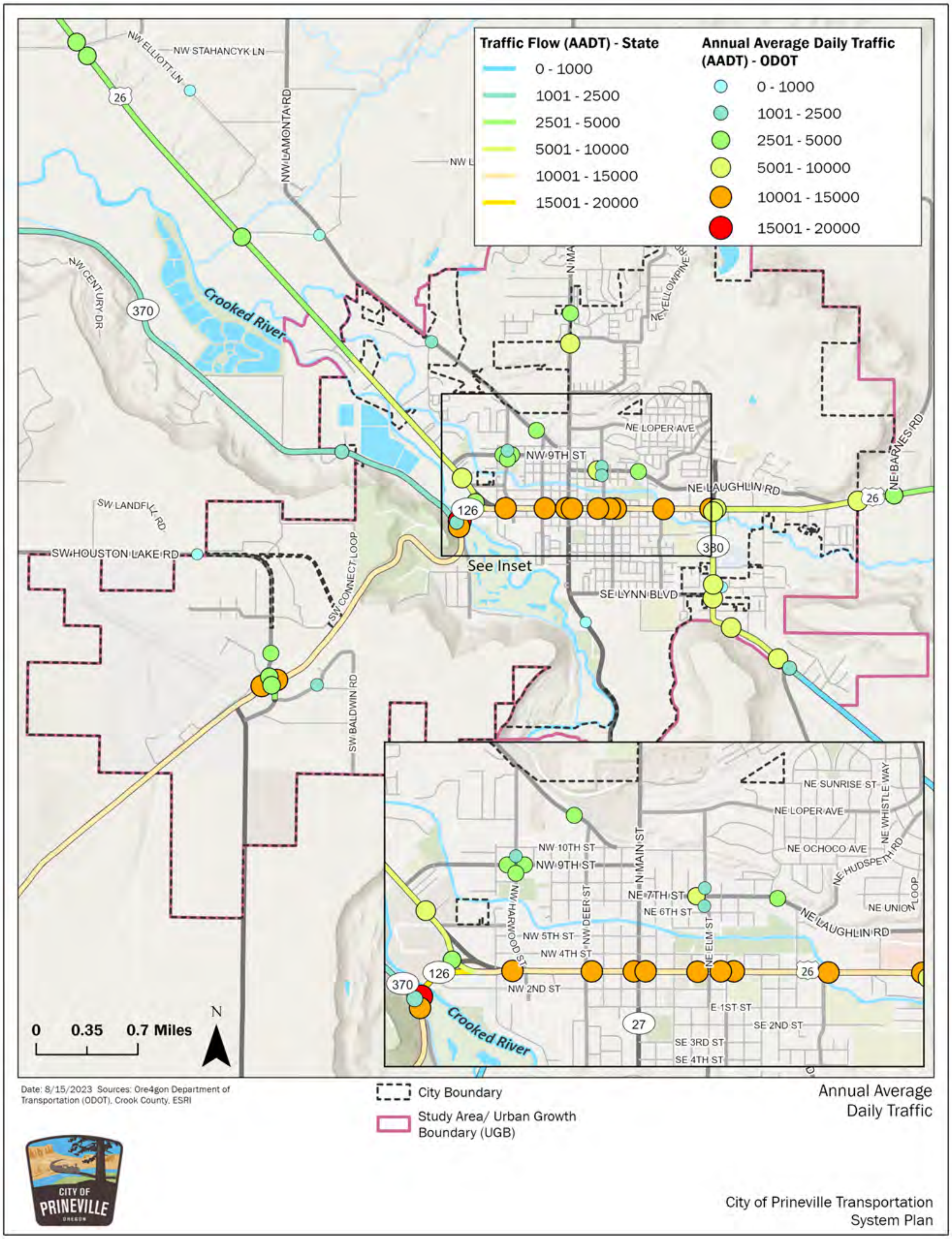


Figure 16. Annual Average Daily Traffic

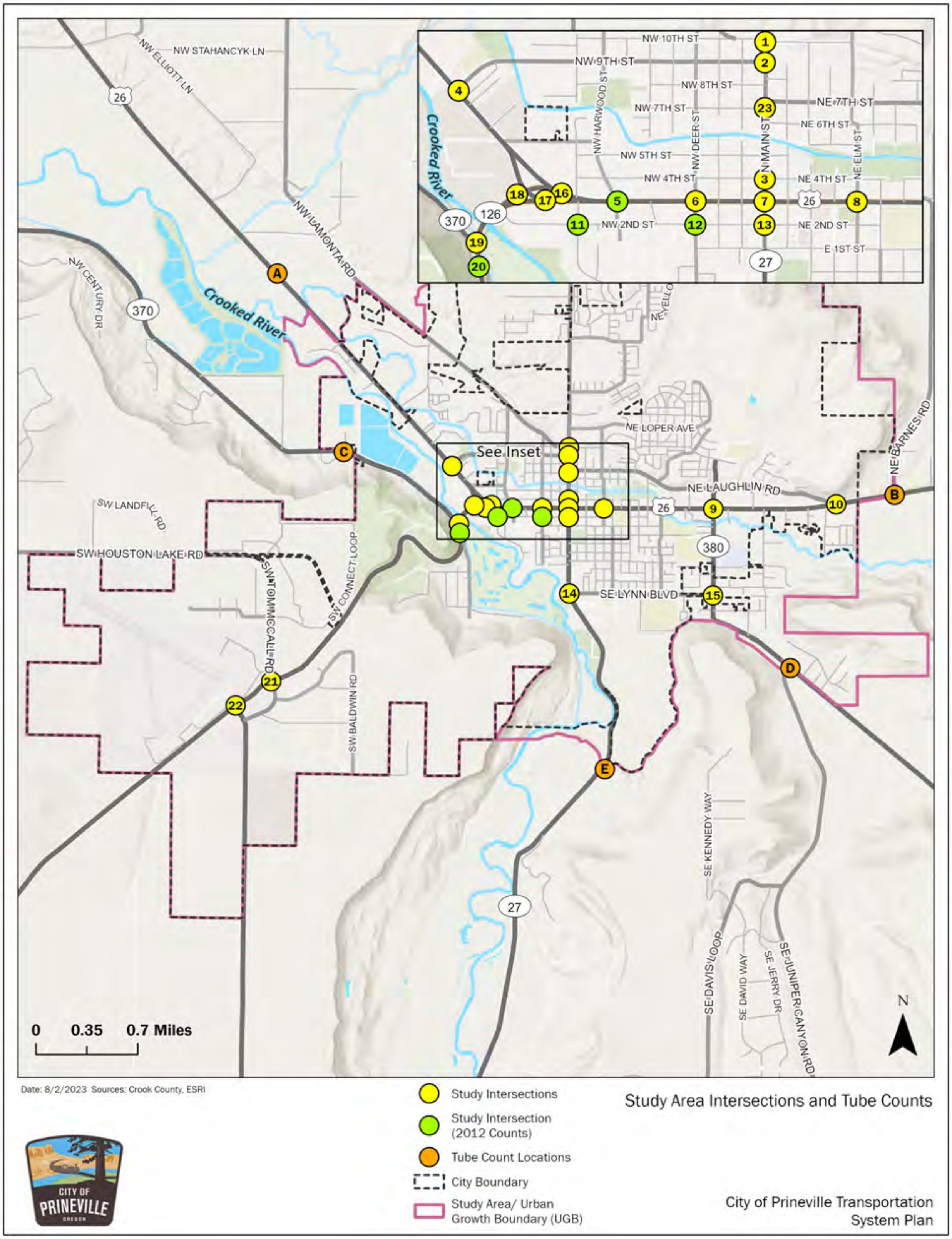


Figure 17. Study Area Intersections and Tube Count Locations

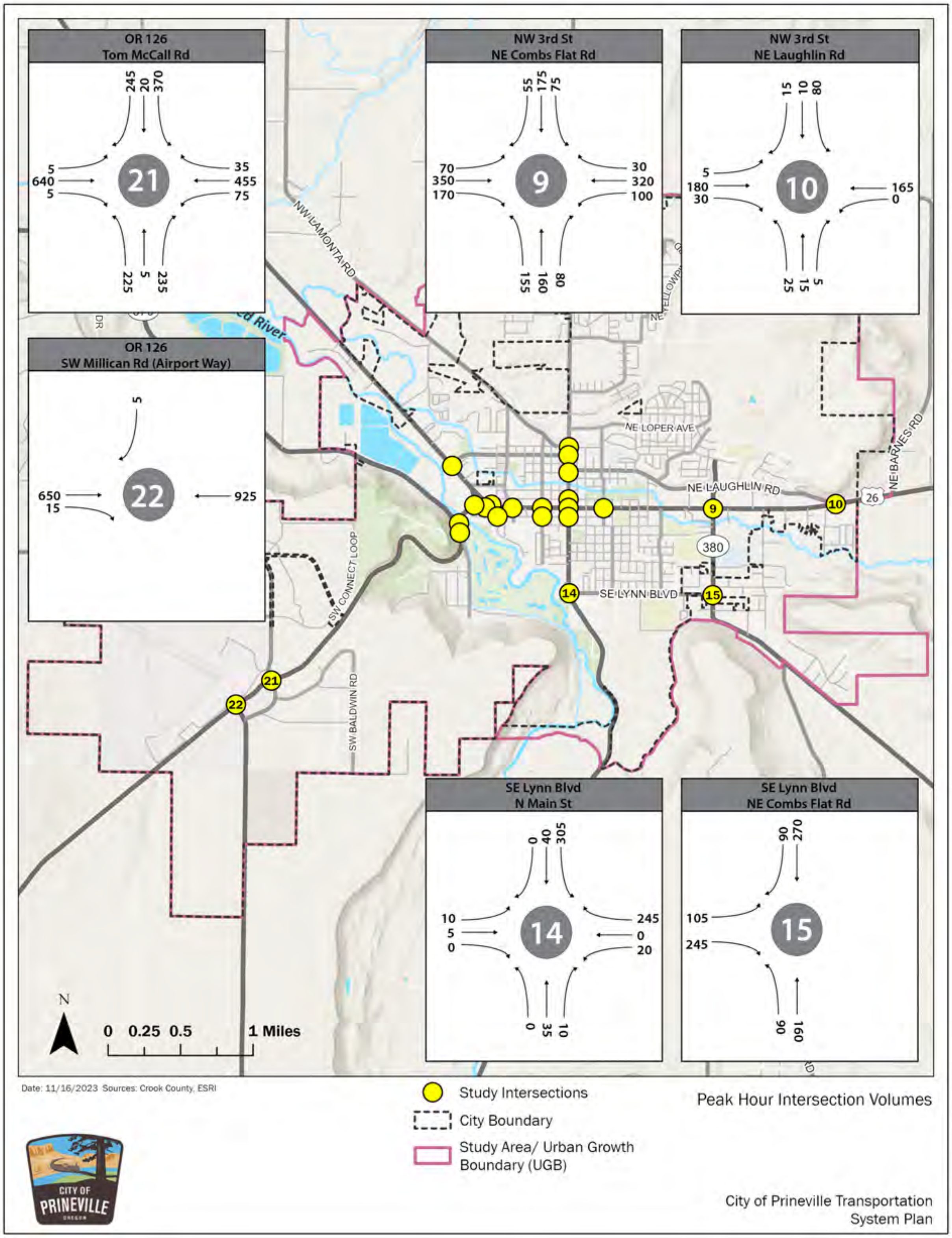


Figure 18. Peak-Hour Intersection Volumes

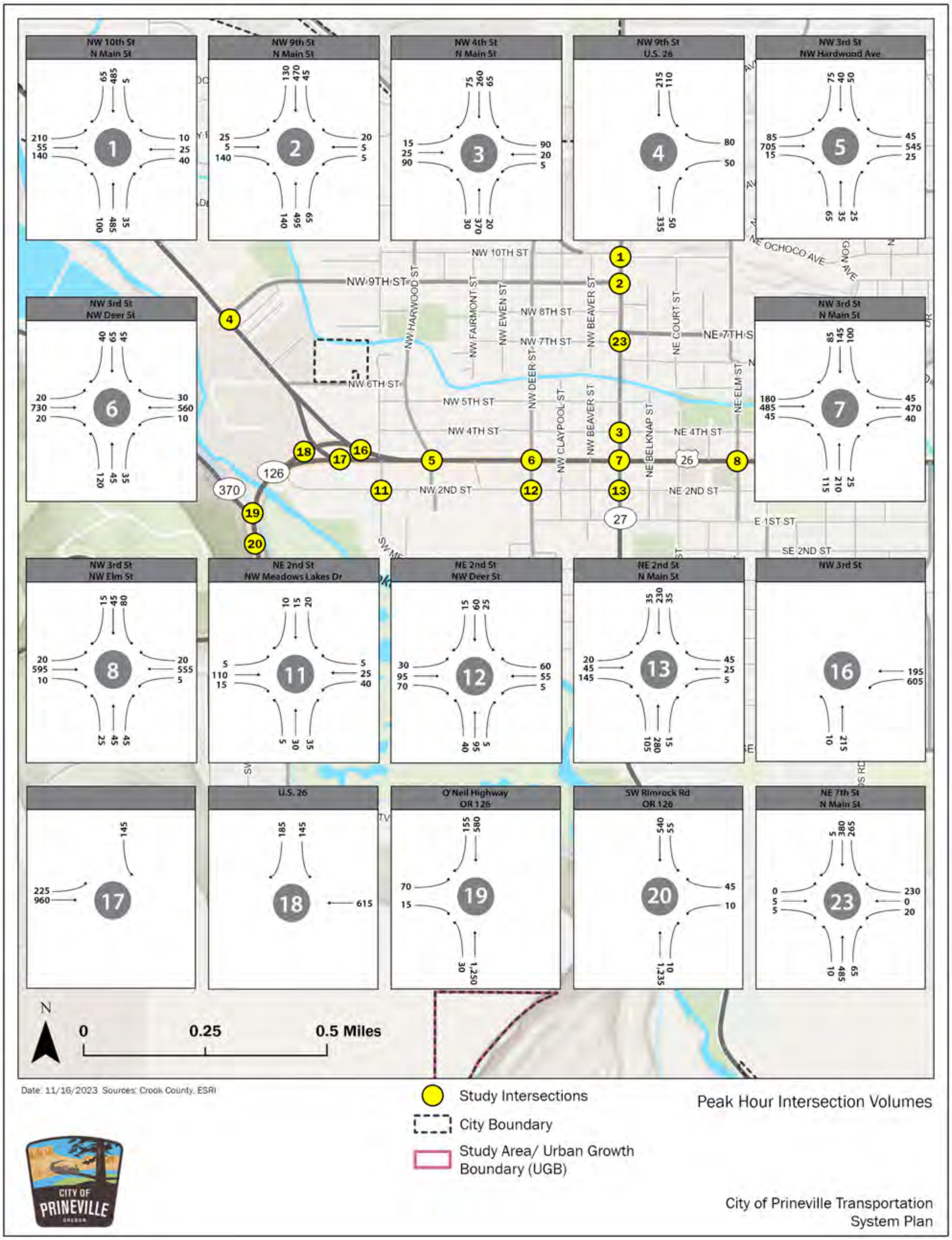


Figure 19. Peak Hour Intersection Volumes

Intersection Operations Analysis

Cities and agencies establish minimum performance standards for the transportation system to help guide planning efforts, project development, and land use entitlements. These standards are often a reflection of the amount of delay or congestion experienced by a motorist at intersections. This performance measure is used to define whether or not a location is performing adequately or will require improvements. In Prineville, intersections are under the roadway jurisdiction of the City, Crook County, or ODOT. Each agency has its own performance standards or targets. Where multiple agencies have jurisdiction, the most stringent performance measure governs. The roadways that fall within ODOT's jurisdiction include the five state highways summarized in Table 3. The highway classifications identify the mobility targets and access management standards for each facility. Intersection performance targets for ODOT facilities are v/c ratio targets for peak 15-minute- operating conditions during the 30 HV. Table 6 of the *Oregon Highway Plan* provides the peak-hour v/c ratio targets for all signalized and unsignalized intersections outside the Portland metropolitan area.[5]

Level of service is another metric that describes how well an intersection operates. Intersections receive a LOS grade from A to F, where LOS A represents the best conditions with minimal delay at the intersection, and LOS F represents the worst conditions. As part of the 2013 City of Prineville TSP, the City identified operations standards for LOS, v/c ratio, and 95th percentile queueing, which will be used to explore improvements later in the TSP update process. Table 10 shows the applicable governing jurisdiction, intersection control, and performance standard for each study intersection. Additional information regarding analysis procedures is documented in Tech Memo #3: Analysis Methodology.

Table 10. Intersection Mobility Targets

#	Intersection	Jurisdiction	Control	Existing Mobility Target
1	N Main St & NE 10th St	City of Prineville	Signalized	LOS E or better, v/c ratio < 0.90
2	N Main St & NW 9th St	City of Prineville	TWSC	LOS E or better, v/c ratio < 1.0
3	N Main St & N 4th St	City of Prineville	TWSC	LOS E or better, v/c ratio < 1.0
4	U.S. 26 & NW 9th St	ODOT	TWSC	v/c < 0.90
5	NW Harwood Ave & NW 3rd St/U.S. 26	ODOT	Signalized	v/c < 0.90
6	NW Deer St & NW 3rd St/U.S. 26	ODOT	Signalized	v/c < 0.90
7	N Main St & 3rd St/U.S. 26	ODOT	Signalized	v/c < 0.90
8	NE Elm St & NE 3rd St/U.S. 26	ODOT	Signalized	v/c < 0.90
9	NE Combs Flat Rd/OR 380 & NE 3rd St/U.S. 26	ODOT	Signalized	v/c < 0.90
10	NE Laughlin Rd & NE 3rd St/U.S. 26	ODOT	TWSC	v/c < 0.80
11	NW Meadows Lakes Dr & NW 2nd St	City of Prineville	TWSC	LOS E or better, v/c ratio < 1.0
12	NW Deer St & NW 2nd St	City of Prineville	TWSC	LOS E or better, v/c ratio < 1.0
13	N Main St & N 2nd St	City of Prineville	TWSC	LOS E or better, v/c ratio < 1.0
14	S Main St & SE Lynn Blvd	City of Prineville	TWSC	LOS E or better, v/c ratio < 1.0
15	SE Combs Flat Rd/OR 380 & SE Lynn Blvd	ODOT	TWSC	v/c < 0.85
16	WB OR 126 & WB U.S. 26	ODOT	Ramp	v/c < 0.85
17	EB OR 126 & EB U.S. 26	ODOT	Ramp	v/c < 0.85
18	WB OF 126 & EB U.S. 26	ODOT	Ramp	v/c < 0.85
19	OR 126 & O'Neil Highway/OR 370	ODOT	TWSC	v/c < 0.80
20	OR 126 & S Rimrock Rd	ODOT	TWSC	v/c < 0.80

#	Intersection	Jurisdiction	Control	Existing Mobility Target
21	SW Tom McCall Rd & OR 126	ODOT	Roundabout	v/c < 0.85
22	SW George Millican Rd & OR 126	ODOT	TWSC	v/c < 0.85
23	N Main St & N 7th St	City of Prineville	TWSC	LOS E or better, v/c ratio < 1.0

LOS = level of service; TWSC = two-way stop control; v/c = volume to capacity

Traffic operations for the 23 study intersections were analyzed using Synchro and SIDRA. Intersection #23 was analyzed as two separate two-way stop-control intersections since there is 60 feet of space between NE 7th Street and NW 7th Street.

Delay, v/c ratios, and LOS were reported using Highway Capacity Manual (HCM) 6th Edition reports and HCM 2000 reports when HCM 6th Edition was not applicable and are summarized in Table 11. For the unsignalized intersections, v/c ratios and delay were reported for the worst movement. Volume-to-capacity ratios for the mainlines at two-way stop-controlled intersections were calculated based on ODOT *Analysis Procedures Manual* guidelines. For signalized intersections, the reported v/c ratios and delays represent the overall intersection operations. Five of the 24 intersections analyzed exceed the mobility target for either v/c ratio or LOS (where applicable).

Table 11. Existing 2022 Traffic Operations – V/C Ratio, Delay, and LOS

#	Intersection	Control	Existing Mobility Target	V/C ratio	Delay (sec)	LOS	Exceeds Mobility Target?
1	N Main St & NE 10th St	Signalized	LOS E or better v/c ratio < 0.90	0.88	29	C	No
2	N Main St & NW 9th St	TWSC	LOS E or better, v/c ratio < 1.0	0.68	41	E	No
3	N Main St & N 4th St	TWSC	LOS E or better, v/c ratio < 1.0	0.36	19	C	No
4	U.S. 26 & NW 9th St	TWSC	v/c < 0.90	0.13	13	B	No
5	NW Harwood Ave & NW 3rd St/U.S. 26	Signalized	v/c < 0.90	**1.60**	74	E	**Yes**
6	NW Deer St & NW 3rd St/U.S. 26	Signalized	v/c < 0.90	0.66	6	A	No
7	N Main St & 3rd St/U.S. 26	Signalized	v/c < 0.90	**1.15**	21	C	**Yes**
8	NE Elm St & NE 3rd St/U.S. 26	Signalized	v/c < 0.90	0.51	7	A	No
9	NE Combs Flat Rd/OR 380 & NE 3rd St/U.S. 26	Signalized	v/c < 0.90	0.79	31	C	No
10	NE Laughlin Rd & NE 3rd St/U.S. 26	TWSC	v/c < 0.80	0.20	13	B	No
11	NW Meadows Lakes Dr & NW 2nd St	TWSC	LOS E or better, v/c ratio < 1.0	0.12	12	B	No
12	NW Deer St & NW 2nd St	TWSC	LOS E or better, v/c ratio < 1.0	0.66	26	D	No
13	N Main St & N 2nd St	TWSC	LOS E or better, v/c ratio < 1.0	0.54	22	C	No
14	S Main St & SE Lynn Blvd	TWSC	LOS E or better, v/c ratio < 1.0	0.15	37	E	No

#	Intersection	Control	Existing Mobility Target	V/C ratio	Delay (sec)	LOS	Exceeds Mobility Target?
15	SE Combs Flat Rd/OR 380 & SE Lynn Blvd	TWSC	v/c < 0.85	0.80	35	E	No
16	WB OR 126 & WB U.S. 26	Ramp	v/c < 0.85	0.58	26	D	No
17	EB OR 126 & EB U.S. 26	Ramp	v/c < 0.85	**0.92**	**75**	**F**	**Yes**
18	WB OF 126 & EB U.S. 26	Ramp	v/c < 0.85	0.33	17	C	No
19	OR 126 & O'Neil Highway/OR 370	TWSC	v/c < 0.80	**1.59**	**450**	**F**	**Yes**
20	OR 126 & S Rimrock Rd	TWSC	v/c < 0.80	0.39	43	E	No
21	SW Tom McCall Rd & OR 126	Roundabout	v/c < 0.85	**1.02**	30	C	**Yes**
22	SW George Millican Rd & OR 126	TWSC	v/c < 0.85	0.02	18	C	No
23	N Main St & NE 7th St	TWSC	LOS E or better, v/c ratio < 1.0	0.62	25	D	No
24	N Main St & NW 7th St	TWSC	LOS E or better, v/c ratio < 1.0	0.02	13	B	No

Note: Red bold text indicates intersections that exceed the mobility target for either v/c ratio or LOS.

LOS = level of service; sec = seconds; TWSC = two-way stop control; v/c = volume to capacity

The 95th percentile queue lengths were analyzed using Synchro. 95th percentile queue lengths exceeded the storage length or the space between intersections at four of the 24 intersections analyzed, including intersections #1, #5, #7, and #16. All of these queues exceed the storage length or the space between intersections by less than 200 feet, or about eight vehicles. Traffic reports are available in Appendix B, Synchro and SIDRA Reports.

Two-Lane Highway Capacity Analysis

Tube counts were collected at five locations, as shown in Figure 17. At these five locations, McTrans Highway Capacity Software (HCS) 2023, which is based on HCM 6th Edition methodologies, was used to determine the segment LOS and v/c ratio. The LOS and v/c ratios were calculated based on roadway characteristics such as highway class, lane and shoulder widths, and terrain, as well as the seasonally adjusted PM peak-hour volumes and heavy vehicle percentages. As shown in Table 12, all five roadway segments operate at LOS C or better. The two-lane highway capacity analysis results are available in Appendix C, HCS Reports.

Table 12. Existing 2022 Traffic Operations – Two-Lane Highway Capacity Analysis

#	Segment	PM Peak-Hour Volume Both Directions	Segment LOS	Segment V/C Ratio
A	U.S. 26, 0.50 miles east of Gumpert Rd	335 vph	A	0.13
B	U.S. 26, 0.02 miles east of Barnes Rd	310 vph	A	0.09
C	OR 370, 0.02 miles west of Westview Rd	260 vph	A	0.12
D	OR 380, 0.05 mile southeast of Juniper Canyon Rd	90 vph	A	0.03
E	OR 27, 1.92 miles south of U.S. 26 (MP 1.92)	20 vph	A	0.01

LOS = level of service; vph = vehicles per hour

Safety Analysis

Recent crash data (2016 through 2020) was procured from ODOT. Analysis focused on crashes involving people driving, cycling, and walking within Prineville. During this 5-year period, 534 crashes occurred, with crash severity ranging from property damage only to fatality; two fatal crashes occurred within this period. Analysis focusing on crashes involving people walking or cycling shows a total of 13 crashes involving people walking and 7 crashes involving people cycling.

Out of the 13 total pedestrian crashes, 3 resulted in a suspected serious injury, 5 resulted in a suspected minor injury, and 5 resulted in a possible injury. There were no pedestrian crashes that resulted in a fatality. Nine crashes involved a party not yielding the right of way, while 3 crashes were caused by inattention. Nine out of 13 of these crashes occurred at an intersection. Eight out of 13 crashes occurred during daylight conditions, while 3 occurred in dark conditions.

Out of the seven total cycling crashes, six resulted in a suspected minor injury while one resulted in a possible injury. Five crashes involved a party not yielding the right of way. Out of the seven total cycling crashes, four crashes were a result of turning movements. Six out of seven cycling crashes occurred at an intersection, driveway, or alley.

Of the 20 crashes involving pedestrians or cyclists, 17 occurred at an intersection, driveway, or alley.

Crashes tended to cluster along 3rd Street, particularly around its intersections with Main Street, NW Deer Street, NE Combs Flat Road, NW Harwood Avenue, and Elm Street. Other intersections of note include N Main Street and 10th Street, NW Deer Street and 9th Street, and N Main Street and 7th Street. Out of the 12 crashes at 3rd Street/Main Street, 7 resulted from a rear-end collision and 3 resulted from a turning movement.

Out of the 534 total car crashes, 164 resulted in a possible injury, 85 resulted in a suspected minor injury, 19 resulted in a suspected serious injury, and 2 resulted in fatalities. Both fatalities involved people driving (no people walking or biking were involved). One fatality resulted from a turning movement at milepost 17.92 where a party traveling on OR 126 did not yield the right of way while entering the intersection of OR 370 and 3rd Street at an angle in darkness with no street lighting. The second fatality resulted from a collision with a fixed object due to inattention on a curve in the roadway at OR 126 at milepost 16.89 where the occupant was ejected from the vehicle. This fatal crash involved a person under the influence of drugs.

Intersections were the most common locations for crashes, comprising 54% of all crashes. Of the intersection crashes, 31% were angled crashes, while 30% occurred due to turning movements and 27% occurred due to rear-end crashes. The second most common location for crashes was on a straight roadway, which comprised 28% of all crashes; 37% of straight roadway crashes were rear-end crashes, and 17% were collisions with a fixed object.

Figure 20 displays fatal vehicle crashes and injuries to pedestrians and cyclists from 2016 through 2020.

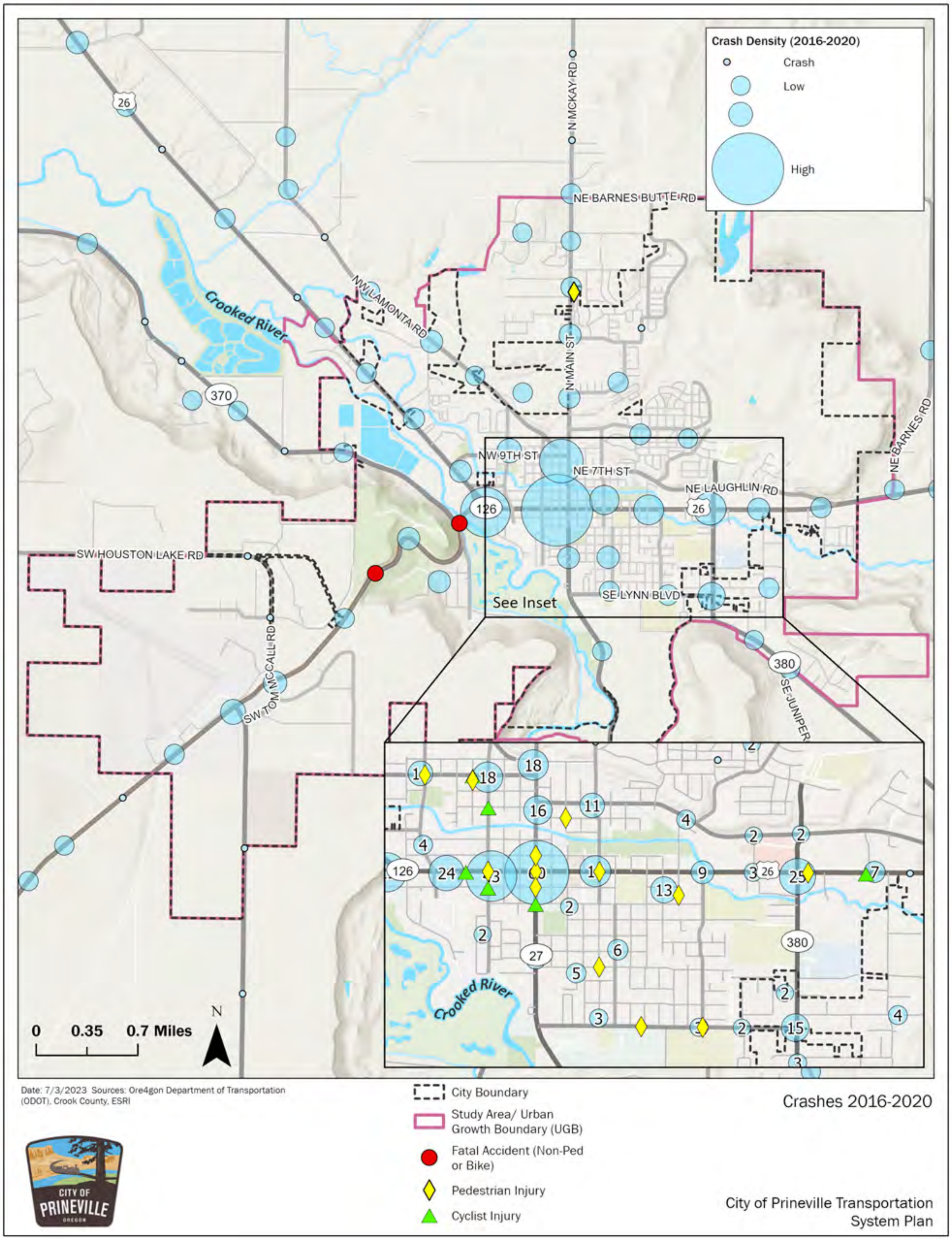


Figure 20. Crashes 2016 through 2020

Crash Analysis

As a part of the safety analysis, 23 different intersections were analyzed to determine their crash rates. These crash rates were compared with the critical crash rate to identify potential hazardous locations. Crash history data from 2016 through 2020 was used to determine the crash rate. Table 13 shows the study intersections, their type, crash rate, and critical crash rate. The crash rate of two intersections exceeded the critical crash rate. These intersections were flagged as potential risky intersections.

Table 13. Critical Crash Rate of the Study Intersections

Intersection	AADT Entering Intersection	Intersection Type	Intersection Crash Rate	Critical Rate	Over Critical
N Main St & NE 10th St	25,637	Urban 4SG	0.15	0.39	Under
N Main St & NW 9th St	23,955	Urban 3ST	0.14	0.31	Under
N Main St & N 4th St	17,551	Urban 4ST	0.37	0.41	Under
US 26 & NW 9th St	12,011	Urban 3ST	0.05	0.37	Under
NW Harwood Ave & NW 3rd St/US 26	23,650	Urban 4SG	0.23	0.40	Under
NW Deer St & NW 3rd St/US 26	27,537	Urban 4SG	0.38	0.39	Under
N Main St & 3rd St/US 26	33,381	Urban 4SG	0.25	0.37	Under
NE Elm St & NE 3rd St/US 26	24,224	Urban 4SG	0.23	0.40	Under
NE Combs Flat Rd/OR 380 & NE 3rd St/US 26	26,809	Urban 4SG	0.31	0.39	Under
NE Laughlin Rd & NE 3rd St/US 26	7,228	Urban 3ST	0.08	0.43	Under
NW Meadows Lakes Dr & NW 2nd St	4,350	Urban 4ST	0.50	0.61	Under
NW Deer St & NW 2nd St	7,750	Urban 4ST	0.78	0.50	**Over**
N Main St & N 2nd St	16,112	Urban 4ST	0.20	0.42	Under
S Main St & SE Lynn Blvd	9,247	Urban 3ST	0.00	0.39	Under
SE Combs Flat Rd/OR 380 & SE Lynn Blvd	15,668	Urban 3ST	0.42	0.34	**Over**
OR 126 & US 26	16,661	Urban 3ST	0.33	0.34	Under
OR 126 & O'Neil Highway/OR 370	28,429	Urban 3ST	0.21	0.30	Under
OR 126 & S Rimrock Rd	21,700	Urban 3ST	0.10	0.32	Under
SW Tom McCall Rd & OR 126	28,902	Urban 4ST	0.09	0.37	Under
SW George Millican Rd & OR 126	19,475	Urban 4ST	0.14	0.40	Under
N Main St & NE 7th St	20,450	Urban 3ST	0.24	0.32	Under

Note: Red bold text indicates intersections that exceeded the critical crash rate. These intersections were flagged as potential risky intersections.

Excess proportion of a specific crash type was also used as a screening method to identify the safety focus locations. Table 14 shows the intersections with an excess proportion of different crash types. Four intersections have an excess proportion of angle crashes, three intersections have an excess proportion of rear-end crashes, two intersections have an excess proportion of fixed-object crashes, and one intersection has an excess proportion of turning crashes.

Table 14. Intersections with Excess Proportion of Specific Crash Type

Intersection	RefPop	Probability	Excess Proportion
Angle Crashes			
NW Deer St & NW 2nd St	4ST	1.00	0.47
OR 126 & U.S. 26	3ST	0.98	0.19
NE Combs Flat Rd/OR 380 & NE 3rd St/U.S. 26	4SG	0.95	0.16
SE Combs Flat Rd/OR 380 & SE Lynn Blvd	3ST	0.93	0.06
Fixed Object Crashes			
OR 126 & S Rimrock Rd	3ST	1.00	0.39
N Main St & NW 9th St	3ST	1.00	0.22
Turning Crashes			
OR 126 & O'Neil Highway/OR 370	3ST	0.95	0.28
Rear-End Crashes			
SW Tom McCall Rd & OR 126	4ST	1.00	0.57
OR 126 & U.S. 26	3ST	0.93	0.24
SW George Millican Rd & OR 126	4ST	0.92	0.17

RefPop = Reference Population; SG = Signalized; ST = Stop Controlled

Six different highway segments were analyzed to determine their crash rates. Segment extents were entirely within Prineville city limits. The highway segments were compared with the statewide crash rate to identify the segments with more crashes than other similar facilities in Oregon. No crashes occurred in one of the study segments. Table 15 summarizes the analysis of the five other segments. Three study segments have crash rates higher than the statewide crash rate of similar facilities and are identified as a safety focus location.

Table 15. Highway Segment Analysis

Segment	AADT	Crashes	Length (miles)	Crash Rate	Highway Classification	Statewide Crash Rate	Exceeding Statewide Crash Rate
OR 126	17,122	43	3.25	0.423	Principal Arterial	1.27	No
OR 27	1,267	18	1.42	5.482	Minor Arterial	1.26	**Yes**
OR 380	7,512	9	1.35	0.486	Minor Arterial	1.26	No
U.S. 26 east of OR 126	12,613	98	2.7	1.577	Principal Arterial	1.27	**Yes**
U.S. 26 west of OR 126	5,792	14	0.85	1.558	Minor Arterial	1.26	**Yes**

Note: Red bold text indicates segments that have higher crash rates than the statewide crash rate of similar facilities. These segments are identified as safety focus locations.

Bike and Pedestrian System Assessment

Pedestrian and Bicycle Level of Traffic Stress

Pedestrian level of traffic stress (PLTS) measures the accessibility and safety of a pedestrian facility for people walking and rolling. PLTS generally ranks highest or most stressful on roads farthest from downtown Prineville. Roads that score high on PLTS have sidewalks that are generally less than 5 feet wide or in poor/very poor condition. Roads missing sidewalk facilities also score high on PLTS. New subdivisions such as Ochoco Pointe generally possess the lowest PLTS and are comfortable places to walk. Figure 21 displays PLTS throughout Prineville.

Bicycle level of traffic stress (BLTS) measures the accessibility and safety of a bicycle facility for people riding bicycles or other small mobility devices such as scooters. BLTS generally ranks highest or most stressful on roadways farthest from downtown Prineville. Roads that score high on BLTS generally have high Average Daily Traffic (ADT), two or more through lanes per direction, and a speed limit over 40 mph. New subdivisions such as Ochoco Pointe have low traffic volumes and low speed limits, which create a more comfortable cycling experience. Roadways with a shoulder that have higher speed limits and traffic volumes, such as SE Lynn Boulevard, score higher on BLTS. Figure 22 displays BLTS in Prineville.

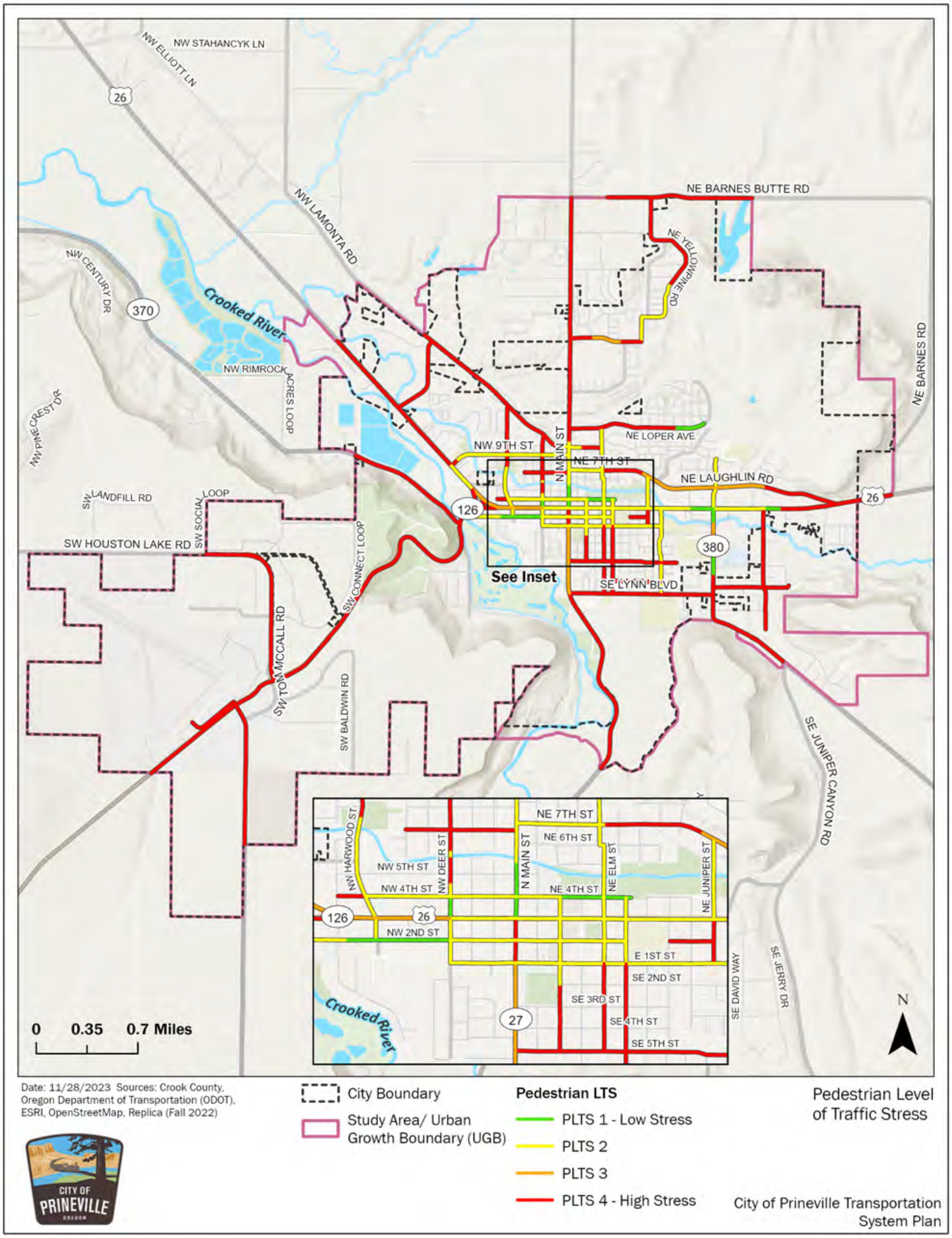


Figure 21. Pedestrian Level of Traffic Stress

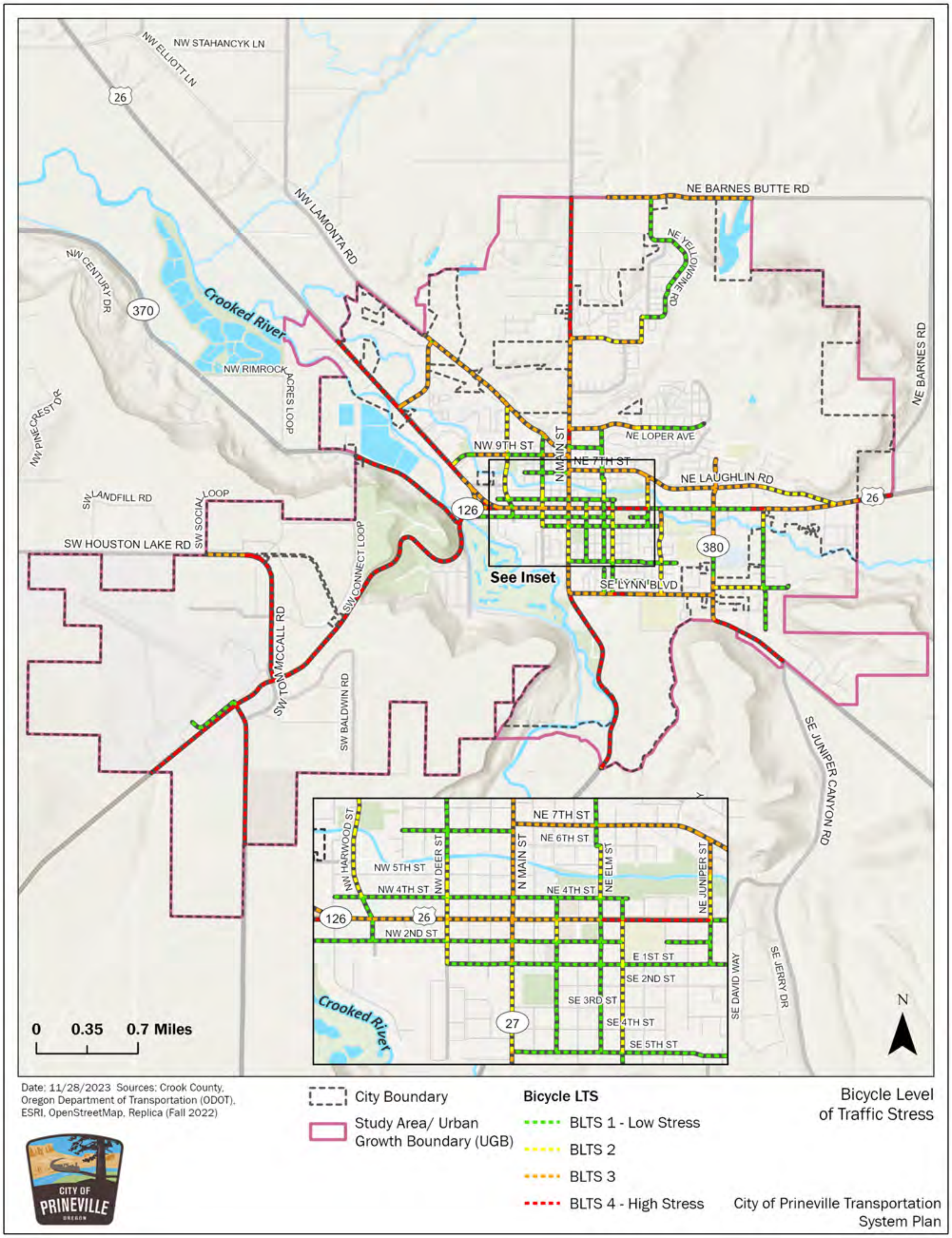


Figure 22. Bicycle Level of Traffic Stress

System Gap Analysis

Notable gaps in Prineville's bicycle and pedestrian system are highlighted in Figure 23. Gaps near schools impede children and parents from walking or cycling due to the high stress associated with such a journey; there is currently a need for increased bicycle and pedestrian connectivity near all Prineville schools. Many of these roads in need of safety upgrades form critical north-south and east-west connections and include NW 2nd Street (a major collector), NW 3rd Street (a major arterial), SE Lynn Boulevard (a minor arterial), and SE Combs Flat Road (a major arterial).

Some intersections present difficult connections for travelers due to a lack of marked crosswalks, such as at SE Lynn Boulevard and SE Combs Flat Road and NE Elm Street and NE Lookout Avenue. Other roads lack sidewalks or only possess them on one side of the street, which poses problems for people walking and rolling. Bicycle facilities, sidewalk facilities, and pedestrian crossing frequencies on some sections of Prineville highways do not meet *Blueprint for Urban Design* guidelines. These findings are highlighted in Table 16.

Roads without sidewalks that are close to schools include SE Lynn Boulevard and SE 5th Street between S Main Street and SE Combs Flat Road, SE Fairview Street between E 1st Street and SE Lynn Boulevard, NW Harwood Avenue between NW 6th Street and NW 4th Street, and the north side of NE 10th Street between NE Court Street and NE Elm Street. Nearly all roads southeast of NE 3rd Street and SE Combs Flat Road lack sidewalks, as well as

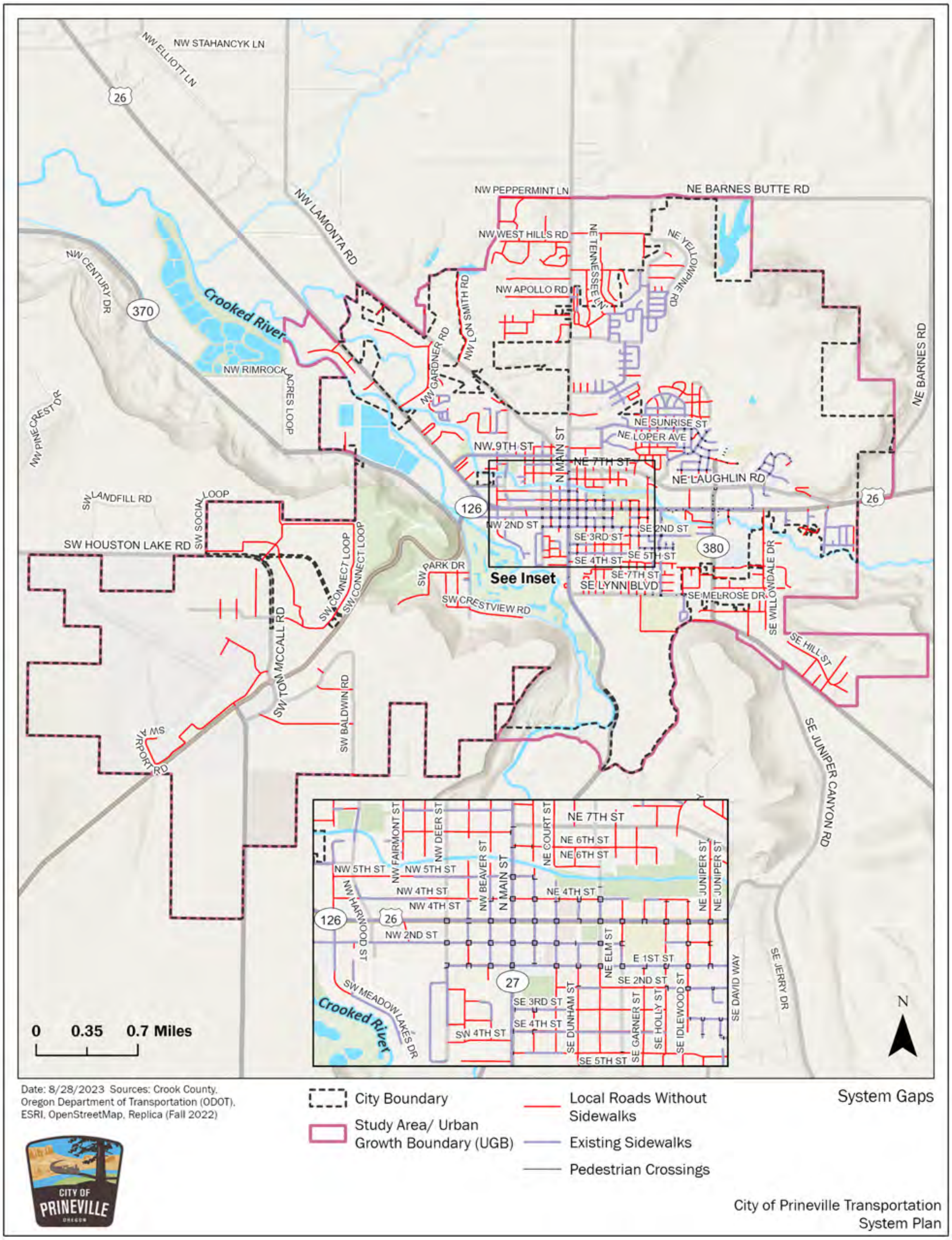


Figure 23. System Gaps

Table 16. Prineville Highways and ODOT Blueprint for Urban Design Standards

Highway	Street Boundaries	Urban Context	BUD Crossing Spacing Standard	BUD Pedestrian Facility Standard	BUD Bicycle Facility Standard
NE 3rd Street (U.S. 26)	NW 2nd Street to NE Juniper Street	Traditional Downtown/CBD	• 250–550 feet (1–2 blocks) • Meets standard	• Ample space for sidewalk activity (e.g., sidewalk cafes, transit shelters) • Meets standard	• Start with separated bicycle facility • Does not meet standard
NE 3rd Street (U.S. 26)	NE Juniper Street to east city limits	Commercial Corridor	• 500–1,000 feet • Does not meet standard	• Continuous and buffered sidewalks, with space for transit stations • Meets standard	• Start with separated bicycle facility, consider roadway characteristics • Meets standard
U.S. 26	NW Locust Avenue to northwest city limits	Commercial Corridor	• 500–1,000 feet • Does not meet standard	• Continuous and buffered sidewalks, with space for transit stations • Meets standard	• Start with separated bicycle facility, consider roadway characteristics • Does not meet standard
Main Street/ Crooked River Highway (OR 27)	NE 3rd Street to south city limits	Residential Corridor	• 500–1,000 feet • Does not meet standard	• Continuous and buffered sidewalks • Does not meet standard	• Start with separated bicycle facility, consider roadway characteristics • Does not meet standard
SE Combs Flat Road/SE Paulina Highway (OR 380)	NE 3rd Street to south city limits	Residential Corridor	• 500–1,000 feet • Does not meet standard	• Continuous and buffered sidewalks • Sidewalk on only one side of street from NE 3rd Street to SE Hylton Lane; otherwise meets standard	• Start with separated bicycle facility, consider roadway characteristics • Meets standard

Transit Needs

A primary transit need in Prineville as a rural community is more frequent weekday service to heavily visited community destinations such as employment sites, shopping centers, activity centers, and medical facilities. Fixed-route weekend service and evening service do not exist in Prineville. While current transit services connect residents to many destinations, Prineville's rural nature means that wait times for demand-response and fixed-route services are longer than ideal. There is also no central transit hub to link the variety of transit routes that pass through Prineville, and just three transit stops that serve the city.

Future needs identified for the Community Connector transit service are listed in Table 17. They include adding new routes from Prineville to Bend and Prineville to Madras, as well as adding new Route 26 stops in the Juniper Canyon area, at City Hall, the Hospital, Bi-Mart/Ray's, and Stryker Park. Other needs for Route 26 include interlining with Route 24 to create a one-seat ride to Bend.

Table 17. Community Connector Route Service Enhancement Plan[2]

Service	Existing/Near-Term (1–2 years)	Short-Term (3–5 years)	Mid-Term (6–10 years)	Long-Term (11–20 years)
Route 26: Prineville to Redmond	• Add 1 peak weekday trip, interline service with Route 24, serving Redmond Airport and COCC (6 total) • Add midday shopper/medical shuttle trip (5 days) • Add 3 Saturday trips	• Add 1 peak weekday trip (7 weekday, 3 Saturday trips) • Midday shopper/ medical shuttle (5 days)	• Add 1 evening trip (8 weekday, 3 Saturday trips) • Midday shopper/ medical shuttle (5 days)	• 8 weekday, 3 Saturday trips • Midday shopper/ medical shuttle (5 days) • Add Sunday service (3 trips)
Dial-a-ride	Dial-A-Ride 7:30 am – 5:30 pm	Dial-A-Ride/Flex-Route : 7:30 am – 5:30 pm, Evening and Saturday limited circulation as part of Route 26 flex-route		

COCC = Central Oregon Community College

Bridge Conditions

Eleven bridges are present within the Prineville city limits, none of which are structurally deficient. Three bridges are scour-critical bridges with an unknown scour vulnerability and are located near the intersections of U.S. 26 and NW Gardner Road, NW 9th Street and Ochoco Creek, and NW Deer Street and Ochoco Creek. Figure 24 shows the locations of the existing bridges in Prineville and their respective conditions.

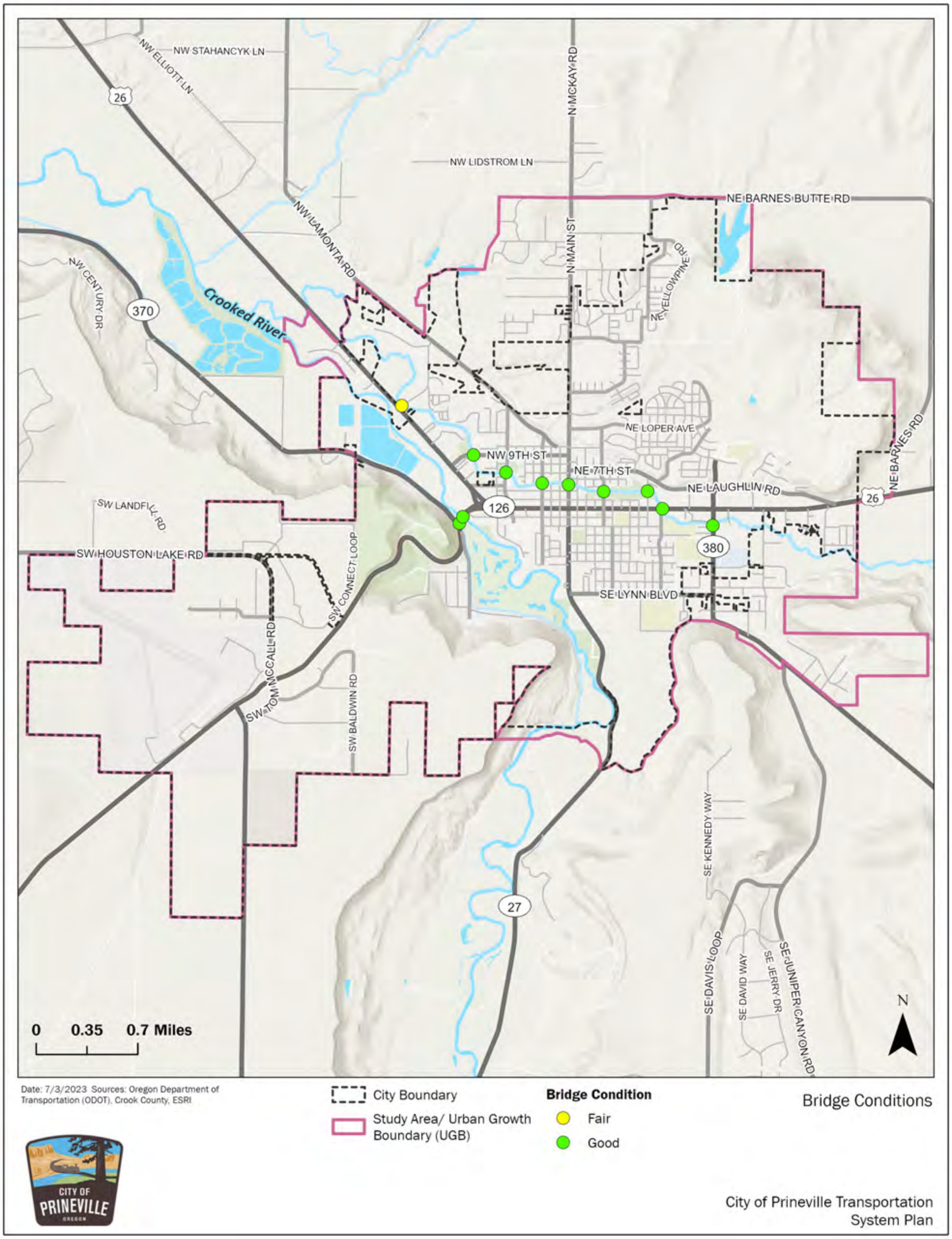


Figure 24. Bridge Conditions

FUNDING

Prineville's transportation funding comes from Special Revenue funds and Capital Project funds. Special Revenue funds support the Transportation Fund, estimated to have approximately $1.77 million for fiscal year (FY) 2023. Capital Project funds support the Transportation System Development Charge (SDC) Fund, estimated to have approximately $10.9 million for FY23. The Transportation Fund is unrestricted in funding purposes. The Transportation SDC Fund is earmarked for projects and cannot be used for other purposes; typical distributions support substantial improvements such as traffic signals or new roadways. Table 18 and Table 19 illustrate historical funding sources for transportation in Prineville.

Table 18. Historical Transportation Funding

Fiscal Year	Franchise Fee Revenue – Water	Franchise Fee Revenue – Wastewater	Excavation Permits	State Revenue Sharing	Gas Tax	Transfer from General Fund	Total Primary Funding Sources
FY23 (Estimate)	$ 148,000	$ 205,000	$ 10,701	$ 144,458	$ 866,000	$ 400,000	$ 1,774,159
FY22	$ 144,000	$ 196,000	$ 10,270	$ 135,993	$ 853,469	$ 400,000	$ 1,739,731
FY21	$ 147,000	$ 191,000	$ 18,380	$ 136,539	$ 758,319	$ 400,000	$ 1,651,239
FY20	$ 142,000	$ 185,000	$ 16,474	$ 121,983	$ 686,113	$ 300,000	$ 1,451,570
FY19	$ 253,000	$ 177,000	$ 9,841	$ 112,853	$ 721,924	$ 300,000	$ 1,574,617
FY18	-	$ 173,000	$ 11,745	$ 107,529	$ 624,833	$ 400,000	$ 1,317,107
FY17	$ 113,000	$ 164,000	$ 12,075	$ 100,135	$ 566,538	$ 100,000	$ 1,055,748
FY16	$ 100,000	$ 159,000	$ 8,805	$ 92,247	$ 551,850	$ 100,000	$ 1,011,902
FY15	$ 94,000	$ 151,000	$ 24,406	$ 91,241	$ 533,823	$ 146,000	$ 1,040,470

Source: City of Prineville, 2023

Table 19. Historical Transportation SDC Funding

Fiscal Year	Project-Specific Intergovernmental Grant Revenue	SDC Collection	Misc.	Interest	Total Primary Funding Sources
FY23 - Estimate	$ 9,900,000	$ 804,988	-	$ 235,221	$ 10,940,208
FY22	$ 900,000	$ 592,747	$ 50,000	$ 3,869	$ 1,546,616
FY21	$ 1,797	$ 783,401	-	$ 7,894	$ 793,091
FY20	$ 1,547,600	$ 633,346	-	$ 24,536	$ 2,205,482
FY19	$ 277,615	$ 593,125	$ 9,000	$ 31,425	$ 911,164
FY18	-	$ 525,075	-	$ 11,120	$ 536,195
FY17	-	$ 334,548	-	$ 4,236	$ 338,784
FY16	-	$ 486,025	$ 44	$ 1,728	$ 487,798
FY15	-	$ 120,884	-	$ 2,950	$ 123,834

Source: City of Prineville, 2023

SDC = system development charge

APPENDICES

A Traffic Counts

B Synchro and SIDRA Reports

C HCS Reports

D Additional Maps

Appendix A

Traffic Counts

Volume by Approach

Location 04_Main_10th
TMC Date 11/08/2022
Site Code 4

Classification Summary
Time Interval 15 minutes

	N Main St Southbound				NW 10th St Westbound				N Main St Northbound				NW 10th St Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
2:00 PM	1	76	9	0	10	6	2	0	21	74	1	0	25	5	33	0	263
2:15 PM	1	76	8	0	5	4	2	0	18	52	3	0	29	1	28	0	227
2:30 PM	3	72	6	0	12	2	2	0	24	102	9	0	47	4	40	0	323
2:45 PM	0	89	9	0	5	3	1	0	27	98	2	0	34	5	31	0	304
3:00 PM	1	87	4	0	2	6	1	0	16	66	3	0	35	4	42	0	267
3:15 PM	1	95	3	0	2	6	2	0	15	65	12	0	39	10	35	0	285
3:30 PM	2	89	5	0	5	2	1	0	25	80	6	0	53	7	54	0	329
3:45 PM	0	96	13	0	6	7	2	0	23	106	12	0	36	6	29	0	336
4:00 PM	2	118	15	0	8	5	2	0	24	117	8	0	54	12	28	0	393
4:15 PM	0	121	19	0	9	7	2	0	24	105	7	0	49	13	25	0	381
4:30 PM	1	107	11	0	13	4	3	0	22	112	7	0	50	20	43	0	393
4:45 PM	1	91	5	0	9	9	2	0	23	93	8	0	52	8	27	0	328
5:00 PM	1	91	1	0	7	9	0	0	22	118	11	0	62	12	39	0	373
5:15 PM	2	93	7	0	9	2	5	0	22	98	13	0	45	4	32	0	332
5:30 PM	1	76	10	0	9	2	0	0	25	92	7	0	43	5	20	0	290
5:45 PM	2	78	3	0	6	0	0	0	14	76	10	0	32	1	14	0	236

Location 18_Main_9th
TMC Date 11/10/2022
Site Code 18

Classification Summary
Time Interval 15 minutes

	NE Main St Southbound				Driveway Westbound				NE Main St Northbound				NW 9th St Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	1	31	39	0	2	0	0	0	3	28	2	0	2	2	2	0	112
6:15 AM	1	26	46	0	0	0	0	0	12	20	0	0	3	0	4	0	112
6:30 AM	1	47	38	0	1	0	0	0	12	24	3	0	1	0	7	0	134
6:45 AM	1	59	42	0	0	0	1	0	2	43	0	0	6	1	11	0	166
7:00 AM	3	64	39	0	0	0	0	0	10	40	5	0	2	0	11	0	174
7:15 AM	2	90	66	0	0	0	0	0	8	33	1	0	2	1	17	0	220
7:30 AM	2	106	39	0	1	0	0	0	17	40	3	0	1	0	31	0	240
7:45 AM	6	124	42	0	0	0	1	0	28	71	4	0	5	1	25	0	307
8:00 AM	1	99	35	0	0	0	1	0	18	50	12	0	2	1	21	0	240
8:15 AM	2	79	29	0	0	0	1	0	19	48	5	0	3	0	14	0	200
8:30 AM	4	108	29	0	1	0	0	0	13	39	1	0	4	0	23	0	222
8:45 AM	3	123	26	0	1	0	0	0	25	76	5	0	1	0	26	0	286
9:00 AM	1	80	23	0	1	0	1	0	15	59	4	0	2	0	24	0	210
9:15 AM	6	81	25	0	0	0	0	0	15	41	4	0	2	0	14	0	188
9:30 AM	21	54	22	0	2	0	0	0	17	48	7	0	3	0	20	0	194
9:45 AM	5	88	20	0	0	1	1	0	19	58	4	0	2	0	21	0	219
10:00 AM	3	75	26	0	2	1	0	0	15	61	7	0	0	0	10	0	200
10:15 AM	4	70	29	0	0	0	0	0	23	61	5	0	5	1	14	0	212
10:30 AM	6	89	21	0	1	0	1	1	22	49	4	0	2	1	18	0	215
10:45 AM	1	96	19	0	0	1	0	0	22	69	5	0	3	2	13	0	231
11:00 AM	12	107	29	0	1	1	4	0	18	74	11	0	4	1	26	0	288
11:15 AM	4	90	14	0	0	0	4	0	22	86	10	0	6	1	21	0	258
11:30 AM	4	76	20	0	2	1	1	0	26	71	11	0	1	3	29	0	245
11:45 AM	7	97	32	0	2	0	5	0	20	92	7	0	2	2	30	0	296
12:00 PM	2	93	27	0	1	1	4	0	27	81	10	0	5	1	12	0	264
12:15 PM	2	112	17	0	0	0	3	0	23	93	12	0	2	1	22	0	287
12:30 PM	9	91	21	0	1	0	3	0	20	74	8	0	4	3	20	0	254
12:45 PM	6	101	14	0	3	2	1	0	20	80	9	0	6	4	20	0	266
1:00 PM	5	93	28	0	1	1	2	0	9	81	7	0	3	0	20	0	250
1:15 PM	5	80	15	0	1	1	1	0	21	74	6	0	3	2	30	0	239
1:30 PM	6	72	24	0	1	1	5	0	20	80	9	0	4	1	21	0	244
1:45 PM	3	97	24	0	1	0	3	0	15	78	12	0	3	1	29	0	266
2:00 PM	4	97	19	0	1	0	1	0	22	70	12	0	4	1	23	0	254
2:15 PM	7	92	22	0	1	1	2	0	29	80	10	0	2	2	17	0	265
2:30 PM	7	79	16	0	1	1	1	0	27	106	13	0	4	0	26	0	281
2:45 PM	7	110	32	0	0	2	2	0	20	105	13	0	4	0	26	0	321
3:00 PM	4	123	22	0	0	0	3	0	31	90	13	0	5	0	23	0	314
3:15 PM	4	115	16	0	0	1	5	0	30	84	12	0	1	4	25	0	297
3:30 PM	12	123	21	0	0	1	2	0	27	90	9	0	2	5	40	0	332
3:45 PM	10	94	20	0	0	1	5	0	33	114	11	0	10	0	32	0	330
4:00 PM	12	118	30	0	2	0	4	0	39	114	14	0	3	1	26	0	363
4:15 PM	9	113	40	0	0	1	6	0	25	111	15	0	5	0	33	0	358
4:30 PM	8	100	29	0	0	0	4	0	31	112	19	0	4	2	35	0	344
4:45 PM	10	106	17	0	2	0	3	0	25	98	8	0	6	1	41	0	317
5:00 PM	8	101	21	0	0	1	3	0	33	125	10	0	5	1	35	0	343
5:15 PM	7	90	30	0	1	1	7	0	16	91	21	0	6	1	32	0	303
5:30 PM	12	92	15	0	0	1	4	0	17	106	13	0	10	5	18	0	293
5:45 PM	4	86	27	0	1	0	4	0	18	88	12	0	5	3	29	0	277
6:00 PM	5	79	15	0	0	0	3	0	20	75	6	0	11	3	20	0	237
6:15 PM	6	53	11	0	2	0	1	0	12	75	11	0	2	2	12	0	187
6:30 PM	3	73	13	0	4	0	2	0	9	72	6	0	7	2	9	0	200
6:45 PM	3	37	8	0	1	1	2	0	8	64	10	0	5	0	14	0	153
7:00 PM	3	42	4	0	1	0	1	0	11	63	3	0	7	3	4	0	142
7:15 PM	3	31	4	0	1	0	3	0	13	62	4	0	4	0	9	0	134
7:30 PM	2	20	3	0	1	1	0	0	12	56	4	0	6	0	7	0	112
7:45 PM	0	29	7	0	1	0	0	0	14	68	6	0	7	0	12	0	144
8:00 PM	1	24	6	0	1	0	1	0	9	58	5	0	4	0	9	0	118
8:15 PM	2	23	5	0	0	1	1	0	2	50	4	0	4	1	4	0	97
8:30 PM	4	27	6	0	1	0	4	0	6	40	2	0	3	2	4	0	99
8:45 PM	1	19	7	0	1	0	1	0	5	55	4	0	4	0	4	0	101
9:00 PM	1	14	1	0	1	0	2	0	4	37	3	0	4	3	6	0	76
9:15 PM	3	10	5	0	1	1	0	0	5	15	3	0	4	1	2	0	50
9:30 PM	1	19	2	0	0	0	0	0	3	22	0	0	2	2	3	0	54
9:45 PM	1	7	3	0	0	0	0	0	3	25	1	0	1	1	7	0	49

Volume by Approach

Location 17_26_9th
TMC Date 11/08/2022
Site Code 17

Classification Summary
Time Interval 15 minutes

	US-26 Southbound			NW 9th St Westbound			US-26 Northbound			Total
Start Time	Left	Thru	U-Turn	Left	Right	U-Turn	Thru	Right	U-Turn	
6:00 AM	5	25	0	13	6	0	28	1	0	78
6:15 AM	6	40	0	12	5	0	12	2	0	77
6:30 AM	5	14	0	18	4	0	30	0	0	71
6:45 AM	7	34	0	23	6	0	19	1	0	90
7:00 AM	11	45	0	21	6	0	22	1	0	106
7:15 AM	12	50	0	22	6	0	27	4	0	121
7:30 AM	21	48	0	14	8	0	19	2	0	112
7:45 AM	19	52	0	14	16	0	35	2	0	138
8:00 AM	9	46	0	7	16	0	42	3	0	123
8:15 AM	12	48	0	9	13	0	37	5	0	124
8:30 AM	13	33	0	11	7	0	66	7	0	137
8:45 AM	13	39	0	15	15	0	37	2	0	121
9:00 AM	9	42	0	8	5	0	29	3	0	96
9:15 AM	11	38	0	14	8	0	36	3	0	110
9:30 AM	11	39	0	7	9	0	37	5	0	108
9:45 AM	9	42	1	6	8	0	45	2	0	113
10:00 AM	15	27	0	10	11	0	38	5	0	106
10:15 AM	6	38	0	8	10	0	38	5	0	105
10:30 AM	5	31	0	3	11	0	46	4	0	100
10:45 AM	16	43	0	9	7	0	48	3	0	126
11:00 AM	10	44	0	11	20	0	31	3	0	119
11:15 AM	16	44	0	12	13	0	49	3	0	137
11:30 AM	15	54	0	9	9	0	40	4	0	131
11:45 AM	9	37	0	8	10	0	50	10	0	124
12:00 PM	17	44	0	9	7	0	51	2	0	130
12:15 PM	15	36	0	10	17	0	65	4	0	147
12:30 PM	15	54	0	9	15	0	54	4	1	152
12:45 PM	10	4	0	14	13	0	50	7	0	98
1:00 PM	14	42	0	8	14	0	35	1	0	114
1:15 PM	12	39	0	15	16	0	61	3	0	146
1:30 PM	15	48	0	8	9	0	35	8	0	123
1:45 PM	10	53	0	10	10	0	44	5	0	132
2:00 PM	12	42	0	7	10	0	41	6	0	118
2:15 PM	11	50	0	7	22	0	41	5	0	136
2:30 PM	16	32	0	16	22	0	67	6	0	159
2:45 PM	29	39	0	8	13	0	63	5	0	157
3:00 PM	18	56	0	14	10	0	44	9	0	151
3:15 PM	16	48	0	8	16	0	68	4	0	160
3:30 PM	26	62	0	5	23	0	57	14	0	187
3:45 PM	26	49	0	11	16	0	77	7	0	186
4:00 PM	23	59	0	12	21	0	70	14	0	199
4:15 PM	23	36	0	10	15	0	81	13	0	178
4:30 PM	26	51	0	11	21	0	75	10	0	194
4:45 PM	18	44	0	12	22	0	86	15	0	197
5:00 PM	27	55	0	12	19	0	71	5	0	189
5:15 PM	19	49	0	6	12	0	59	7	0	152
5:30 PM	20	51	0	11	20	0	52	2	0	156
5:45 PM	10	26	0	9	15	0	58	4	0	122
6:00 PM	16	38	0	5	5	0	35	7	0	106
6:15 PM	11	24	0	2	11	0	28	7	0	83
6:30 PM	9	26	1	5	11	0	22	5	0	79
6:45 PM	8	12	0	4	12	0	24	4	0	64
7:00 PM	8	19	0	4	3	0	24	2	0	60
7:15 PM	3	11	0	6	8	0	15	4	0	47
7:30 PM	5	12	0	2	3	0	16	1	0	39
7:45 PM	20	8	0	1	6	0	14	1	0	50
8:00 PM	4	9	0	2	6	0	6	2	0	29
8:15 PM	3	5	0	2	3	0	18	1	0	32
8:30 PM	8	16	0	3	4	0	12	1	0	44
8:45 PM	8	4	0	2	3	0	14	1	0	32
9:00 PM	1	6	0	3	2	0	7	3	0	22
9:15 PM	1	10	0	1	5	0	11	1	0	29
9:30 PM	1	6	0	1	2	0	7	1	0	18
9:45 PM	2	6	0	3	5	0	5	1	0	22

Volume by Approach

Location 12_Main_26
TMC Date 11/10/2022
Site Code 12

Classification Summary
Time Interval 15 minutes

	N Main St Southbound				US-26 Westbound				N Main St Northbound				US-26 Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	0	5	19	0	0	66	2	0	25	8	0	0	4	11	0	0	140
6:15 AM	2	8	16	0	2	58	5	0	14	3	2	0	9	26	5	0	150
6:30 AM	4	4	21	0	2	81	5	0	20	9	0	0	12	27	6	0	191
6:45 AM	5	20	15	0	4	65	5	0	18	9	3	0	12	48	0	0	204
7:00 AM	7	14	13	0	4	64	6	0	17	10	1	0	19	52	4	0	211
7:15 AM	12	18	21	0	1	65	5	0	15	13	7	0	15	66	9	0	247
7:30 AM	8	30	24	0	3	63	5	0	22	14	2	0	13	80	10	0	274
7:45 AM	23	33	16	0	3	90	13	0	34	43	7	0	21	105	16	0	404
8:00 AM	10	32	17	0	5	77	8	0	24	28	2	0	13	63	10	0	289
8:15 AM	13	22	20	0	4	58	8	0	18	13	0	0	22	72	10	0	260
8:30 AM	17	22	17	0	5	73	12	0	11	14	3	0	15	72	11	0	272
8:45 AM	23	46	15	0	7	84	9	0	21	50	7	0	14	95	5	0	376
9:00 AM	15	16	23	0	4	70	12	0	20	23	4	0	17	74	12	0	290
9:15 AM	10	16	23	0	3	94	10	0	21	13	3	0	20	90	7	0	310
9:30 AM	13	15	12	0	9	72	9	0	19	20	8	0	14	76	9	0	276
9:45 AM	16	31	16	0	5	103	12	0	27	24	7	0	22	72	11	0	346
10:00 AM	13	19	17	0	3	95	14	0	17	18	3	0	20	60	12	0	291
10:15 AM	15	15	22	0	3	102	9	0	15	21	2	0	28	77	10	0	319
10:30 AM	20	25	15	0	4	91	11	0	25	25	4	0	19	79	12	0	330
10:45 AM	16	27	21	0	7	95	13	0	21	27	6	0	26	88	17	0	364
11:00 AM	16	35	33	1	6	104	18	0	26	23	7	0	34	100	18	0	421
11:15 AM	11	33	25	0	5	122	7	0	15	31	7	0	28	99	13	0	396
11:30 AM	20	39	16	0	9	122	15	0	21	46	10	0	22	100	20	0	440
11:45 AM	15	39	17	1	15	106	12	0	19	34	9	0	22	87	13	0	389
12:00 PM	17	33	25	0	7	125	17	0	30	36	8	0	18	94	12	0	422
12:15 PM	17	31	17	0	6	87	10	0	15	33	3	0	33	106	13	0	371
12:30 PM	25	34	11	0	3	106	11	0	20	23	6	0	30	103	19	0	391
12:45 PM	19	32	22	0	8	100	21	0	15	30	6	0	26	108	15	0	402
1:00 PM	9	29	23	0	8	113	19	0	21	31	7	0	26	98	19	0	403
1:15 PM	27	27	17	0	4	111	19	0	18	34	5	0	35	93	18	0	408
1:30 PM	15	31	17	0	9	90	21	0	12	19	6	0	32	107	23	0	382
1:45 PM	21	24	19	0	5	119	10	0	15	27	3	0	35	109	12	0	399
2:00 PM	25	17	12	0	5	97	7	0	23	23	7	0	25	104	6	0	351
2:15 PM	10	19	25	0	12	119	14	0	26	27	10	0	23	102	17	0	404
2:30 PM	15	28	19	0	7	100	17	0	16	66	7	0	29	111	21	0	436
2:45 PM	19	38	14	0	16	104	13	0	23	31	7	0	34	95	15	0	409
3:00 PM	20	37	17	0	11	94	21	0	36	31	6	0	44	101	14	0	432
3:15 PM	25	30	12	0	8	106	15	0	16	34	6	0	26	86	14	0	378
3:30 PM	25	41	17	0	8	86	18	0	26	46	4	0	28	124	19	0	442
3:45 PM	22	42	15	0	10	98	13	0	26	58	6	0	37	112	12	0	451
4:00 PM	23	37	20	0	7	88	8	0	36	56	8	0	43	103	9	0	438
4:15 PM	21	28	21	0	11	115	9	0	23	45	4	0	51	111	7	0	446
4:30 PM	23	24	20	0	10	124	11	0	20	34	6	0	31	114	15	0	432
4:45 PM	22	41	23	0	5	102	13	0	13	36	7	0	42	120	7	0	431
5:00 PM	17	31	11	0	7	116	10	0	26	33	5	0	42	119	20	0	437
5:15 PM	14	34	22	0	15	89	17	0	17	26	3	0	39	85	14	0	375
5:30 PM	21	30	13	0	5	74	28	0	11	26	4	0	36	83	26	0	357
5:45 PM	21	36	11	0	6	50	16	0	12	41	2	0	33	73	20	0	321
6:00 PM	24	35	13	0	11	55	12	0	22	23	4	0	40	75	20	0	334
6:15 PM	14	22	16	0	8	59	17	0	10	23	6	0	33	71	13	0	292
6:30 PM	19	34	19	0	2	39	21	0	4	18	3	0	28	58	19	0	264
6:45 PM	10	19	15	0	4	46	17	0	8	20	3	0	30	67	12	0	251
7:00 PM	14	8	8	0	5	42	21	0	8	15	3	0	29	38	17	0	208
7:15 PM	11	12	12	0	4	33	19	0	6	9	2	0	24	51	11	0	194
7:30 PM	8	14	12	0	4	25	13	0	12	7	2	0	21	37	9	0	164
7:45 PM	6	18	13	0	3	39	10	0	10	32	3	0	33	38	7	0	212
8:00 PM	9	11	11	0	6	25	7	0	9	17	1	0	26	50	6	0	178
8:15 PM	9	7	13	0	4	28	5	0	6	13	2	0	16	45	6	0	154
8:30 PM	7	15	11	0	1	23	14	0	9	15	3	0	8	38	16	0	160
8:45 PM	5	9	6	0	2	24	10	0	6	10	2	0	20	21	9	0	124
9:00 PM	4	8	8	0	3	22	7	0	3	8	3	0	13	17	4	0	100
9:15 PM	3	1	7	0	1	12	1	0	3	1	0	0	12	20	7	0	68
9:30 PM	0	10	6	0	1	10	3	0	5	2	1	0	15	18	4	0	75
9:45 PM	0	11	4	0	0	15	3	0	1	4	1	0	15	19	7	0	80

Volume by Approach

Location 11_380_26
TMC Date 11/08/2022
Site Code 11

Classification Summary
Time Interval 15 minutes

	OR-380 Southbound				US-26 Westbound				OR-380 Northbound				US-26 Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	3	4	7	0	2	31	2	0	24	7	2	0	3	11	4	0	100
6:15 AM	2	6	3	0	1	30	1	0	14	13	2	0	4	11	8	0	95
6:30 AM	1	4	3	0	4	34	1	0	21	14	6	0	4	16	5	0	113
6:45 AM	2	12	6	0	5	26	2	0	17	18	5	0	7	22	9	0	131
7:00 AM	4	13	8	0	9	38	1	0	26	15	6	0	14	24	9	0	167
7:15 AM	3	25	9	0	8	52	2	0	21	27	7	0	12	18	12	0	196
7:30 AM	6	46	19	0	17	40	2	0	27	41	12	0	19	32	19	0	280
7:45 AM	6	60	16	0	23	50	2	0	34	31	11	0	9	28	17	0	287
8:00 AM	3	21	12	0	8	46	3	0	32	20	11	0	12	58	30	0	256
8:15 AM	1	24	10	0	8	32	3	0	18	16	5	0	9	43	21	0	190
8:30 AM	9	37	12	0	16	43	7	0	28	16	7	0	6	38	22	0	241
8:45 AM	6	32	10	0	15	46	2	0	39	32	14	0	16	32	37	0	281
9:00 AM	6	20	10	0	5	51	3	0	32	22	10	0	13	42	23	0	237
9:15 AM	10	34	10	0	11	48	8	0	38	22	10	0	5	44	17	0	257
9:30 AM	7	19	12	0	6	56	3	0	29	16	9	0	6	36	19	0	218
9:45 AM	7	21	8	0	14	69	4	0	35	27	10	0	10	37	30	0	272
10:00 AM	3	25	7	0	14	66	7	0	41	19	9	0	10	45	14	0	260
10:15 AM	5	30	16	0	12	56	5	0	31	17	14	0	12	42	15	0	255
10:30 AM	14	28	10	0	13	59	7	0	49	25	20	0	10	60	26	0	321
10:45 AM	12	24	11	0	8	75	4	0	36	21	12	0	9	67	26	0	305
11:00 AM	7	27	8	0	16	74	5	0	27	17	17	0	22	79	38	0	337
11:15 AM	9	38	12	0	9	79	5	0	36	30	18	0	9	57	30	0	332
11:30 AM	13	30	13	0	11	83	6	0	47	30	21	0	9	60	32	0	355
11:45 AM	11	25	12	0	15	80	2	0	42	26	12	0	13	67	33	0	338
12:00 PM	7	24	16	0	21	72	7	0	50	22	18	0	11	80	25	0	353
12:15 PM	9	31	12	0	18	85	10	0	45	26	19	0	11	66	24	0	356
12:30 PM	11	35	12	0	18	74	11	0	33	33	15	0	15	49	33	0	339
12:45 PM	10	43	13	0	14	75	8	0	38	27	18	0	10	63	27	0	346
1:00 PM	11	29	14	0	22	82	9	0	26	28	20	0	14	57	35	0	347
1:15 PM	9	23	11	0	17	72	3	0	41	23	25	0	15	74	41	0	354
1:30 PM	13	21	12	0	24	55	6	0	39	27	18	0	11	73	34	0	333
1:45 PM	10	30	18	0	12	61	9	0	44	24	8	0	13	50	29	0	308
2:00 PM	12	45	16	0	18	75	6	0	27	21	10	0	10	66	42	0	348
2:15 PM	12	37	10	0	23	60	8	0	47	25	20	0	10	63	30	0	345
2:30 PM	11	41	5	0	13	69	12	0	30	31	27	0	14	66	44	0	363
2:45 PM	12	36	12	0	23	79	11	0	43	29	17	0	9	48	19	0	338
3:00 PM	8	43	20	0	10	78	11	0	42	31	14	0	11	52	43	0	363
3:15 PM	14	42	14	0	23	59	6	0	35	32	13	0	2	46	36	0	322
3:30 PM	8	46	15	0	32	67	8	0	41	29	14	0	12	60	42	0	374
3:45 PM	11	42	8	0	23	67	8	0	39	44	19	0	16	96	34	0	407
4:00 PM	20	31	13	0	24	72	7	0	29	31	16	0	14	73	37	0	367
4:15 PM	20	47	15	0	25	67	12	0	41	35	21	0	15	69	46	0	413
4:30 PM	15	40	16	0	17	84	1	0	32	37	18	0	17	81	38	0	396
4:45 PM	17	41	11	0	19	67	12	0	34	30	15	0	10	84	22	0	362
5:00 PM	4	43	13	0	21	85	6	0	36	34	10	0	11	78	38	0	379
5:15 PM	12	38	3	0	13	68	7	0	24	28	18	0	13	74	39	0	337
5:30 PM	12	35	9	0	11	63	7	0	36	28	10	0	10	57	51	0	329
5:45 PM	11	24	0	0	21	53	4	0	32	13	12	0	13	64	31	0	278
6:00 PM	8	24	7	0	7	40	6	0	21	20	8	0	6	43	27	0	217
6:15 PM	3	14	4	0	14	32	5	0	15	15	4	0	3	47	29	0	185
6:30 PM	1	27	6	0	10	38	2	0	13	7	6	0	6	26	24	0	166
6:45 PM	8	15	4	0	8	23	3	0	14	12	9	0	5	23	18	0	142
7:00 PM	4	8	5	0	8	25	5	0	14	11	3	0	14	25	14	0	136
7:15 PM	4	11	7	0	9	11	2	0	12	10	4	0	7	21	21	0	119
7:30 PM	2	14	4	0	2	12	0	0	9	8	2	0	6	16	8	0	83
7:45 PM	5	12	0	0	4	13	1	0	10	7	1	0	3	26	15	0	97
8:00 PM	4	5	3	0	5	10	1	0	3	7	1	0	2	21	7	0	69
8:15 PM	1	6	0	0	2	12	2	0	10	5	1	0	0	16	13	0	68
8:30 PM	1	6	1	0	3	11	1	0	6	5	2	0	0	16	10	0	62
8:45 PM	1	13	2	0	0	10	2	0	4	14	7	0	1	14	13	0	81
9:00 PM	2	8	3	0	2	2	0	0	11	9	1	0	3	9	16	0	66
9:15 PM	2	6	1	0	3	4	1	0	5	3	2	0	2	5	9	0	43
9:30 PM	0	1	1	0	0	8	0	0	2	2	0	0	1	3	4	0	22
9:45 PM	1	5	0	0	2	3	1	0	2	7	2	0	1	6	7	0	37

Volume by Approach

Location 06_Main_Lynn
TMC Date 11/08/2022
Site Code 6

Classification Summary
Time Interval 15 minutes

	S Main St Southbound				SE Lynn Blvd Westbound				S Main St Northbound				SE Lynn Blvd Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	0	0	0	4	0	0	32	0	0	1	0	0	0	0	0	0	37
6:15 AM	2	0	0	7	3	0	38	0	0	2	0	0	0	0	0	0	52
6:30 AM	1	0	0	11	1	1	35	0	0	4	0	0	0	0	0	0	53
6:45 AM	5	0	0	13	0	0	41	0	0	5	2	0	0	0	0	0	66
7:00 AM	1	0	0	5	2	2	39	0	0	4	0	0	0	0	0	0	53
7:15 AM	3	0	0	22	0	1	54	0	0	7	1	0	0	0	0	0	88
7:30 AM	2	0	0	29	2	4	50	0	1	6	3	0	6	1	0	0	104
7:45 AM	5	0	0	43	1	7	49	0	1	8	1	0	16	2	1	0	134
8:00 AM	6	0	0	34	0	1	31	0	0	3	3	0	6	1	0	0	85
8:15 AM	5	0	0	36	2	0	49	0	0	6	2	0	2	0	0	0	102
8:30 AM	6	4	0	59	4	1	43	0	0	11	3	0	3	0	0	0	134
8:45 AM	4	1	0	66	3	1	65	0	0	3	5	0	0	2	0	0	150
9:00 AM	7	0	0	39	0	2	58	0	0	5	0	0	0	0	0	0	111
9:15 AM	4	0	0	35	3	1	32	0	0	7	2	0	1	0	0	0	85
9:30 AM	5	0	0	25	2	0	23	0	0	4	2	0	1	0	0	0	62
9:45 AM	5	0	0	35	0	0	36	0	0	8	1	0	0	0	0	0	85
10:00 AM	6	0	0	31	3	1	29	0	0	4	1	0	0	0	0	0	75
10:15 AM	9	1	0	24	2	0	41	0	0	7	0	0	0	0	0	0	84
10:30 AM	7	0	0	23	1	0	32	0	0	5	2	0	0	0	0	0	70
10:45 AM	5	0	1	23	2	0	24	0	0	9	0	0	0	0	0	0	64
11:00 AM	11	0	0	22	2	0	34	0	0	7	1	0	0	0	0	0	77
11:15 AM	8	1	0	32	0	1	31	0	0	7	3	0	1	1	0	0	85
11:30 AM	6	0	0	46	2	0	85	0	0	0	2	0	2	1	0	0	144
11:45 AM	4	1	0	66	1	0	31	0	0	13	5	0	1	0	0	0	122
12:00 PM	12	0	0	37	4	0	43	0	0	7	2	0	1	0	0	0	106
12:15 PM	12	0	0	22	5	0	22	0	0	12	3	0	2	1	0	0	79
12:30 PM	3	0	0	27	0	1	31	0	0	7	2	0	2	0	0	0	73
12:45 PM	10	0	0	29	4	0	42	0	0	8	3	0	2	0	0	0	98
1:00 PM	5	0	0	36	1	1	32	0	0	6	3	0	2	0	0	0	86
1:15 PM	8	0	0	39	3	0	51	0	0	12	1	0	0	0	0	0	114
1:30 PM	12	0	0	26	0	0	25	0	0	13	2	0	1	0	0	0	79
1:45 PM	11	0	0	36	2	0	34	0	0	11	3	0	0	0	0	0	97
2:00 PM	7	0	0	41	2	0	19	0	0	2	4	0	0	0	0	0	75
2:15 PM	8	0	0	34	4	0	40	0	0	14	3	0	1	0	0	0	104
2:30 PM	8	0	0	43	2	0	58	0	0	6	3	0	4	0	0	0	124
2:45 PM	7	1	0	43	1	6	47	0	1	8	4	0	13	6	0	0	137
3:00 PM	7	1	0	42	4	1	26	0	0	5	1	0	5	4	0	0	96
3:15 PM	8	0	0	39	2	0	32	0	0	4	6	0	0	0	0	0	91
3:30 PM	7	0	0	83	5	1	39	0	0	7	1	0	0	0	0	0	143
3:45 PM	7	0	0	70	8	1	100	0	0	6	1	0	1	1	0	0	195
4:00 PM	7	0	0	79	3	0	37	0	0	11	3	0	0	4	0	0	144
4:15 PM	8	0	0	62	4	0	50	0	0	7	1	0	5	0	0	0	137
4:30 PM	13	0	0	64	2	0	35	0	0	6	4	0	1	1	0	0	126
4:45 PM	10	0	0	66	5	1	28	0	0	9	4	0	1	1	0	0	125
5:00 PM	8	0	0	70	4	0	36	0	0	5	2	0	0	0	1	0	126
5:15 PM	19	0	0	57	4	0	30	0	0	7	4	0	1	0	0	0	122
5:30 PM	8	0	0	76	3	0	35	0	0	5	2	0	0	0	0	0	129
5:45 PM	5	1	0	57	3	0	23	0	0	10	8	0	1	0	0	0	108
6:00 PM	4	0	0	39	3	0	17	0	0	5	0	0	0	1	0	0	69
6:15 PM	2	3	0	33	2	2	16	0	0	4	1	0	0	0	0	0	63
6:30 PM	7	2	0	40	2	0	13	0	0	6	0	0	0	0	0	0	70
6:45 PM	2	0	0	30	1	0	23	0	0	3	0	0	0	0	0	0	59
7:00 PM	3	0	0	22	2	0	17	0	0	3	1	0	0	0	0	0	48
7:15 PM	3	0	0	36	1	0	8	0	0	1	2	0	0	0	0	0	51
7:30 PM	1	0	0	17	2	0	11	0	0	4	2	0	0	0	0	0	37
7:45 PM	3	0	0	19	1	0	12	0	0	4	1	0	0	0	0	0	40
8:00 PM	1	0	0	17	2	0	7	0	0	0	2	0	0	0	0	0	29
8:15 PM	2	0	0	24	0	0	2	0	0	0	0	0	3	0	0	0	31
8:30 PM	3	0	0	15	0	0	17	0	0	2	0	0	4	1	0	0	42
8:45 PM	0	0	0	15	0	0	25	0	0	0	0	0	0	0	0	0	40
9:00 PM	2	0	0	15	0	0	11	0	0	0	0	0	0	0	0	0	28
9:15 PM	1	0	0	10	0	0	3	0	0	0	0	0	0	0	0	0	14
9:30 PM	1	0	0	7	0	0	6	0	0	0	1	0	0	0	0	0	15
9:45 PM	0	0	0	8	1	0	3	0	0	0	1	0	0	0	0	0	13

Volume by Approach

Location 05_380_Lynn
TMC Date 11/08/2022
Site Code 5

Classification Summary
Time Interval 15 minutes

	OR-380 Southbound				Driveway Westbound				OR-380 Northbound				SE Lynn Blvd Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	1	6	3	0	2	4	1	0	22	30	4	0	1	2	4	0	80
6:15 AM	2	9	1	0	1	2	4	0	29	26	3	0	3	1	5	0	86
6:30 AM	1	6	2	0	0	1	4	0	25	36	5	0	2	0	10	0	92
6:45 AM	0	6	7	0	1	0	3	0	37	30	4	0	9	1	4	0	102
7:00 AM	0	10	7	0	0	3	4	0	44	39	5	0	5	1	4	0	122
7:15 AM	1	11	8	0	1	3	3	0	46	50	5	0	10	2	9	0	149
7:30 AM	1	17	28	0	2	2	4	0	40	69	4	0	9	1	7	0	184
7:45 AM	3	34	48	0	5	2	4	0	54	44	3	0	7	2	13	0	219
8:00 AM	3	27	21	0	1	2	1	0	14	37	1	0	8	1	18	0	134
8:15 AM	16	21	15	0	1	4	2	0	28	28	2	0	11	2	11	0	141
8:30 AM	3	31	33	0	2	3	1	0	46	37	3	0	13	0	14	0	186
8:45 AM	3	34	32	0	3	3	3	0	59	54	6	0	31	2	12	0	242
9:00 AM	0	24	8	0	1	4	2	0	19	35	4	0	11	1	18	0	127
9:15 AM	6	32	13	0	4	3	5	0	26	48	3	0	8	3	19	0	170
9:30 AM	2	25	7	0	2	0	1	0	25	34	1	0	8	2	17	0	124
9:45 AM	3	26	10	0	0	4	1	0	27	38	1	0	14	0	15	0	139
10:00 AM	3	25	16	0	1	1	6	0	21	37	2	0	9	1	13	0	135
10:15 AM	0	28	12	0	0	1	1	0	30	38	2	0	9	1	9	0	131
10:30 AM	1	32	18	0	0	1	6	0	27	45	8	0	14	2	14	0	168
10:45 AM	5	31	4	0	3	0	7	0	33	42	1	0	7	2	14	0	149
11:00 AM	4	39	18	0	1	1	6	0	21	26	2	0	9	0	16	0	143
11:15 AM	3	40	14	0	3	1	1	0	20	53	2	0	11	2	19	0	169
11:30 AM	1	38	21	0	2	4	1	0	26	45	0	0	31	4	19	0	192
11:45 AM	3	39	18	0	0	2	4	0	24	36	2	0	13	3	21	0	165
12:00 PM	3	34	20	0	2	1	5	0	21	43	1	0	10	2	24	0	166
12:15 PM	0	34	17	0	1	2	1	0	23	42	1	0	9	3	16	0	149
12:30 PM	5	41	10	0	1	1	8	0	22	46	5	0	14	1	16	0	170
12:45 PM	4	29	14	0	4	3	3	0	33	28	2	0	10	0	18	0	148
1:00 PM	6	37	20	0	1	3	2	0	20	38	1	0	8	2	19	0	157
1:15 PM	3	39	18	0	1	0	4	0	26	42	2	0	25	2	35	0	197
1:30 PM	1	40	17	0	1	1	3	0	27	46	7	0	13	1	23	0	180
1:45 PM	3	43	15	0	5	0	4	0	19	41	0	0	13	2	30	0	175
2:00 PM	5	46	19	0	4	4	6	0	14	30	3	0	12	3	28	0	174
2:15 PM	3	55	25	0	2	2	5	0	25	39	0	0	22	5	20	0	203
2:30 PM	3	57	23	0	4	2	6	0	22	31	1	0	26	6	31	0	212
2:45 PM	2	39	16	0	0	2	5	0	33	49	2	0	12	2	38	0	200
3:00 PM	2	61	22	0	1	0	2	0	27	37	0	0	14	1	36	0	203
3:15 PM	3	62	27	0	3	2	0	0	22	42	1	0	11	3	18	0	194
3:30 PM	3	63	28	0	6	0	4	0	28	31	1	0	19	2	37	0	222
3:45 PM	7	59	19	0	5	1	1	0	16	41	1	0	51	3	64	0	268
4:00 PM	6	63	20	0	3	0	3	0	18	27	2	0	14	4	55	0	215
4:15 PM	6	66	25	0	6	1	3	0	25	40	0	0	18	2	46	0	238
4:30 PM	4	56	20	0	5	0	3	0	21	37	2	0	13	3	58	0	222
4:45 PM	5	44	20	0	3	0	5	0	19	34	3	0	12	2	57	0	204
5:00 PM	6	62	26	0	6	1	3	0	25	27	1	0	12	3	52	0	224
5:15 PM	10	55	18	0	6	0	5	0	31	33	1	0	25	3	52	0	239
5:30 PM	1	60	17	0	5	2	1	0	22	31	1	0	10	2	21	0	173
5:45 PM	3	50	20	0	4	1	0	0	16	23	1	0	17	4	41	0	180
6:00 PM	2	49	11	0	2	1	2	0	9	11	1	0	14	4	33	0	139
6:15 PM	0	36	13	0	4	1	0	0	9	16	0	0	5	1	20	0	105
6:30 PM	2	27	9	0	2	0	1	0	8	11	1	0	8	3	31	0	103
6:45 PM	0	23	9	0	1	2	0	0	7	14	0	0	10	0	16	0	82
7:00 PM	1	20	4	0	0	0	1	0	7	6	0	0	5	0	16	0	60
7:15 PM	0	22	10	0	1	1	0	0	7	12	0	0	7	2	19	0	81
7:30 PM	0	14	2	0	0	1	0	0	4	4	0	0	8	0	13	0	46
7:45 PM	2	13	8	0	0	2	0	0	4	5	1	0	3	0	11	0	49
8:00 PM	0	11	5	0	0	0	0	0	5	1	0	0	5	0	14	0	41
8:15 PM	0	11	5	0	1	0	0	0	4	10	0	0	0	0	23	0	54
8:30 PM	0	13	3	0	1	1	0	0	5	10	0	0	4	0	14	0	51
8:45 PM	0	20	6	0	0	0	0	0	4	7	0	0	13	0	18	0	68
9:00 PM	1	17	2	0	0	0	0	0	9	14	0	0	3	0	9	0	55
9:15 PM	1	17	1	0	0	0	0	0	1	2	0	1	0	0	7	0	30
9:30 PM	0	18	1	0	0	0	0	0	3	2	0	0	1	0	4	0	29
9:45 PM	0	8	2	0	0	0	1	0	1	5	0	0	3	0	2	0	22

Volume by Approach

Location 13_126_26
TMC Date 11/08/2022
Site Code 13

Classification Summary
Time Interval 15 minutes

	OR-126 Southbound					US-26 Westbound				OR-126 Northbound					US-26 Eastbound				Total
Start Time	Left	Thru	Bear Right	Right	U-Turn	Bear Left	Thru	Right	U-Turn	Hard Left	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	0	0	0	1	0	180	20	1	0	2	12	0	0	0	0	0	0	0	216
6:15 AM	0	0	0	0	0	148	16	0	0	3	9	0	0	0	0	0	0	0	176
6:30 AM	0	0	0	0	0	182	26	0	0	3	14	0	0	0	0	0	0	0	225
6:45 AM	0	0	0	0	0	188	17	0	0	1	12	0	0	0	0	0	0	0	218
7:00 AM	0	0	0	0	0	143	20	2	0	0	9	0	0	0	0	0	0	0	174
7:15 AM	0	0	0	1	0	146	20	4	0	0	9	1	0	0	0	0	0	0	181
7:30 AM	0	0	0	1	0	165	22	1	0	0	7	0	0	0	0	0	0	0	196
7:45 AM	0	0	0	0	0	147	30	1	0	1	22	4	0	0	0	0	0	0	205
8:00 AM	0	0	2	1	0	139	29	4	0	0	23	1	0	0	0	0	0	0	199
8:15 AM	0	0	3	1	0	111	25	3	0	0	19	2	0	0	0	0	0	0	164
8:30 AM	0	0	3	0	0	110	21	0	0	2	12	1	0	0	0	0	0	0	149
8:45 AM	0	0	1	0	0	100	27	1	0	2	15	0	0	0	0	0	0	0	146
9:00 AM	0	0	1	1	0	117	21	4	0	0	19	1	0	0	0	0	0	0	164
9:15 AM	0	0	0	0	0	112	35	1	0	1	15	0	0	0	0	0	0	0	164
9:30 AM	0	0	0	5	0	98	26	2	0	1	17	1	0	0	0	0	0	0	150
9:45 AM	0	0	1	2	0	130	29	6	0	0	21	0	0	0	0	0	0	0	189
10:00 AM	0	0	1	1	0	111	30	0	0	3	21	0	0	0	0	0	0	0	167
10:15 AM	0	0	0	5	0	105	30	6	0	3	20	1	0	0	0	0	0	0	170
10:30 AM	0	0	1	2	0	102	27	1	0	4	18	0	0	0	0	0	0	0	155
10:45 AM	0	0	4	0	0	103	32	2	0	3	28	0	0	0	0	0	0	0	172
11:00 AM	0	0	1	1	0	99	25	0	0	1	14	1	0	0	0	0	0	0	142
11:15 AM	0	0	1	2	0	118	38	2	0	0	22	0	0	0	0	0	0	0	183
11:30 AM	0	0	2	3	0	122	38	5	0	2	24	3	0	0	0	0	0	0	199
11:45 AM	0	0	2	1	0	138	30	3	0	2	30	0	0	0	0	0	0	0	206
12:00 PM	0	0	2	0	0	129	40	1	0	1	26	0	0	0	0	0	0	0	199
12:15 PM	0	0	0	2	0	108	49	3	0	2	20	2	0	0	0	0	0	0	186
12:30 PM	0	0	0	2	0	138	43	1	0	2	17	0	0	0	0	0	0	0	203
12:45 PM	0	0	1	5	0	125	38	3	0	3	18	0	0	0	0	0	0	0	193
1:00 PM	0	0	0	3	0	120	31	1	0	4	14	0	0	0	0	0	0	0	173
1:15 PM	0	0	1	2	0	125	40	5	0	2	20	0	0	0	0	0	0	0	195
1:30 PM	0	0	3	1	0	100	25	6	0	4	21	2	0	0	0	0	0	0	162
1:45 PM	0	0	0	1	0	101	36	2	0	2	14	0	0	0	0	0	0	0	156
2:00 PM	0	0	5	2	0	107	26	5	0	1	25	0	0	0	0	0	0	0	171
2:15 PM	0	0	3	3	0	106	32	3	0	0	23	3	0	0	0	0	0	0	173
2:30 PM	0	0	3	0	0	121	47	2	0	1	45	0	0	0	0	0	0	0	219
2:45 PM	0	0	1	3	0	103	38	3	0	1	34	1	0	0	0	0	0	0	184
3:00 PM	0	0	3	2	0	113	34	2	0	1	15	0	0	0	0	0	0	0	170
3:15 PM	0	0	3	0	0	119	33	1	0	3	41	3	0	0	0	0	0	0	203
3:30 PM	0	0	2	1	0	112	32	3	0	0	48	0	0	0	0	0	0	0	198
3:45 PM	0	0	1	1	0	137	38	4	0	2	43	2	0	0	0	0	0	0	228
4:00 PM	0	0	4	3	0	144	42	2	0	1	41	1	0	0	0	0	0	0	238
4:15 PM	0	0	0	3	0	136	41	1	0	0	57	1	0	0	0	0	0	0	239
4:30 PM	0	0	1	1	0	135	44	1	0	2	47	0	0	0	0	0	0	0	231
4:45 PM	0	0	2	1	0	111	47	1	0	2	55	1	0	0	0	0	0	0	220
5:00 PM	0	0	1	1	0	136	42	1	0	2	40	1	0	0	0	0	0	0	224
5:15 PM	0	0	1	4	0	121	41	4	0	3	38	0	0	0	0	0	0	0	212
5:30 PM	0	0	1	0	0	103	31	1	0	1	38	0	0	0	0	0	0	0	175
5:45 PM	0	0	1	1	0	68	50	0	0	0	31	0	0	0	0	0	0	0	151
6:00 PM	0	0	0	5	0	76	27	0	0	2	18	1	0	0	0	0	0	0	129
6:15 PM	0	0	0	0	0	57	17	0	0	0	17	0	0	0	0	0	0	0	91
6:30 PM	0	0	2	0	0	49	15	0	0	0	15	0	0	0	0	0	0	0	81
6:45 PM	0	0	0	0	0	29	18	0	0	1	15	0	0	0	0	0	0	0	63
7:00 PM	0	0	0	0	0	39	17	0	0	1	14	0	0	0	0	0	0	0	71
7:15 PM	0	0	0	0	0	38	11	0	0	0	7	0	0	0	0	0	0	0	56
7:30 PM	0	0	0	0	0	27	13	0	0	1	10	0	0	0	0	0	0	0	51
7:45 PM	0	0	0	0	0	25	10	0	0	0	6	0	0	0	0	0	0	0	41
8:00 PM	0	0	0	0	0	17	6	0	0	0	5	0	0	0	0	0	0	0	28
8:15 PM	0	0	0	0	0	27	11	0	0	1	8	0	0	0	0	0	0	0	47
8:30 PM	0	0	0	0	0	28	11	0	0	0	7	0	0	0	0	0	0	0	46
8:45 PM	0	0	0	0	0	39	10	0	0	1	4	0	0	0	0	0	0	0	54
9:00 PM	0	0	0	0	0	19	4	0	0	0	5	0	0	0	0	0	0	0	28
9:15 PM	0	0	0	0	0	16	4	0	0	0	5	1	0	0	0	0	0	0	26
9:30 PM	0	0	0	0	0	13	3	0	0	0	6	0	0	0	0	0	0	0	22
9:45 PM	0	0	0	0	0	11	3	0	0	0	4	0	0	0	0	0	0	0	18

Volume by Approach

Location 10_126_370
TMC Date 11/08/2022
Site Code 10

Classification Summary
Time Interval 15 minutes

	OR-126 Southbound			OR-126 Northbound			OR-370 Eastbound			Total
Start Time	Thru	Right	U-Turn	Left	Thru	U-Turn	Left	Right	U-Turn	
6:00 AM	203	17	0	2	44	0	4	5	0	275
6:15 AM	183	20	0	5	43	0	13	5	0	269
6:30 AM	251	14	0	1	54	0	17	6	0	343
6:45 AM	221	15	0	2	56	0	10	6	0	310
7:00 AM	185	16	0	2	76	0	22	2	0	303
7:15 AM	173	20	0	3	89	0	6	2	0	293
7:30 AM	181	14	0	2	125	0	19	5	0	346
7:45 AM	170	20	0	2	136	0	36	4	0	368
8:00 AM	148	19	0	1	115	0	11	4	0	298
8:15 AM	130	16	0	2	113	0		2	0	263
8:30 AM	117	16	0	0	100	0	16	6	0	255
8:45 AM	116	17	0	5	110	0	18	1	0	267
9:00 AM	127	11	0	3	84	0	20	3	0	248
9:15 AM	134	13	0	3	72	0	12	3	0	237
9:30 AM	102	19	0	0	85	0	13	2	0	221
9:45 AM	123	24	0	2	94	0	9	5	0	257
10:00 AM	109	13	0	3	79	0	17	1	0	222
10:15 AM	114	21	0	3	105	0	16	3	0	262
10:30 AM	112	25	0	4	88	0	16	5	0	250
10:45 AM	114	12	0	3	99	0	17	2	0	247
11:00 AM	107	16	0	5	120	0	18	4	0	270
11:15 AM	122	23	0	5	116	0	21	1	0	288
11:30 AM	146	23	0	3	154	0	27	4	0	357
11:45 AM	138	15	0	2	134	0	15	2	0	306
12:00 PM	128	25	0	4	119	0	23	6	0	305
12:15 PM	118	21	0	5	108	0	12	6	0	270
12:30 PM	141	18	0	4	133	0	12	2	0	310
12:45 PM	115	26	0	5	95	0	16	1	0	258
1:00 PM	132	16	0	5	119	0	20	3	0	295
1:15 PM	128	23	0	4	113	0	19	1	0	288
1:30 PM	110	11	0	2	123	0	20	6	0	272
1:45 PM	111	14	0	3	132	0	21	6	0	287
2:00 PM	110	19	0	1	130	0	21	0	0	281
2:15 PM	99	33	1	5	150	0	25	3	0	316
2:30 PM	127	31	0	5	200	0	20	2	0	385
2:45 PM	99	19	0	6	161	0	24	1	0	310
3:00 PM	115	19	0	2	74	0	19	3	0	232
3:15 PM	102	34	0	4	281	0	23	4	0	448
3:30 PM	117	24	0	3	271	0	17	6	0	438
3:45 PM	126	35	0	5	241	0	17	3	0	427
4:00 PM	144	29	0	7	277	0	16	4	0	477
4:15 PM	138	31	0	6	297	0	18	5	0	495
4:30 PM	120	44	0	7	321	0	14	3	0	509
4:45 PM	110	24	0	7	280	0	23	3	0	447
5:00 PM	136	35	0	7	240	0	23	2	0	443
5:15 PM	105	31	0	4	228	0	26	1	0	395
5:30 PM	79	20	0	4	182	0	15	1	0	301
5:45 PM	66	15	0	1	161	0	14	0	0	257
6:00 PM	74	19	0	5	113	0	17	3	0	231
6:15 PM	50	18	0	0	113	0	19	3	0	203
6:30 PM	40	10	0	2	69	0	16	3	0	140
6:45 PM	38	6	0	0	72	0	11	0	0	127
7:00 PM	38	8	0	1	68	0	9	2	0	126
7:15 PM	43	4	1	0	61	0	11	0	0	120
7:30 PM	23	7	0	1	51	0	6	0	0	88
7:45 PM	23	3	0	0	43	0	3	0	0	72
8:00 PM	18	5	0	0	49	0	5	1	0	78
8:15 PM	26	8	0	1	54	0	6	1	0	96
8:30 PM	30	5	0	0	32	0	2	1	0	70
8:45 PM	34	7	0	0	32	0	3	0	0	76
9:00 PM	20	4	0	1	28	0	2	0	0	55
9:15 PM	20	3	0	0	33	0	4	2	0	62
9:30 PM	15	1	0	1	21	0	1	0	0	39
9:45 PM	12	1	0	0	24	0	2	0	0	39

Volume by Approach

Location 09_Tom_126
TMC Date 11/10/2022
Site Code 9

Classification Summary
Time Interval 15 minutes

	Tom McCall Rd Southbound				OR-126 Westbound				Tom McCall Rd Northbound				OR-126 Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	6	0	1	0	26	131	24	0	3	0	0	0	47	20	43	0	301
6:15 AM	4	0	1	0	45	100	32	0	3	7	2	0	27	32	41	0	294
6:30 AM	12	2	1	0	44	115	51	0	14	2	4	0	32	65	46	0	388
6:45 AM	10	0	0	0	54	118	60	0	12	1	1	0	19	76	23	0	374
7:00 AM	3	2	0	0	27	85	33	0	12	1	2	0	20	75	22	0	282
7:15 AM	13	3	1	0	12	86	34	0	24	3	5	0	20	90	15	0	306
7:30 AM	8	1	4	0	16	86	21	0	19	7	5	0	23	106	20	0	316
7:45 AM	12	4	2	0	31	124	27	0	15	10	1	0	15	119	25	0	385
8:00 AM	11	2	1	0	20	132	24	0	16	1	4	0	14	91	14	0	330
8:15 AM	15	2	0	0	12	98	20	0	16	2	4	0	10	85	8	0	272
8:30 AM	13	2	2	0	13	100	11	0	6	5	2	0	9	72	9	0	244
8:45 AM	12	5	3	0	13	88	13	0	18	3	4	0	6	83	2	0	250
9:00 AM	17	3	0	1	16	105	10	0	12	2	8	0	13	95	9	0	291
9:15 AM	13	1	1	0	27	102	15	0	21	3	4	0	2	69	14	0	272
9:30 AM	15	0	3	0	21	116	12	0	25	5	2	0	7	60	5	0	271
9:45 AM	8	4	3	0	14	87	21	0	14	5	5	0	6	77	5	0	249
10:00 AM	18	3	2	0	18	99	20	0	15	6	5	0	9	63	3	0	261
10:15 AM	15	6	2	0	19	107	18	0	16	2	5	0	5	67	2	0	264
10:30 AM	17	2	17	0	13	131	7	0	19	1	2	0	2	59	3	0	273
10:45 AM	26	3	0	0	18	97	21	0	20	4	6	0	5	85	0	0	285
11:00 AM	15	6	5	0	10	93	5	0	40	2	4	0	0	75	1	0	256
11:15 AM	25	1	4	0	16	70	18	0	33	1	8	0	2	60	9	0	247
11:30 AM	31	4	4	0	29	93	13	0	31	5	5	0	2	65	0	0	282
11:45 AM	33	3	3	0	24	94	30	0	36	3	3	0	4	72	2	0	307
12:00 PM	14	0	3	0	34	93	15	0	34	7	2	0	2	64	4	0	272
12:15 PM	19	5	7	0	33	88	22	0	18	5	3	0	3	88	6	0	297
12:30 PM	24	6	12	0	18	88	22	0	25	2	4	0	5	87	2	0	295
12:45 PM	13	5	5	0	17	93	26	0	23	2	8	0	7	93	2	0	294
1:00 PM	27	1	8	0	24	107	20	0	20	4	8	0	5	74	0	0	298
1:15 PM	17	3	10	0	18	83	18	0	15	4	5	0	3	90	7	0	273
1:30 PM	24	2	4	0	17	83	12	0	20	3	5	0	4	95	4	0	273
1:45 PM	22	2	7	0	12	85	13	0	15	4	4	0	1	86	1	0	252
2:00 PM	37	1	13	0	12	87	15	0	31	3	6	0	4	90	2	0	301
2:15 PM	40	3	16	0	14	87	19	0	22	2	18	0	4	80	2	0	307
2:30 PM	50	2	22	0	20	81	7	0	38	0	10	0	3	119	4	0	356
2:45 PM	35	3	11	0	14	95	17	0	28	4	20	0	4	125	1	0	357
3:00 PM	44	5	24	0	10	124	6	0	46	1	12	0	1	105	1	0	379
3:15 PM	59	1	28	0	14	94	20	0	22	0	16	0	1	119	4	0	378
3:30 PM	107	1	50	0	12	111	7	0	55	2	25	0	1	148	1	0	520
3:45 PM	56	2	49	0	12	93	10	0	34	2	16	0	2	161	2	0	439
4:00 PM	83	4	52	0	8	123	15	0	58	0	42	0	1	144	0	0	530
4:15 PM	66	3	34	0	8	114	12	0	79	1	62	0	2	140	1	0	522
4:30 PM	60	3	26	0	9	125	3	0	53	0	39	0	3	159	1	0	481
4:45 PM	53	4	25	0	10	123	7	0	51	0	18	0	0	152	2	0	445
5:00 PM	29	3	11	0	10	107	11	0	42	0	16	0	1	161	1	0	392
5:15 PM	26	2	8	0	3	83	6	0	9	0	6	0	1	153	1	0	298
5:30 PM	19	1	9	0	5	80	15	0	16	0	11	0	1	130	0	0	287
5:45 PM	6	1	9	0	3	47	7	0	21	0	2	0	1	117	2	0	216
6:00 PM	3	0	9	0	10	56	4	0	12	0	0	0	1	75	1	0	171
6:15 PM	2	0	12	0	6	53	6	1	12	0	4	0	1	110	1	0	208
6:30 PM	2	0	10	0	7	34	5	0	5	0	2	0	1	87	1	0	154
6:45 PM	8	1	6	0	5	27	1	0	8	0	2	0	0	64	0	0	122
7:00 PM	0	0	3	0	3	32	4	0	5	0	1	0	0	87	0	0	135
7:15 PM	1	0	1	0	4	28	6	0	3	0	1	0	0	53	2	0	99
7:30 PM	1	0	3	0	2	26	7	0	11	0	1	0	1	48	2	0	102
7:45 PM	1	0	6	0	3	26	5	0	5	0	0	0	0	58	4	0	108
8:00 PM	0	0	2	0	1	27	1	0	2	0	0	0	0	58	0	0	91
8:15 PM	0	0	0	0	5	22	8	0	3	0	0	0	0	48	0	0	86
8:30 PM	1	0	2	0	4	23	6	0	2	1	1	0	0	30	0	0	70
8:45 PM	1	0	0	0	2	23	6	0	3	0	1	0	1	38	0	0	75
9:00 PM	1	0	0	0	1	19	7	0	2	0	0	0	3	24	0	0	57
9:15 PM	0	0	2	0	2	8	3	0	6	0	0	0	1	35	0	0	57
9:30 PM	0	0	3	0	4	6	3	0	2	0	0	0	0	45	0	0	63
9:45 PM	1	0	1	0	1	15	3	1	3	0	0	0	0	28	0	0	53

Volume by Approach

Location 08_126_Millican
TMC Date 11/08/2022
Site Code 8

Classification Summary
Time Interval 15 minutes

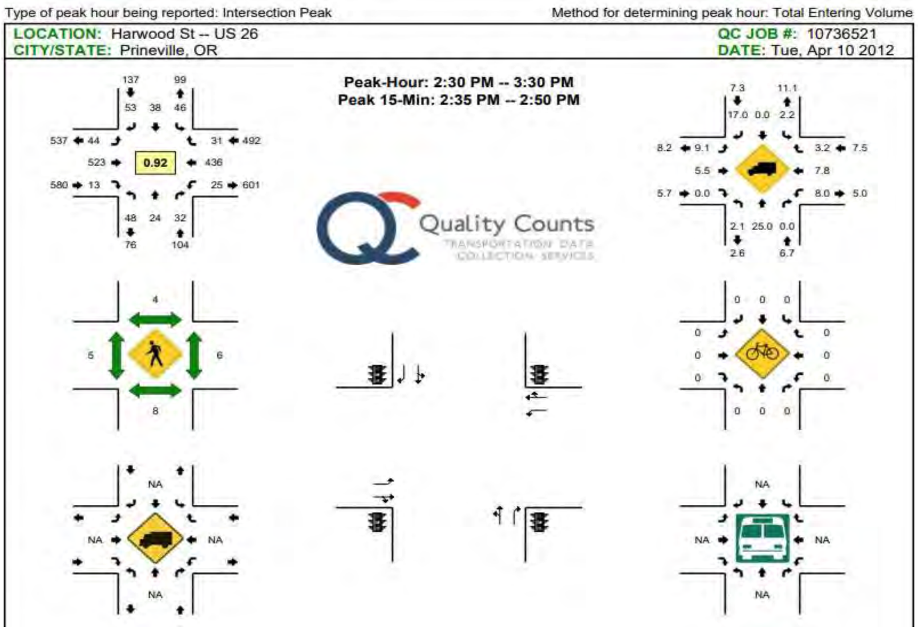
	SW Millican Rd (Airport Way) Southbound				OR-126 Westbound				SW Millican Rd (Airport Way) Northbound				OR-126 Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	0	0	0	0	0	120	1	0	0	0	0	1	0	91	4	0	217
6:15 AM	0	0	1	0	0	142	0	0	0	0	0	0	0	107	5	0	255
6:30 AM	0	0	0	0	0	154	0	0	0	0	0	0	0	70	0	0	224
6:45 AM	0	0	2	0	0	103	0	0	0	0	0	0	0	136	6	0	247
7:00 AM	0	0	0	0	0	174	0	0	0	0	0	0	0	111	3	0	288
7:15 AM	0	0	0	0	0	139	0	0	0	0	0	0	0	107	2	0	248
7:30 AM	0	0	0	0	0	154	0	0	0	0	0	0	0	112	4	0	270
7:45 AM	0	0	0	0	0	112	0	0	0	0	0	0	0	175	5	0	292
8:00 AM	0	0	0	0	0	141	0	0	0	0	0	0	0	89	3	0	233
8:15 AM	0	0	1	0	0	108	0	0	0	0	0	0	0	105	5	0	219
8:30 AM	0	0	1	0	0	94	0	0	0	0	0	0	0	89	0	0	184
8:45 AM	0	0	0	0	0	91	0	0	0	0	0	0	1	90	3	1	186
9:00 AM	0	0	0	0	0	104	0	0	0	0	0	0	0	66	4	0	174
9:15 AM	0	0	0	0	0	111	0	0	0	0	0	0	0	72	5	0	188
9:30 AM	0	0	1	0	0	84	1	0	0	0	0	0	1	61	4	0	152
9:45 AM	0	0	0	0	0	107	0	0	0	0	0	0	0	59	1	0	167
10:00 AM	0	0	0	0	0	91	0	0	0	0	0	0	0	58	0	0	149
10:15 AM	0	0	0	0	0	87	1	0	0	0	0	0	0	69	2	0	159
10:30 AM	0	0	1	0	1	95	0	0	0	0	0	0	0	72	3	0	172
10:45 AM	0	0	0	0	0	72	0	0	0	0	0	0	0	77	1	0	150
11:00 AM	0	0	0	0	0	74	0	0	0	0	0	0	0	65	3	0	142
11:15 AM	0	0	1	0	0	84	0	0	0	0	0	0	0	78	3	0	166
11:30 AM	0	0	1	0	0	97	0	0	0	0	0	0	0	83	2	0	183
11:45 AM	0	0	0	0	0	92	0	0	0	0	0	0	0	80	2	0	174
12:00 PM	0	0	0	0	0	93	0	0	0	0	0	0	0	64	1	0	158
12:15 PM	0	0	0	0	0	71	0	0	0	0	0	0	0	66	3	0	140
12:30 PM	0	0	0	0	0	94	0	0	0	0	0	0	0	84	4	0	182
12:45 PM	0	0	0	0	0	83	0	0	0	0	0	0	0	82	2	0	167
1:00 PM	0	0	0	0	0	83	0	0	0	0	0	0	0	82	5	0	170
1:15 PM	0	0	1	0	0	94	0	0	0	0	0	0	0	88	4	0	187
1:30 PM	0	0	3	0	0	88	0	0	0	0	0	0	0	94	2	0	187
1:45 PM	0	0	0	0	0	83	0	0	0	0	0	0	0	102	1	0	186
2:00 PM	0	0	0	0	0	98	1	0	0	0	0	0	0	74	1	0	174
2:15 PM	0	0	2	0	0	84	1	0	0	0	0	0	0	93	2	0	182
2:30 PM	0	0	2	0	0	113	1	0	0	0	0	0	0	109	1	0	226
2:45 PM	0	0	0	0	0	101	0	0	0	0	0	0	0	107	2	0	210
3:00 PM	0	0	3	0	0	111	0	0	0	0	0	0	0	127	4	0	245
3:15 PM	0	0	1	0	0	127	0	0	0	0	0	0	0	139	1	0	268
3:30 PM	0	0	1	0	0	153	0	0	0	0	0	0	0	136	2	0	292
3:45 PM	0	0	2	0	0	133	0	0	0	0	0	0	0	147	3	0	285
4:00 PM	1	0	1	0	0	188	0	0	0	0	0	0	0	165	2	0	357
4:15 PM	0	0	1	0	0	195	0	0	0	0	0	0	0	138	2	0	336
4:30 PM	0	0	2	0	0	185	0	0	0	0	0	0	0	141	6	0	334
4:45 PM	0	0	1	0	0	172	0	0	0	0	0	0	0	151	4	0	328
5:00 PM	0	0	2	0	0	159	0	0	0	0	0	0	0	142	0	0	303
5:15 PM	0	0	0	0	0	127	0	0	0	0	0	0	0	151	0	0	278
5:30 PM	0	0	0	0	0	77	0	0	0	0	0	0	0	130	0	0	207
5:45 PM	0	0	1	0	0	64	0	0	0	0	0	0	0	127	1	0	193
6:00 PM	0	0	0	0	0	56	0	0	0	0	0	0	0	81	1	0	138
6:15 PM	0	0	0	0	0	48	0	0	0	0	0	0	0	91	0	0	139
6:30 PM	0	0	0	0	0	40	0	0	0	0	0	0	0	47	0	0	87
6:45 PM	0	0	1	0	0	31	0	0	0	0	0	0	0	60	2	0	94
7:00 PM	0	0	0	0	0	57	0	0	0	0	0	0	0	47	0	0	104
7:15 PM	0	0	0	0	0	28	0	0	0	0	0	0	0	53	1	0	82
7:30 PM	0	0	0	0	0	26	0	0	0	0	0	0	0	38	0	0	64
7:45 PM	0	0	0	0	0	17	0	0	0	0	0	0	0	46	0	0	63
8:00 PM	0	0	0	0	0	16	0	0	0	0	0	0	0	36	0	0	52
8:15 PM	0	0	0	0	0	13	0	0	0	0	0	0	0	45	0	0	58
8:30 PM	0	0	0	0	0	20	0	1	0	0	0	0	0	31	0	0	52
8:45 PM	0	0	1	0	0	19	0	0	0	0	0	0	0	15	0	0	35
9:00 PM	0	0	0	0	0	20	0	0	0	0	0	0	0	20	0	0	40
9:15 PM	0	0	0	0	0	9	0	0	0	0	0	0	0	23	1	0	33
9:30 PM	1	0	0	0	0	13	1	0	0	0	0	0	0	16	1	0	32
9:45 PM	0	0	0	0	0	7	0	0	0	0	0	0	0	17	0	0	24

Volume by Approach

Location 14_Laughlin_26
TMC Date 11/08/2022
Site Code 14

Classification Summary
Time Interval 15 minutes

	NE Laughlin Rd Southbound				US-26 Westbound				US-26 Eastbound				Total
Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	
6:00 AM	0	0	0	0	0	24	2	0	0	13	0	0	39
6:15 AM	0	0	0	0	0	25	4	0	0	10	0	0	39
6:30 AM	0	0	0	0	0	23	6	0	0	19	0	0	48
6:45 AM	0	0	0	0	0	20	4	0	0	14	0	0	38
7:00 AM	0	0	0	0	0	37	6	0	0	18	0	0	61
7:15 AM	0	0	0	0	0	39	7	0	0	17	0	0	63
7:30 AM	0	0	0	0	0	50	18	0	0	52	0	0	120
7:45 AM	0	0	0	0	0	62	13	0	0	39	0	0	114
8:00 AM	0	0	0	0	0	33	9	0	0	28	0	0	70
8:15 AM	0	0	0	0	0	23	1	0	0	32	0	0	56
8:30 AM	0	0	0	0	0	49	4	0	0	26	0	0	79
8:45 AM	0	0	0	0	0	36	2	0	0	31	0	0	69
9:00 AM	0	0	0	0	0	33	5	0	0	22	0	0	60
9:15 AM	0	0	0	0	0	38	4	0	0	24	0	0	66
9:30 AM	0	0	4	0	0	21	10	0	0	26	0	0	61
9:45 AM	0	0	0	0	0	35	11	0	0	25	0	0	71
10:00 AM	0	0	1	0	0	48	9	0	0	30	0	0	88
10:15 AM	0	0	0	0	0	48	3	0	0	34	0	0	85
10:30 AM	0	0	0	0	0	34	6	0	0	34	0	0	74
10:45 AM	0	0	0	0	0	26	24	0	0	33	0	0	83
11:00 AM	0	0	0	0	0	35	7	0	0	34	0	0	76
11:15 AM	0	0	0	0	0	38	4	0	0	28	0	0	70
11:30 AM	0	0	0	0	0	35	5	0	0	37	0	0	77
11:45 AM	0	0	0	0	0	44	6	0	0	32	0	0	82
12:00 PM	0	0	0	0	0	40	4	0	0	47	0	0	91
12:15 PM	0	0	0	0	0	34	9	0	0	44	0	0	87
12:30 PM	0	0	0	0	0	31	5	0	0	28	0	0	64
12:45 PM	0	0	0	0	0	42	7	0	0	38	0	0	87
1:00 PM	0	0	0	0	0	49	1	0	0	44	0	0	94
1:15 PM	0	0	0	0	0	41	1	0	0	42	0	0	84
1:30 PM	0	0	0	0	0	43	7	0	0	59	0	0	109
1:45 PM	0	0	0	0	0	35	5	0	0	39	0	0	79
2:00 PM	0	0	0	0	0	28	10	0	0	41	0	0	79
2:15 PM	0	0	0	0	0	38	5	0	0	43	0	0	86
2:30 PM	0	0	0	0	0	42	5	0	0	63	0	0	110
2:45 PM	0	0	0	0	0	48	9	0	0	47	0	0	104
3:00 PM	0	0	0	0	0	31	0	0	0	37	0	0	68
3:15 PM	0	0	0	0	0	36	7	0	0	31	0	0	74
3:30 PM	0	0	0	0	0	48	11	0	0	43	0	0	102
3:45 PM	0	0	0	0	0	31	7	0	0	60	0	0	98
4:00 PM	0	0	0	0	0	37	9	0	0	68	0	0	114
4:15 PM	0	0	0	0	0	43	9	0	0	55	0	0	107
4:30 PM	0	0	0	0	0	39	10	0	0	59	0	0	108
4:45 PM	0	0	0	0	0	33	6	0	0	65	0	0	104
5:00 PM	0	0	0	0	0	32	4	0	0	52	0	0	88
5:15 PM	0	0	0	0	0	30	5	0	0	53	0	0	88
5:30 PM	0	0	0	0	0	24	4	0	0	50	0	0	78
5:45 PM	0	0	0	0	0	34	7	0	0	45	0	0	86
6:00 PM	0	0	0	0	0	13	1	0	0	35	0	0	49
6:15 PM	0	0	0	0	0	20	1	0	0	28	0	0	49
6:30 PM	0	0	0	0	0	19	1	0	0	23	0	0	43
6:45 PM	0	0	0	0	0	15	0	0	0	23	0	0	38
7:00 PM	0	0	0	0	0	11	4	0	0	18	0	0	33
7:15 PM	0	0	0	0	0	8	1	0	0	16	0	0	25
7:30 PM	0	0	0	0	0	11	5	0	0	13	0	0	29
7:45 PM	0	0	0	0	0	5	0	0	0	15	0	0	20
8:00 PM	0	0	0	0	0	6	0	0	0	15	0	0	21
8:15 PM	0	0	0	0	0	5	0	0	0	15	0	0	20
8:30 PM	0	0	0	0	0	7	1	0	0	12	0	0	20
8:45 PM	0	0	0	0	0	5	1	0	0	14	0	0	20
9:00 PM	0	0	0	0	0	4	1	0	0	8	0	0	13
9:15 PM	0	0	0	0	0	2	0	0	0	5	0	0	7
9:30 PM	0	0	0	0	0	4	0	0	0	4	0	0	8
9:45 PM	0	0	0	0	0	2	0	0	0	5	0	0	7

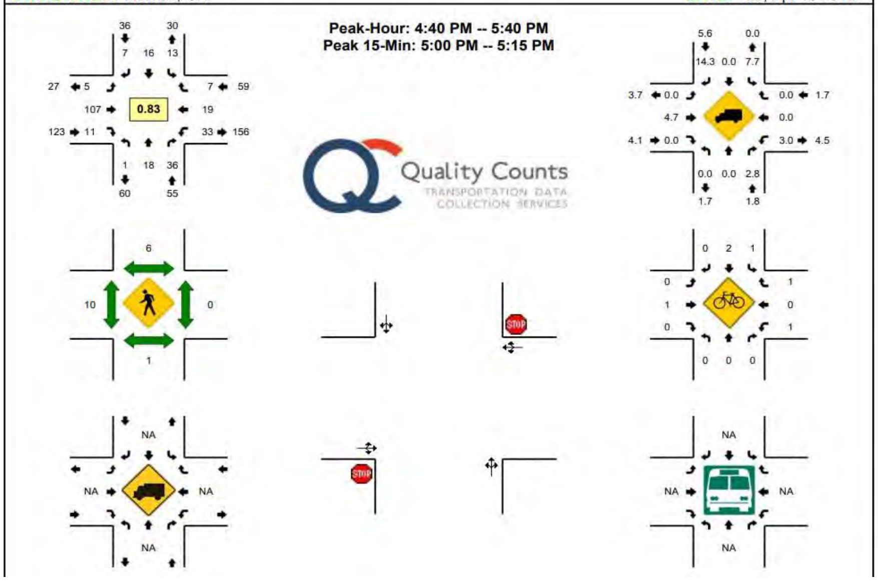


5-Min Count Period	Harwood St (Northbound)				Harwood St (Southbound)				US 26 (Eastbound)				US 26 (Westbound)				
Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Total
2:00 PM	2	2	1	0	2	0	1	0	2	45	1	0	1	42	1	0	100
2:05 PM	1	0	2	0	4	0	2	0	0	28	2	0	2	40	2	0	83
2:10 PM	2	1	6	0	1	1	2	0	1	27	1	0	5	31	1	0	79
2:15 PM	5	1	5	0	1	1	3	0	2	40	2	0	3	33	0	0	96
2:20 PM	1	3	0	0	1	4	1	0	1	47	2	0	2	43	0	0	105
2:25 PM	2	1	0	0	0	0	2	0	1	44	3	0	6	31	0	0	90
2:30 PM	3	1	3	0	3	2	1	0	1	51	4	0	3	36	1	0	109
2:35 PM	1	1	7	0	0	3	6	0	2	62	1	0	5	37	1	0	126
2:40 PM	7	1	4	0	0	2	9	0	2	49	0	0	2	39	3	0	118
2:45 PM	4	2	3	0	4	1	4	0	8	48	0	0	3	36	1	0	114
2:50 PM	1	2	1	0	6	4	4	0	6	44	1	0	2	29	4	0	104
2:55 PM	2	2	4	0	11	10	5	0	0	38	2	0	0	25	1	0	100
3:00 PM	3	4	3	0	3	3	4	0	2	45	1	0	0	34	5	0	107
3:05 PM	6	3	3	0	6	2	3	0	5	28	1	0	2	49	4	0	112
3:10 PM	2	3	1	0	1	3	5	0	4	27	1	0	2	39	4	0	92
3:15 PM	8	2	1	0	5	4	7	0	2	40	0	0	3	42	3	0	117
3:20 PM	5	3	0	0	3	1	3	0	7	47	1	0	2	39	2	0	113
3:25 PM	6	0	2	0	4	3	2	0	5	44	1	0	1	31	2	0	101
3:30 PM	0	3	1	0	1	0	6	0	7	51	0	0	0	23	4	0	96
3:35 PM	6	0	0	0	0	1	6	0	7	62	0	0	6	37	0	0	125
3:40 PM	3	2	1	0	6	8	10	0	12	49	2	0	2	26	2	0	123
3:45 PM	3	1	5	0	2	2	2	0	4	48	4	0	1	24	1	0	97
3:50 PM	4	1	0	0	4	3	3	0	3	44	1	0	0	27	4	0	94
3:55 PM	3	3	1	0	3	1	3	0	5	38	1	0	1	33	3	0	95
Peak Hour																	
All Vehicle	49	25	18	0	38	31	54	0	63	523	13	0	20	404	34	0	1313
Heavy Truck	0	0	0		0	0	24		8	56	0		4	20	0		112
HV%	0%	0%	0%		0%	0%	44%		13%	11%	0%		20%	5%	0%		
Ped		4				0				8				8			20
Bike	0	0	0		0	0	0		0	0	0		0	0	0		0

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

LOCATION: Meadow Lakes Dr -- 2nd St — **QC JOB #:** 10736511

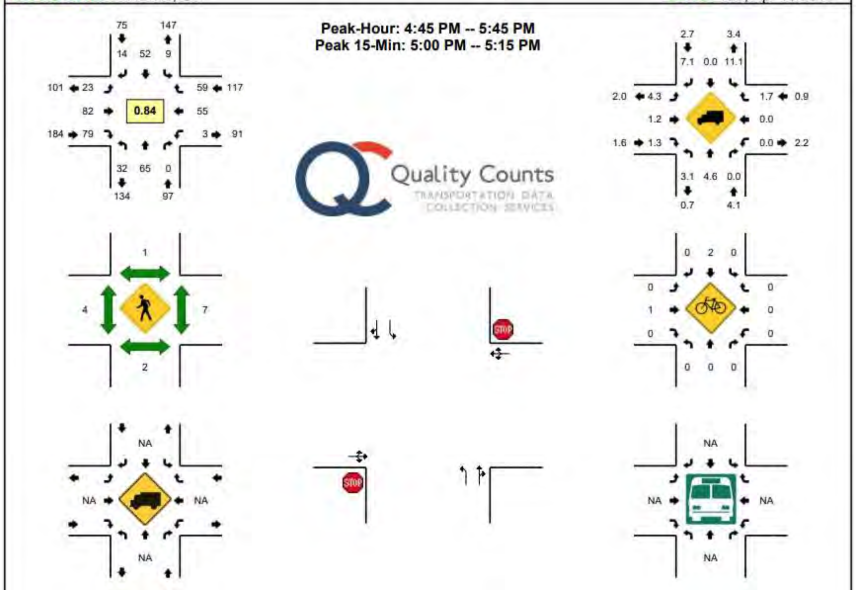
CITY/STATE: Prineville, OR — **DATE:** Tue, Apr 10 2012



5-Min Count Period	Meadow Lakes Dr (Northbound)				Meadow Lakes Dr (Southbound)				2nd St(Eastbound)				2nd St (Westbound)				
Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Total
4:00 PM	1	2	4	0	2	1	0	0	0	8	1	0	0	0	0	0	19
4:05 PM	1	2	1	0	3	2	1	0	0	9	1	0	7	2	0	0	29
4:10 PM	0	4	2	0	1	1	0	0	1	7	1	0	3	2	0	0	22
4:15 PM	0	3	3	0	1	1	0	0	0	3	0	0	3	4	1	0	19
4:20 PM	1	1	0	0	0	2	0	0	0	8	0	0	2	2	0	0	16
4:25 PM	0	2	2	0	0	0	0	0	0	14	1	0	0	2	0	0	21
4:30 PM	0	2	2	0	1	0	1	0	0	5	0	0	1	0	1	0	13
4:35 PM	0	1	1	0	1	0	0	0	0	10	2	0	3	0	2	0	20
4:40 PM	0	0	4	0	1	1	1	0	1	4	3	0	3	1	1	0	20
4:45 PM	0	3	1	0	1	3	2	0	1	6	0	0	2	2	0	0	21
4:50 PM	1	3	2	0	3	1	0	0	0	4	0	0	3	1	0	0	18
4:55 PM	0	0	4	0	0	0	1	0	1	5	2	0	3	2	0	0	18
5:00 PM	0	3	6	0	2	0	0	0	0	9	1	0	3	1	1	0	26
5:05 PM	0	0	7	0	1	3	0	0	0	12	2	0	5	3	1	0	34
5:10 PM	0	1	4	0	1	2	2	0	1	8	1	0	1	0	1	0	22
5:15 PM	0	1	0	0	0	3	0	0	0	10	0	0	1	2	1	0	18
5:20 PM	0	4	2	0	1	2	1	0	1	9	1	0	2	0	1	0	24
5:25 PM	0	1	0	0	0	0	0	0	0	16	1	0	3	4	0	0	25
5:30 PM	0	0	3	0	1	1	0	0	0	10	0	0	3	1	1	0	20
5:35 PM	0	2	3	0	2	0	0	0	0	14	0	0	4	2	0	0	27
5:40 PM	0	2	4	0	0	1	0	0	0	7	0	0	2	3	0	0	19
5:45 PM	0	0	0	0	2	1	0	0	0	11	0	0	2	1	0	0	17
5:50 PM	0	3	4	0	0	1	0	0	1	6	1	0	2	4	0	0	22
5:55 PM	0	0	1	0	0	1	2	0	0	12	0	0	0	0	2	0	18
Peak Hour																	
All Vehicle	4	23	26	0	14	12	6	0	4	83	11	0	30	18	5	0	259
Heavy Truck	0	0	4		0	0	0		0	0	0		4	0	0		8
HV%	0%	0%	15%		0%	0%	0%		0%	0%	0%		13%	0%	0%		
Ped		0				0				4				0			4
Bike	0	0	0		1	0	0		0	0	0		0	0	0		1

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Deer St -- 2nd St | **QC JOB #:** 10736512
CITY/STATE: Prineville, OR | **DATE:** Tue, Apr 10 2012

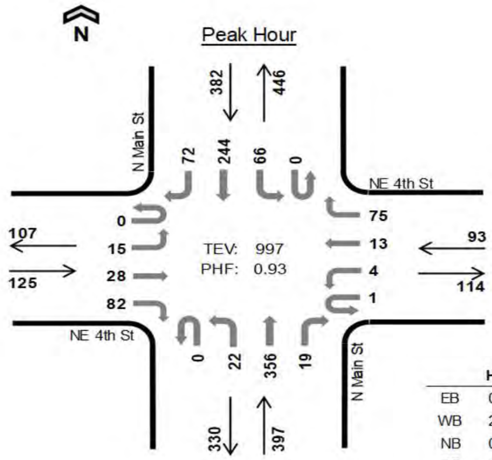


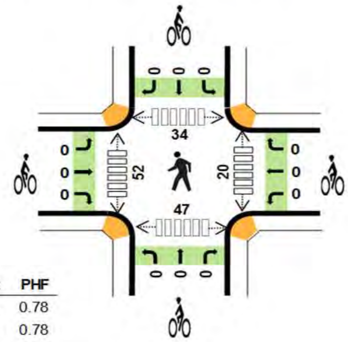
5-Min Count Period	Deer St (Northbound)				Deer St (Southbound)				2nd St(Eastbound)				2nd St (Westbound)				
Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Total
4:00 PM	1	6	0	0	1	5	1	0	4	4	6	0	0	5	3	0	36
4:05 PM	8	11	0	0	4	5	3	0	2	12	5	0	0	2	5	0	57
4:10 PM	1	7	1	0	3	6	2	0	3	5	4	0	0	6	4	0	42
4:15 PM	2	5	0	0	1	2	0	0	2	9	2	0	1	5	2	0	31
4:20 PM	3	3	0	0	0	3	0	0	1	5	5	0	1	1	4	0	26
4:25 PM	0	5	0	0	1	2	1	0	1	6	7	0	0	0	4	0	27
4:30 PM	2	6	1	0	6	4	1	0	1	3	5	0	0	4	3	0	36
4:35 PM	3	5	0	0	0	6	2	0	2	7	3	0	0	4	2	0	34
4:40 PM	4	4	0	0	1	3	0	0	1	5	2	0	0	2	1	0	23
4:45 PM	5	8	0	0	0	3	0	0	2	6	3	0	0	7	3	0	37
4:50 PM	1	2	0	0	2	4	2	0	1	4	6	0	0	1	8	0	31
4:55 PM	1	8	0	0	0	2	0	0	4	3	5	0	0	5	5	0	33
5:00 PM	4	7	0	0	3	8	2	0	2	7	6	0	0	4	4	0	47
5:05 PM	3	3	0	0	1	4	3	0	3	8	10	0	0	6	6	0	47
5:10 PM	1	6	0	0	3	2	1	0	3	11	9	0	0	4	7	0	47
5:15 PM	1	6	0	0	0	6	0	0	2	7	6	0	2	5	5	0	40
5:20 PM	2	9	0	0	0	5	1	0	1	7	5	0	0	4	4	0	38
5:25 PM	2	3	0	0	0	1	0	0	0	7	4	0	0	2	5	0	24
5:30 PM	3	4	0	0	0	6	2	0	3	7	5	0	1	7	5	0	43
5:35 PM	5	7	0	0	0	6	1	0	2	8	12	0	0	5	6	0	52
5:40 PM	4	2	0	0	0	5	2	0	0	7	8	0	0	5	1	0	34
5:45 PM	1	1	0	0	2	2	2	0	2	9	6	0	1	6	2	0	34
5:50 PM	0	3	2	0	0	3	1	0	2	4	5	0	0	6	3	0	29
5:55 PM	2	8	0	0	0	1	0	0	0	5	6	0	0	4	4	0	30
Peak Hour																	
All Vehicle	31	70	2	0	19	45	12	0	24	69	53	0	2	42	44	0	473
Heavy Truck	0	0	0		4	0	4		4	0	0		0	0	0		12
HV%	0%	0%	0%		21%	0%	33%		17%	0%	0%		0%	0%	0%		
Ped		0				0				4				16			20
Bike	0	0	0		0	1	0		0	1	0		0	0	0		2

N Main St
NE 4th St

idax

Date: 11/10/2022
Count Period: 2:00 PM to 6:00 PM
Peak Hour: 3:30 PM to 4:30 PM





	HV %	PHF
EB	0.8%	0.78
WB	2.2%	0.78
NB	0.5%	0.95
SB	1.3%	0.90
TOTAL	1.0%	0.93

Four-Hour Count Summaries

Interval Start	NE 4th St				NE 4th St				N Main St				N Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:30 PM	**0**	**3**	**12**	**20**	**0**	**0**	**5**	**11**	**0**	**4**	**87**	**3**	**0**	**14**	**64**	**13**	**236**	**0**
3:45 PM	**0**	**5**	**6**	**19**	**0**	**3**	**3**	**23**	**0**	**6**	**88**	**3**	**0**	**15**	**69**	**22**	**262**	**0**
4:00 PM	**0**	**5**	**7**	**28**	**0**	**1**	**4**	**25**	**0**	**5**	**89**	**7**	**0**	**20**	**57**	**19**	**267**	**0**
4:15 PM	**0**	**2**	**3**	**15**	**1**	**0**	**1**	**16**	**0**	**7**	**92**	**6**	**0**	**17**	**54**	**18**	**232**	**997**
Peak Hour All	**0**	**15**	**28**	**82**	**1**	**4**	**13**	**75**	**0**	**22**	**356**	**19**	**0**	**66**	**244**	**72**	**997**	**0**
Peak Hour HV	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**2**	**3**	**0**	**10**	**0**
Peak Hour HV%	**-**	**7%**	**0%**	**0%**	**0%**	**0%**	**0%**	**3%**	**-**	**0%**	**1%**	**0%**	**-**	**3%**	**1%**	**0%**	**1%**	**0**

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**3**	***4***
3:45 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**5**	**15**	**17**	**7**	***44***
4:00 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**7**	**19**	**8**	**13**	***47***
4:15 PM	**0**	**1**	**1**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**8**	**17**	**9**	**24**	***58***
Peak Hour	**1**	**2**	**2**	**5**	***10***	**0**	**0**	**0**	**0**	***0***	**20**	**52**	**34**	**47**	***153***

Four-Hour Count Summaries

Interval Start	NE 4th St				NE 4th St				N Main St				N Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	11	5	18	0	1	2	10	0	3	49	2	0	19	49	12	181	0
2:15 PM	0	6	4	9	0	2	1	9	0	4	56	0	0	12	56	5	164	0
2:30 PM	0	6	1	12	0	1	2	9	0	2	105	3	0	10	48	15	214	0
2:45 PM	0	3	4	13	0	0	2	8	0	4	69	3	1	10	66	7	190	749
3:00 PM	0	4	9	12	0	1	2	8	0	5	82	5	0	16	59	9	212	780
3:15 PM	0	6	3	12	0	1	1	6	0	4	68	6	0	12	63	10	192	808
3:30 PM	**0**	**3**	**12**	**20**	**0**	**0**	**5**	**11**	**0**	**4**	**87**	**3**	**0**	**14**	**64**	**13**	**236**	830
3:45 PM	**0**	**5**	**6**	**19**	**0**	**3**	**3**	**23**	**0**	**6**	**88**	**3**	**0**	**15**	**69**	**22**	**262**	902
4:00 PM	**0**	**5**	**7**	**28**	**0**	**1**	**4**	**25**	**0**	**5**	**89**	**7**	**0**	**20**	**57**	**19**	**267**	957
4:15 PM	**0**	**2**	**3**	**15**	**1**	**0**	**1**	**16**	**0**	**7**	**92**	**6**	**0**	**17**	**54**	**18**	**232**	997
4:30 PM	0	3	5	21	0	2	9	19	0	7	68	3	0	7	57	10	211	972
4:45 PM	0	3	6	20	0	0	3	26	0	4	86	4	0	16	60	23	251	961
5:00 PM	0	4	11	16	0	2	6	23	0	2	81	2	0	18	53	11	229	923
5:15 PM	0	4	3	12	0	1	1	18	0	1	70	9	0	16	57	15	207	898
5:30 PM	0	9	7	13	0	0	4	9	0	3	79	4	0	10	52	13	203	890
5:45 PM	0	5	6	14	0	1	1	12	0	5	80	4	0	5	66	14	213	852
Count Total	0	79	92	254	1	16	47	232	0	66	1,249	64	1	217	930	216	3,464	0
Peak Hour All	**0**	**15**	**28**	**82**	**1**	**4**	**13**	**75**	**0**	**22**	**356**	**19**	**0**	**66**	**244**	**72**	**997**	**0**
Peak Hour HV	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**2**	**3**	**0**	**10**	**0**
Peak Hour HV%	**-**	**7%**	**0%**	**0%**	**0%**	**0%**	**0%**	**3%**	**-**	**0%**	**1%**	**0%**	**-**	**3%**	**1%**	**0%**	**1%**	**0**

Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
2:00 PM	0	1	1	3	*5*	0	0	0	1	*1*	0	0	1	0	*1*
2:15 PM	0	0	3	0	*3*	0	0	0	0	*0*	3	2	0	0	*5*
2:30 PM	0	0	3	3	*6*	0	0	0	0	*0*	2	3	0	5	*10*
2:45 PM	0	1	2	3	*6*	0	0	0	0	*0*	3	2	5	1	*11*
3:00 PM	0	0	4	4	*8*	0	0	0	0	*0*	5	2	1	3	*11*
3:15 PM	1	0	0	3	*4*	0	0	0	0	*0*	4	3	4	7	*18*
3:30 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**3**	***4***
3:45 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**5**	**15**	**17**	**7**	***44***
4:00 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**7**	**19**	**8**	**13**	***47***
4:15 PM	**0**	**1**	**1**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**8**	**17**	**9**	**24**	***58***
4:30 PM	1	0	1	0	*2*	0	0	0	0	*0*	14	17	13	32	*76*
4:45 PM	1	1	0	2	*4*	0	0	0	0	*0*	29	30	15	28	*102*
5:00 PM	0	0	2	0	*2*	0	0	0	0	*0*	21	26	11	30	*88*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	40	21	7	29	*97*
5:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	47	9	4	44	*104*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	33	38	25	30	*126*
Count Total	5	5	18	23	*51*	0	0	0	1	*1*	221	205	120	256	*802*
Peak Hour	**1**	**2**	**2**	**5**	***10***	**0**	**0**	**0**	**0**	***0***	**20**	**52**	**34**	**47**	***153***

Four-Hour Count Summaries - Heavy Vehicles

Interval Start	NE 4th St Eastbound				NE 4th St Westbound				N Main St Northbound				N Main St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	1	2	0	5	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	2	1	0	6	0
2:45 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	0	3	0	6	20
3:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	8	23
3:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1	4	24
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	20
3:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	16
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	10
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**4**	**10**
4:30 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	10
4:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	0	4	12
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	12
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	3	2	0	0	0	1	4	0	0	18	0	0	6	16	1	51	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**2**	**3**	**0**	**10**	**0**

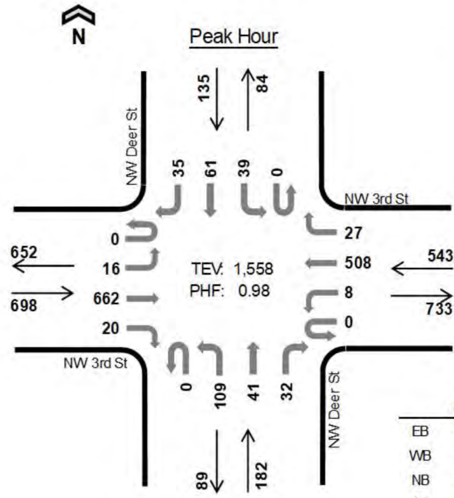
Four-Hour Count Summaries - Bikes

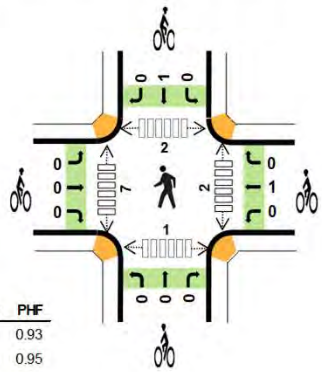
Interval Start	NE 4th St Eastbound			NE 4th St Westbound			N Main St Northbound			N Main St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	1	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NW Deer St
NW 3rd St

Date: 11/08/2022
Count Period: 2:00 PM to 6:00 PM
Peak Hour: 3:45 PM to 4:45 PM





	HV %:	PHF
EB	4.0%	0.93
WB	4.8%	0.95
NB	3.3%	0.91
SB	0.7%	0.84
TOTAL	3.9%	0.98

Four-Hour Count Summaries

Interval Start		NW 3rd St Eastbound UT	LT	TH	RT	NW 3rd St Westbound UT	LT	TH	RT	NW Deer St Northbound UT	LT	TH	RT	NW Deer St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
3:45 PM		0	5	151	4	0	2	131	10	0	32	11	7	0	10	18	8	389	0
4:00 PM		0	4	161	8	0	2	129	4	0	26	11	8	0	9	8	7	377	0
4:15 PM		0	2	170	6	0	1	134	4	0	27	9	7	0	11	15	9	395	0
4:30 PM		0	5	180	2	0	3	114	9	0	24	10	10	0	9	20	11	397	1,558
Peak Hour	All	0	16	662	20	0	8	508	27	0	109	41	32	0	39	61	35	1,558	0
	HV	0	0	28	0	0	0	26	0	0	6	0	0	0	0	1	0	61	0
	HV%	-	0%	4%	0%	0%	0%	5%	0%	0%	6%	0%	0%	0%	0%	2%	0%	4%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
3:45 PM	4	5	4	0	13	0	0	0	1	1	0	4	0	1	5
4:00 PM	6	9	1	0	16	0	1	0	0	1	1	1	0	0	2
4:15 PM	7	10	1	1	19	0	0	0	0	0	1	0	1	0	2
4:30 PM	11	2	0	0	13	0	0	0	0	0	0	2	1	0	3
Peak Hour	28	26	6	1	61	0	1	0	1	2	2	7	2	1	12

Four-Hour Count Summaries

Interval Start		NW 3rd St Eastbound UT	LT	TH	RT	NW 3rd St Westbound UT	LT	TH	RT	NW Deer St Northbound UT	LT	TH	RT	NW Deer St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
2:00 PM		0	7	122	3	0	2	105	7	0	16	7	10	0	6	11	11	307	0
2:15 PM		0	1	135	4	0	3	121	4	0	17	10	5	0	5	17	4	326	0
2:30 PM		0	4	140	7	0	1	119	3	0	18	7	6	0	6	12	9	332	0
2:45 PM		0	4	129	6	0	0	122	6	0	14	14	9	0	5	6	7	322	1,287
3:00 PM		0	3	106	3	0	5	121	3	0	12	7	6	0	6	13	7	292	1,272
3:15 PM		0	7	112	3	0	2	108	2	0	13	5	5	0	9	11	7	284	1,230
3:30 PM		0	5	152	10	0	5	116	5	0	19	15	8	0	4	18	7	364	1,262
3:45 PM		0	5	151	4	0	2	131	10	0	32	11	7	0	10	18	8	389	1,329
4:00 PM		0	4	161	8	0	2	129	4	0	26	11	8	0	9	8	7	377	1,414
4:15 PM		0	2	170	6	0	1	134	4	0	27	9	7	0	11	15	9	395	1,525
4:30 PM		0	5	180	2	0	3	114	9	0	24	10	10	0	9	20	11	397	1,558
4:45 PM		0	3	169	9	0	1	117	6	0	17	12	8	0	7	13	13	375	1,544
5:00 PM		0	4	158	2	0	1	132	3	0	29	7	12	0	9	9	11	377	1,544
5:15 PM		0	6	142	3	0	2	119	2	0	25	12	3	0	2	7	8	331	1,480
5:30 PM		0	5	154	5	0	2	99	5	0	15	8	3	0	5	10	5	316	1,399
5:45 PM		0	2	122	3	0	3	90	2	0	9	6	4	0	1	4	5	251	1,275
Count Total		0	67	2,303	78	0	35	1,877	75	0	313	151	111	0	104	192	129	5,435	0
Peak Hour	All	0	16	662	20	0	8	508	27	0	109	41	32	0	39	61	35	1,558	0
	HV	0	0	28	0	0	0	26	0	0	6	0	0	0	0	1	0	61	0
	HV%	-	0%	4%	0%	-	0%	5%	0%	-	6%	0%	0%	-	0%	2%	0%	4%	0

Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	6	9	1	1	*17*	0	0	0	0	*0*	0	1	5	1	*7*
2:15 PM	5	7	2	0	*14*	1	0	0	0	*1*	0	0	1	0	*1*
2:30 PM	6	8	1	0	*15*	0	0	0	0	*0*	0	0	3	0	*3*
2:45 PM	3	13	2	0	*18*	0	0	0	0	*0*	0	0	2	0	*2*
3:00 PM	2	7	0	1	*10*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	7	5	0	2	*14*	0	0	0	0	*0*	0	1	1	0	*2*
3:30 PM	5	10	0	0	*15*	0	0	0	0	*0*	0	4	0	1	*5*
3:45 PM	**4**	**5**	**4**	**0**	***13***	**0**	**0**	**0**	**1**	***1***	**0**	**4**	**0**	**1**	*5*
4:00 PM	**6**	**9**	**1**	**0**	***16***	**0**	**1**	**0**	**0**	***1***	**1**	**1**	**0**	**0**	*2*
4:15 PM	**7**	**10**	**1**	**1**	***19***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	*2*
4:30 PM	**11**	**2**	**0**	**0**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**1**	**0**	*3*
4:45 PM	6	2	3	3	*14*	0	0	0	0	*0*	0	2	0	1	*3*
5:00 PM	2	7	0	0	*9*	0	0	0	0	*0*	1	2	0	0	*3*
5:15 PM	1	2	0	0	*3*	0	0	0	0	*0*	1	0	0	0	*1*
5:30 PM	3	4	0	1	*8*	0	0	0	0	*0*	2	0	0	0	*2*
5:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	2	0	0	*2*
Count Total	74	100	15	9	*198*	1	1	0	2	*4*	6	19	14	4	*43*
Peak Hour	**28**	**26**	**6**	**1**	***61***	**0**	**1**	**0**	**1**	***2***	**2**	**7**	**2**	**1**	***12***

Four-Hour Count Summaries - Heavy Vehicles

Interval Start	NW 3rd St Eastbound				NW 3rd St Westbound				NW Deer St Northbound				NW Deer St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	6	0	0	0	9	0	0	0	0	1	0	0	0	1	17	0
2:15 PM	0	0	4	1	0	0	7	0	0	2	0	0	0	0	0	0	14	0
2:30 PM	0	0	6	0	0	0	8	0	0	1	0	0	0	0	0	0	15	0
2:45 PM	0	0	3	0	0	0	13	0	0	0	1	1	0	0	0	0	18	64
3:00 PM	0	0	1	1	0	0	7	0	0	0	0	0	0	0	0	1	10	57
3:15 PM	0	0	7	0	0	0	5	0	0	0	0	0	0	1	1	0	14	57
3:30 PM	0	0	5	0	0	0	10	0	0	0	0	0	0	0	0	0	15	57
3:45 PM	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	52
4:00 PM	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	58
4:15 PM	**0**	**0**	**7**	**0**	**0**	**0**	**10**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**19**	63
4:30 PM	**0**	**0**	**11**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**61**
4:45 PM	0	0	6	0	0	0	2	0	0	1	2	0	0	1	0	2	14	62
5:00 PM	0	0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	9	55
5:15 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	39
5:30 PM	0	0	3	0	0	0	4	0	0	0	0	0	0	1	0	0	8	34
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Count Total	0	0	72	2	0	0	100	0	0	10	3	2	0	3	2	4	198	0
Peak Hour	**0**	**0**	**28**	**0**	**0**	**0**	**26**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**1**	**0**	**61**	**0**

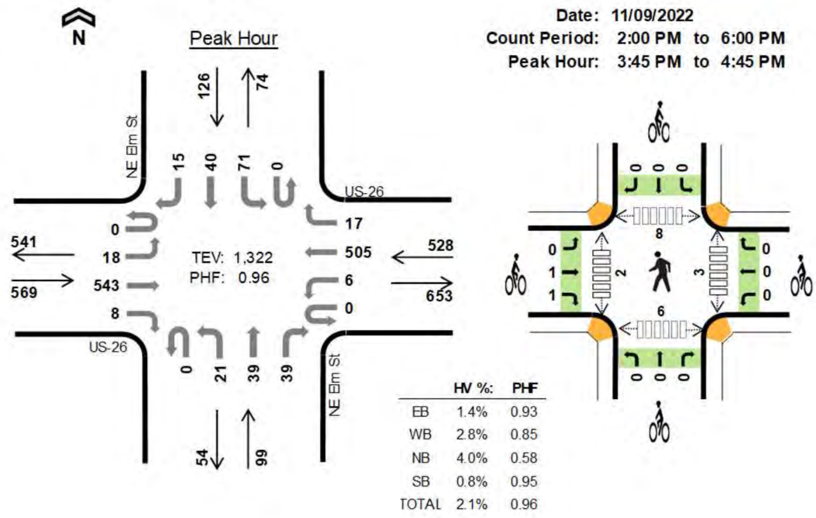
Four-Hour Count Summaries - Bikes

Interval Start	NW 3rd St Eastbound			NW 3rd St Westbound			NW Deer St Northbound			NW Deer St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	1
4:00 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Count Total	0	1	0	0	1	0	0	0	0	0	2	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NE Elm St
US-26

Date: 11/09/2022
Count Period: 2:00 PM to 6:00 PM
Peak Hour: 3:45 PM to 4:45 PM



	HV %:	PHF
EB	1.4%	0.93
WB	2.8%	0.85
NB	4.0%	0.58
SB	0.8%	0.95
TOTAL	2.1%	0.96

Four-Hour Count Summaries

Interval Start		US-26 Eastbound				US-26 Westbound				NE Elm St Northbound				NE Elm St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:45 PM		0	5	133	4	0	2	115	8	0	8	19	16	0	17	14	2	343	0
4:00 PM		0	3	149	1	0	0	118	2	0	4	5	11	0	19	9	3	324	0
4:15 PM		0	5	128	3	0	2	121	4	0	6	7	7	0	21	8	2	314	0
4:30 PM		0	5	133	0	0	2	151	3	0	3	8	5	0	14	9	8	341	1,322
Peak Hour	All	0	18	543	8	0	6	505	17	0	21	39	39	0	71	40	15	1,322	0
	HV	0	1	7	0	0	1	14	0	0	1	3	0	0	0	1	0	28	0
	HV%	-	6%	1%	0%	-	17%	3%	0%	-	5%	8%	0%	-	0%	3%	0%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:45 PM	1	4	3	0	*8*	0	0	0	0	*0*	0	1	0	4	*5*
4:00 PM	5	5	1	1	*12*	1	0	0	0	*1*	0	0	3	0	*3*
4:15 PM	1	1	0	0	*2*	1	0	0	0	*1*	0	1	2	0	*3*
4:30 PM	1	5	0	0	*6*	0	0	0	0	*0*	3	0	3	2	*8*
Peak Hour	8	15	4	1	*28*	2	0	0	0	*2*	3	2	8	6	*19*

Four-Hour Count Summaries

Interval Start		US-26 Eastbound				US-26 Westbound				NE Elm St Northbound				NE Elm St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM		0	0	121	3	0	1	97	7	0	4	6	8	0	20	7	6	280	0
2:15 PM		0	2	108	5	0	4	107	6	0	9	9	10	0	16	8	6	290	0
2:30 PM		0	0	112	2	0	0	116	2	0	6	7	10	0	9	11	6	281	0
2:45 PM		0	4	92	2	0	4	107	6	0	3	5	9	0	14	7	3	256	1,107
3:00 PM		0	4	101	2	0	2	99	7	0	5	10	9	0	24	6	8	277	1,104
3:15 PM		0	5	122	3	0	1	117	1	0	5	12	9	0	27	8	6	316	1,130
3:30 PM		0	2	109	2	0	2	129	7	0	8	14	9	0	21	11	2	316	1,165
3:45 PM		0	5	133	4	0	2	115	8	0	8	19	16	0	17	14	2	343	1,252
4:00 PM		0	3	149	1	0	0	118	2	0	4	5	11	0	19	9	3	324	1,299
4:15 PM		0	5	128	3	0	2	121	4	0	6	7	7	0	21	8	2	314	1,297
4:30 PM		0	5	133	0	0	2	151	3	0	3	8	5	0	14	9	8	341	1,322
4:45 PM		0	4	139	1	0	1	108	7	0	1	9	8	0	20	8	5	311	1,290
5:00 PM		0	3	130	2	0	2	112	9	0	7	7	9	0	28	4	6	319	1,285
5:15 PM		0	3	135	3	0	2	128	3	0	2	8	10	0	19	8	6	327	1,298
5:30 PM		0	4	120	2	0	2	95	4	0	1	7	4	0	15	3	4	261	1,218
5:45 PM		0	4	78	2	0	4	98	4	0	2	3	4	0	14	9	3	225	1,132
Count Total		0	53	1,910	37	0	31	1,818	80	0	74	136	138	0	298	130	76	4,781	0
Peak Hour	All	0	18	543	8	0	6	505	17	0	21	39	39	0	71	40	15	1,322	0
	HV	0	1	7	0	0	1	14	0	0	1	3	0	0	0	1	0	28	0
	HV%	-	6%	1%	0%	-	17%	3%	0%	-	5%	8%	0%	-	0%	3%	0%	2%	0

Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	4	3	1	1	9	0	0	0	0	0	1	2	1	0	4
2:15 PM	3	6	0	1	10	0	0	0	0	0	0	1	2	1	4
2:30 PM	1	10	0	0	11	0	0	0	0	0	0	0	1	0	1
2:45 PM	4	5	0	1	10	0	0	0	0	0	0	3	1	1	5
3:00 PM	0	5	3	1	9	0	0	0	0	0	0	0	1	1	2
3:15 PM	3	3	0	1	7	0	0	0	0	0	1	3	3	0	7
3:30 PM	4	6	1	0	11	0	0	0	0	0	0	4	1	1	6
3:45 PM	**1**	**4**	**3**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	5
4:00 PM	**5**	**5**	**1**	**1**	**12**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	3
4:15 PM	**1**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**2**	**0**	3
4:30 PM	**1**	**5**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**2**	8
4:45 PM	0	4	1	0	5	0	0	0	0	0	0	0	3	0	3
5:00 PM	1	4	0	0	5	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	2	0	1	3	0	0	0	0	0	0	1	0	0	1
5:30 PM	3	1	0	0	4	0	0	0	0	0	0	0	3	0	3
5:45 PM	0	2	0	0	2	0	0	0	0	0	0	3	1	0	4
Count Total	31	66	10	7	114	2	0	0	0	2	5	19	25	11	60
Peak Hour	**8**	**15**	**4**	**1**	**28**	**2**	**0**	**0**	**0**	**2**	**3**	**2**	**8**	**6**	**19**

Four-Hour Count Summaries - Heavy Vehicles

Interval Start	US-26 Eastbound				US-26 Westbound				NE Elm St Northbound				NE Elm St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	4	0	0	0	3	0	0	0	0	1	0	1	0	0	9	0
2:15 PM	0	0	3	0	0	0	4	2	0	0	0	0	0	1	0	0	10	0
2:30 PM	0	0	1	0	0	0	10	0	0	0	0	0	0	0	0	0	11	0
2:45 PM	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	1	10	40
3:00 PM	0	0	0	0	0	0	5	0	0	1	2	0	0	0	0	1	9	40
3:15 PM	0	0	3	0	0	1	2	0	0	0	0	0	0	1	0	0	7	37
3:30 PM	0	0	4	0	0	0	6	0	0	0	0	1	0	0	0	0	11	37
3:45 PM	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**8**	35
4:00 PM	**0**	**0**	**5**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**12**	38
4:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	33
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**28**
4:45 PM	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	5	25
5:00 PM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	18
5:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	3	19
5:30 PM	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	4	17
5:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	14
Count Total	0	3	28	0	0	2	62	2	0	2	5	3	0	4	1	2	114	0
Peak Hour	**0**	**1**	**7**	**0**	**0**	**1**	**14**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**1**	**0**	**28**	**0**

Four-Hour Count Summaries - Bikes

Interval Start	US-26 Eastbound			US-26 Westbound			NE Elm St Northbound			NE Elm St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
4:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	1	1	0	0	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

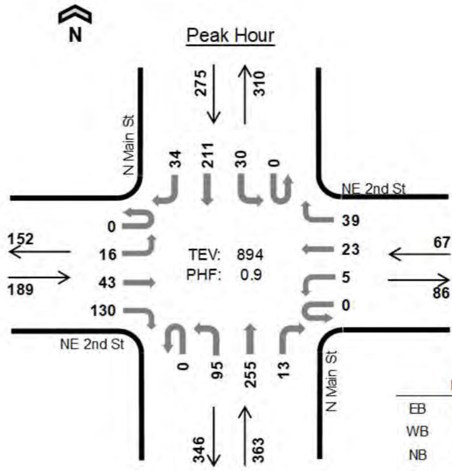
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

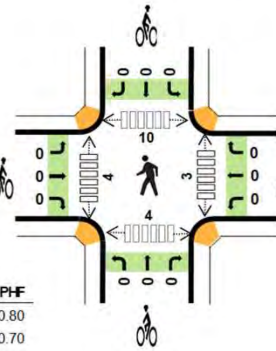
N Main St
NE 2nd St

idax

Date: 11/09/2022
Count Period: 2:00 PM to 6:00 PM
Peak Hour: 3:45 PM to 4:45 PM

Peak Hour





	HV %:	PHF
EB	0.5%	0.80
WB	1.5%	0.70
NB	1.4%	0.69
SB	1.1%	0.94
TOTAL	1.1%	0.90

Four-Hour Count Summaries

Interval Start		NE 2nd St Eastbound UT	LT	TH	RT	NE 2nd St Westbound UT	LT	TH	RT	N Main St Northbound UT	LT	TH	RT	N Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
3:45 PM		0	1	7	24	0	1	6	5	0	30	97	5	0	8	57	6	247	0
4:00 PM		0	6	9	35	0	3	4	17	0	24	59	1	0	7	51	7	223	0
4:15 PM		0	5	12	31	0	0	3	5	0	17	50	3	0	9	54	10	199	0
4:30 PM		0	4	15	40	0	1	10	12	0	24	49	4	0	6	49	11	225	894
Peak Hour	All	0	16	43	130	0	5	23	39	0	95	255	13	0	30	211	34	894	0
	HV	0	0	0	1	0	0	1	0	0	1	4	0	0	0	3	0	10	0
	HV%	-	0%	0%	1%	-	0%	4%	0%	-	1%	2%	0%	-	0%	1%	0%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
3:45 PM	0	1	2	2	*5*	0	0	0	0	*0*	0	0	2	1	*3*
4:00 PM	0	0	2	0	*2*	0	0	0	0	*0*	3	2	2	3	*10*
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	4	0	*5*
4:30 PM	1	0	1	1	*3*	0	0	0	0	*0*	0	1	2	0	*3*
Peak Hour	1	1	5	3	*10*	0	0	0	0	*0*	3	4	10	4	*21*

Four-Hour Count Summaries

Interval Start		NE 2nd St Eastbound UT	LT	TH	RT	NE 2nd St Westbound UT	LT	TH	RT	N Main St Northbound UT	LT	TH	RT	N Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
2:00 PM		0	2	4	20	0	0	2	8	0	16	49	5	0	6	34	11	157	0
2:15 PM		0	3	8	16	0	0	1	3	0	24	46	1	0	8	31	9	150	0
2:30 PM		0	2	11	21	0	1	3	9	0	21	57	3	0	7	35	5	175	0
2:45 PM		0	3	8	17	1	0	5	9	0	18	58	2	0	7	50	6	184	666
3:00 PM		0	4	15	33	0	1	8	11	0	11	43	2	0	10	62	7	207	716
3:15 PM		0	1	7	22	0	0	6	5	0	14	49	2	0	5	56	7	174	740
3:30 PM		0	2	7	33	0	1	5	7	0	19	63	3	0	10	59	7	216	781
3:45 PM		**0**	**1**	**7**	**24**	**0**	**1**	**6**	**5**	**0**	**30**	**97**	**5**	**0**	**8**	**57**	**6**	**247**	844
4:00 PM		**0**	**6**	**9**	**35**	**0**	**3**	**4**	**17**	**0**	**24**	**59**	**1**	**0**	**7**	**51**	**7**	**223**	860
4:15 PM		**0**	**5**	**12**	**31**	**0**	**0**	**3**	**5**	**0**	**17**	**50**	**3**	**0**	**9**	**54**	**10**	**199**	885
4:30 PM		**0**	**4**	**15**	**40**	**0**	**1**	**10**	**12**	**0**	**24**	**49**	**4**	**0**	**6**	**49**	**11**	**225**	**894**
4:45 PM		0	8	12	51	0	2	4	6	0	20	56	2	0	6	47	8	222	869
5:00 PM		0	5	8	46	0	0	5	16	0	28	53	0	0	1	64	13	239	885
5:15 PM		0	6	5	39	0	2	5	6	0	13	45	3	0	2	66	7	199	885
5:30 PM		0	8	9	24	1	1	4	6	0	12	53	0	0	3	61	4	186	846
5:45 PM		0	2	4	28	0	0	3	3	0	12	49	0	0	4	64	8	177	801
Count Total		0	62	141	480	2	13	74	128	0	303	876	36	0	99	840	126	3,180	0
Peak Hour	All	0	16	43	130	0	5	23	39	0	95	255	13	0	30	211	34	894	0
	HV	0	0	0	1	0	0	1	0	0	1	4	0	0	0	3	0	10	0
	HV%	-	0%	0%	1%	-	0%	4%	0%	-	1%	2%	0%	-	0%	1%	0%	1%	0

Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	0	0	4	1	*5*	0	0	0	0	*0*	0	3	2	3	*8*
2:15 PM	2	0	2	1	*5*	0	0	0	0	*0*	0	3	0	2	*5*
2:30 PM	3	1	2	0	*6*	0	0	0	0	*0*	2	0	6	0	*8*
2:45 PM	0	0	3	2	*5*	0	0	0	0	*0*	0	2	1	1	*4*
3:00 PM	2	0	1	1	*4*	1	1	0	0	*2*	2	2	2	2	*8*
3:15 PM	2	0	4	1	*7*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	1	0	2	3	*6*	0	0	0	0	*0*	4	0	1	1	*6*
3:45 PM	**0**	**1**	**2**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**1**	*3*
4:00 PM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**3**	**2**	**2**	**3**	*10*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**4**	**0**	*5*
4:30 PM	**1**	**0**	**1**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**0**	*3*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	3	1	*5*
5:00 PM	1	0	0	1	*2*	0	0	0	1	*1*	0	1	7	0	*8*
5:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	1	1	1	*3*
5:30 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	1	0	*1*
5:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	1	0	2	*3*
Count Total	13	2	24	13	*52*	2	1	0	1	*4*	12	17	34	17	*80*
Peak Hour	**1**	**1**	**5**	**3**	***10***	**0**	**0**	**0**	**0**	***0***	**3**	**4**	**10**	**4**	*21*

Four-Hour Count Summaries - Heavy Vehicles

Interval Start	NE 2nd St				NE 2nd St				N Main St				N Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	5	0
2:15 PM	0	0	0	2	0	0	0	0	0	0	2	0	0	0	1	0	5	0
2:30 PM	0	0	0	3	0	0	0	1	0	0	2	0	0	0	0	0	6	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	5	21
3:00 PM	0	0	0	2	0	0	0	0	0	0	1	0	0	0	1	0	4	20
3:15 PM	0	0	0	2	0	0	0	0	0	1	3	0	0	0	1	0	7	22
3:30 PM	0	0	0	1	0	0	0	0	0	1	1	0	0	1	2	0	6	22
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**0**	**5**	22
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	20
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	13
4:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	**10**
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	4
Count Total	0	0	0	13	0	0	1	1	0	3	21	0	0	1	11	1	52	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**3**	**0**	**10**	**0**

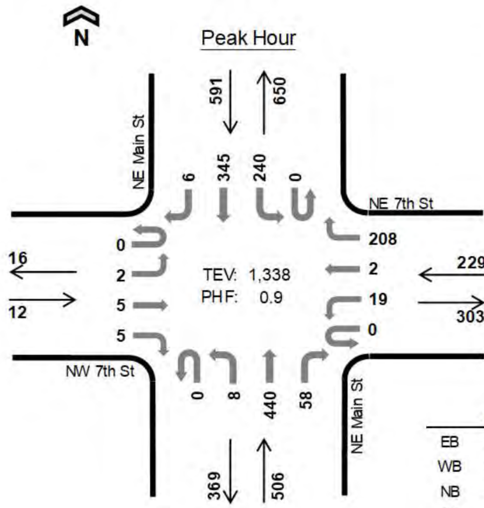
Four-Hour Count Summaries - Bikes

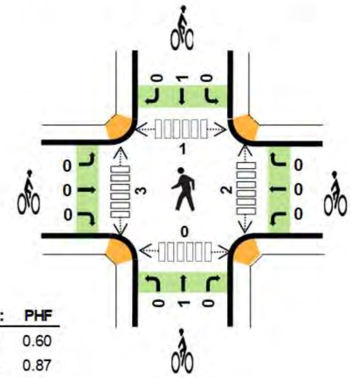
Interval Start	NE 2nd St			NE 2nd St			N Main St			N Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	1	1	0	1	0	0	0	0	0	1	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NE Main St
NW 7th St

Date: 11/09/2022
Count Period: 12:00 PM to 6:00 PM
Peak Hour: 3:45 PM to 4:45 PM





	HV %:	PHF
EB	0.0%	0.60
WB	1.7%	0.87
NB	4.3%	0.84
SB	1.5%	0.84
TOTAL	2.6%	0.90

Six-Hour Count Summaries

Interval Start		NW 7th St				NE 7th St				NE Main St				NE Main St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:45 PM		0	0	0	0	0	4	0	48	0	1	131	19	0	63	79	0	345	0
4:00 PM		0	1	2	2	0	2	0	64	0	3	111	11	0	64	110	2	372	0
4:15 PM		0	0	2	1	0	6	1	53	0	1	89	16	0	48	80	1	298	0
4:30 PM		0	1	1	2	0	7	1	43	0	3	109	12	0	65	76	3	323	1,338
Peak Hour	All	0	2	5	5	0	19	2	208	0	8	440	58	0	240	345	6	1,338	0
	HV	0	0	0	0	0	0	0	4	0	1	21	0	0	5	4	0	35	0
	HV%	-	0%	0%	0%	-	0%	0%	2%	-	13%	5%	0%	-	2%	1%	0%	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:45 PM	0	0	6	3	*9*	0	0	0	0	*0*	1	0	0	0	*1*
4:00 PM	0	1	6	3	*10*	0	0	0	1	*1*	0	1	0	0	*1*
4:15 PM	0	2	3	2	*7*	0	0	1	0	*1*	1	1	0	0	*2*
4:30 PM	0	1	7	1	*9*	0	0	0	0	*0*	0	1	1	0	*2*
Peak Hour	0	4	22	9	*35*	0	0	1	1	*2*	2	3	1	0	*6*

Six-Hour Count Summaries

Interval Start	NW 7th St				NE 7th St				NE Main St				NE Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	1	1	1	0	8	1	45	0	2	97	7	0	44	67	1	275	0
12:15 PM	0	0	0	1	0	7	0	49	0	2	69	11	0	59	75	0	273	0
12:30 PM	0	2	1	4	0	4	0	40	0	3	71	9	0	45	84	3	266	0
12:45 PM	0	0	1	0	0	8	1	43	0	2	79	8	0	53	75	0	270	1,084
1:00 PM	0	2	2	1	0	5	1	46	0	3	64	12	0	43	69	0	248	1,057
1:15 PM	0	1	4	4	0	6	0	46	0	1	70	5	0	39	59	0	235	1,019
1:30 PM	0	1	1	1	0	2	1	44	0	3	82	8	0	64	67	0	274	1,027
1:45 PM	0	0	1	2	0	10	0	45	0	3	50	9	0	66	69	1	256	1,013
2:00 PM	0	0	1	2	0	14	1	43	0	1	72	10	0	61	71	0	276	1,041
2:15 PM	0	1	1	1	0	4	0	48	0	1	69	14	0	55	53	0	247	1,053
2:30 PM	0	1	0	4	0	7	0	60	0	3	85	5	0	56	67	0	288	1,067
2:45 PM	0	1	1	2	0	2	0	59	0	4	110	9	0	49	83	1	321	1,132
3:00 PM	0	1	0	4	0	6	0	47	0	2	68	12	0	62	89	0	291	1,147
3:15 PM	0	0	1	2	0	7	0	64	0	3	63	6	0	71	80	1	298	1,198
3:30 PM	0	1	0	3	0	1	0	53	0	3	81	15	0	55	108	0	320	1,230
3:45 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**48**	**0**	**1**	**131**	**19**	**0**	**63**	**79**	**0**	**345**	1,254
4:00 PM	**0**	**1**	**2**	**2**	**0**	**2**	**0**	**64**	**0**	**3**	**111**	**11**	**0**	**64**	**110**	**2**	**372**	1,335
4:15 PM	**0**	**0**	**2**	**1**	**0**	**6**	**1**	**53**	**0**	**1**	**89**	**16**	**0**	**48**	**80**	**1**	**298**	1,335
4:30 PM	**0**	**1**	**1**	**2**	**0**	**7**	**1**	**43**	**0**	**3**	**109**	**12**	**0**	**65**	**76**	**3**	**323**	**1,338**
4:45 PM	0	0	1	0	0	12	1	50	0	2	103	13	0	44	77	0	303	1,296
5:00 PM	0	0	0	0	0	9	0	64	1	2	102	11	0	60	71	1	321	1,245
5:15 PM	0	0	1	0	0	5	0	58	0	0	88	17	0	48	93	3	313	1,260
5:30 PM	0	0	2	1	0	4	0	42	0	4	88	18	1	40	70	0	270	1,207
5:45 PM	0	0	1	1	0	2	0	50	0	1	82	14	0	33	83	0	267	1,171
Count Total	0	14	25	39	0	142	8	1,204	1	53	2,033	271	1	1,287	1,855	17	6,950	0
Peak Hour All	**0**	**2**	**5**	**5**	**0**	**19**	**2**	**208**	**0**	**8**	**440**	**58**	**0**	**240**	**345**	**6**	**1,338**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**1**	**21**	**0**	**0**	**5**	**4**	**0**	**35**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**2%**	**-**	**13%**	**5%**	**0%**	**-**	**2%**	**1%**	**0%**	**3%**	**0**

Note: Six-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
12:00 PM	1	0	5	4	*10*	0	0	0	1	*1*	0	1	1	0	*2*
12:15 PM	0	1	2	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
12:30 PM	1	0	1	4	*6*	0	0	0	0	*0*	0	1	0	0	*1*
12:45 PM	0	3	6	6	*15*	1	0	0	0	*1*	0	0	0	0	*0*
1:00 PM	0	3	1	3	*7*	0	0	0	0	*0*	0	0	0	0	*0*
1:15 PM	1	3	5	6	*15*	0	0	0	0	*0*	0	2	0	0	*2*
1:30 PM	0	1	8	9	*18*	0	0	0	0	*0*	0	0	0	0	*0*
1:45 PM	0	0	5	13	*18*	0	0	0	0	*0*	0	0	0	0	*0*
2:00 PM	1	2	2	2	*7*	0	0	0	0	*0*	2	2	1	0	*5*
2:15 PM	0	1	3	5	*9*	0	0	0	0	*0*	0	1	0	0	*1*
2:30 PM	0	2	7	6	*15*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	0	2	6	6	*14*	0	0	1	0	*1*	0	0	1	0	*1*
3:00 PM	0	1	6	3	*10*	0	0	0	0	*0*	3	0	0	0	*3*
3:15 PM	0	3	3	7	*13*	0	0	1	0	*1*	0	0	0	0	*0*
3:30 PM	0	0	5	2	*7*	0	0	0	0	*0*	1	0	1	0	*2*
3:45 PM	**0**	**0**	**6**	**3**	***9***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
4:00 PM	**0**	**1**	**6**	**3**	***10***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**0**	**0**	*1*
4:15 PM	**0**	**2**	**3**	**2**	***7***	**0**	**0**	**1**	**0**	***1***	**1**	**1**	**0**	**0**	*2*
4:30 PM	**0**	**1**	**7**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	***2***
4:45 PM	0	0	1	0	*1*	0	0	1	0	*1*	0	0	0	0	*0*
5:00 PM	0	2	0	5	*7*	0	0	0	1	*1*	0	0	0	0	*0*
5:15 PM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	1	2	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	2	3	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	4	31	93	100	*228*	1	0	4	3	*8*	8	10	5	0	*23*
Peak Hour	**0**	**4**	**22**	**9**	***35***	**0**	**0**	**1**	**1**	***2***	**2**	**3**	**1**	**0**	***6***

Six-Hour Count Summaries - Heavy Vehicles

Interval Start	NW 7th St				NE 7th St				NE Main St				NE Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	1	0	0	0	0	0	0	0	5	0	0	0	3	1	10	0
12:15 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	1	3	0	7	0
12:30 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	1	3	0	6	0
12:45 PM	0	0	0	0	0	1	0	2	0	1	4	1	0	1	5	0	15	38
1:00 PM	0	0	0	0	0	1	0	2	0	0	1	0	0	0	3	0	7	35
1:15 PM	0	0	0	1	0	0	0	3	0	0	4	1	0	3	3	0	15	43
1:30 PM	0	0	0	0	0	0	0	1	0	0	7	1	0	7	2	0	18	55
1:45 PM	0	0	0	0	0	0	0	0	0	1	1	3	0	9	4	0	18	58
2:00 PM	0	0	1	0	0	1	0	1	0	0	2	0	0	1	1	0	7	58
2:15 PM	0	0	0	0	0	0	0	1	0	0	3	0	0	3	2	0	9	52
2:30 PM	0	0	0	0	0	0	0	2	0	0	6	1	0	3	3	0	15	49
2:45 PM	0	0	0	0	0	0	0	2	0	0	5	1	0	2	4	0	14	45
3:00 PM	0	0	0	0	0	0	0	1	0	0	5	1	0	2	1	0	10	48
3:15 PM	0	0	0	0	0	0	0	3	0	1	2	0	0	5	2	0	13	52
3:30 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	2	0	0	7	44
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**2**	**1**	**0**	**9**	39
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**5**	**0**	**0**	**2**	**1**	**0**	**10**	39
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**7**	33
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**7**	**0**	**0**	**1**	**0**	**0**	**9**	**35**
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	27
5:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	3	0	7	24
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	20
5:30 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	1	1	0	5	16
5:45 PM	0	0	0	0	0	0	0	2	0	0	3	0	0	1	0	0	6	21
Count Total	0	0	2	2	0	4	0	27	0	4	80	9	0	50	49	1	228	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**1**	**21**	**0**	**0**	**5**	**4**	**0**	**35**	**0**

Six-Hour Count Summaries - Bikes

Interval Start	NW 7th St			NE 7th St			NE Main St			NE Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	2
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	2
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	1	0	0	0	0	0	0	4	0	0	3	0	8	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Appendix B

Synchro and SIDRA Reports

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	285	80	190	55	35	15	140	670	50	5	670	90
Future Volume (veh/h)	285	80	190	55	35	15	140	670	50	5	670	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1856	1856	1515	1737	1870	1870	1900	1900	1856	1826
Adj Flow Rate, veh/h	297	83	198	57	36	16	146	698	52	5	698	94
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	2	3	3	26	11	2	2	0	0	3	5
Cap, veh/h	274	97	232	86	91	40	184	801	60	12	591	80
Arrive On Green	0.16	0.20	0.20	0.05	0.09	0.09	0.10	0.47	0.47	0.01	0.37	0.37
Sat Flow, veh/h	1767	490	1170	1767	994	442	1781	1719	128	1810	1601	216
Grp Volume(v), veh/h	297	0	281	57	0	52	146	0	750	5	0	792
Grp Sat Flow(s),veh/h/ln	1767	0	1660	1767	0	1435	1781	0	1847	1810	0	1817
Q Serve(g_s), s	10.5	0.0	11.1	2.1	0.0	2.3	5.4	0.0	24.7	0.2	0.0	25.0
Cycle Q Clear(g_c), s	10.5	0.0	11.1	2.1	0.0	2.3	5.4	0.0	24.7	0.2	0.0	25.0
Prop In Lane	1.00		0.70	1.00		0.31	1.00		0.07	1.00		0.12
Lane Grp Cap(c), veh/h	274	0	329	86	0	132	184	0	861	12	0	671
V/C Ratio(X)	1.08	0.00	0.85	0.66	0.00	0.40	0.79	0.00	0.87	0.42	0.00	1.18
Avail Cap(c_a), veh/h	274	0	380	274	0	329	263	0	861	267	0	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	26.2	31.7	0.0	29.0	29.6	0.0	16.3	33.5	0.0	21.4
Incr Delay (d2), s/veh	78.5	0.0	14.7	6.4	0.0	1.4	8.6	0.0	9.7	16.2	0.0	96.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	0.0	5.5	1.0	0.0	0.8	2.7	0.0	11.6	0.1	0.0	27.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	107.1	0.0	40.9	38.0	0.0	30.4	38.3	0.0	25.9	49.7	0.0	117.5
LnGrp LOS	F	A	D	D	A	C	D	A	C	D	A	F
Approach Vol, veh/h		578			109			896			797	
Approach Delay, s/veh		75.0			34.4			27.9			117.1	
Approach LOS		E			C			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	36.6	7.8	17.9	12.0	30.0	15.0	10.7
Change Period (Y+Rc), s	5.0	5.0	4.5	4.5	5.0	5.0	4.5	4.5
Max Green Setting (Gmax), s	10.0	25.0	10.5	15.5	10.0	25.0	10.5	15.5
Max Q Clear Time (g_c+I1), s	2.2	26.7	4.1	13.1	7.4	27.0	12.5	4.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	69.5
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	74.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	5	190	5	5	30	195	685	90	60	645	180
Future Vol, veh/h	35	5	190	5	5	30	195	685	90	60	645	180
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	0	1	0	0	0	1	2	0	0	2	0
Mvmt Flow	36	5	198	5	5	31	203	714	94	63	672	188

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2077	2106	766	2161	2153	761	860	0	0	808	0	0
Stage 1	892	892	-	1167	1167	-	-	-	-	-	-	-
Stage 2	1185	1214	-	994	986	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.5	6.21	7.1	6.5	6.2	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.15	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4	3.309	3.5	4	3.3	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	39	52	404	35	49	409	786	-	-	826	-	-
Stage 1	332	363	-	238	270	-	-	-	-	-	-	-
Stage 2	227	257	-	298	328	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 23	33	404	11	31	409	786	-	-	826	-	-
Mov Cap-2 Maneuver	~ 23	33	-	11	31	-	-	-	-	-	-	-
Stage 1	246	308	-	177	200	-	-	-	-	-	-	-
Stage 2	151	191	-	127	278	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 651.5	158.9	2.2	0.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	786	-	-	107	58	826	-	-
HCM Lane V/C Ratio	0.258	-	-	2.239	0.718	0.076	-	-
HCM Control Delay (s)	11.2	-	-	$ 651.5	158.9	9.7	0	-
HCM Lane LOS	B	-	-	F	F	A	A	-
HCM 95th %tile Q(veh)	1	-	-	20.9	3.1	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	15.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	30	125	10	25	125	40	510	30	90	360	105
Future Vol, veh/h	25	30	125	10	25	125	40	510	30	90	360	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	13	0	0	0	0	0	0	1	0	3	1	0
Mvmt Flow	27	33	137	11	27	137	44	560	33	99	396	115

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1399	1333	454	1402	1374	577	511	0	0	593	0	0
Stage 1	652	652	-	665	665	-	-	-	-	-	-	-
Stage 2	747	681	-	737	709	-	-	-	-	-	-	-
Critical Hdwy	7.23	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.13	-	-
Critical Hdwy Stg 1	6.23	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.23	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4	3.3	3.5	4	3.3	2.2	-	-	2.227	-	-
Pot Cap-1 Maneuver	112	155	610	119	147	520	1065	-	-	978	-	-
Stage 1	439	467	-	453	461	-	-	-	-	-	-	-
Stage 2	388	453	-	413	440	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	62	134	610	67	127	520	1065	-	-	978	-	-
Mov Cap-2 Maneuver	62	134	-	67	127	-	-	-	-	-	-	-
Stage 1	421	420	-	434	442	-	-	-	-	-	-	-
Stage 2	257	434	-	265	396	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	87.7	39.3	0.6	1.5
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1065	-	-	216	273	978	-	-
HCM Lane V/C Ratio	0.041	-	-	0.916	0.644	0.101	-	-
HCM Control Delay (s)	8.5	-	-	87.7	39.3	9.1	-	-
HCM Lane LOS	A	-	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	7.5	4.1	0.3	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	110	460	65	150	295
Future Vol, veh/h	65	110	460	65	150	295
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	-	-	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	4	7	2	5	9
Mvmt Flow	68	116	484	68	158	311

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1145	518	0	0	552	0
Stage 1	518	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Critical Hdwy	6.45	6.24	-	-	4.15	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.336	-	-	2.245	-
Pot Cap-1 Maneuver	218	554	-	-	1003	-
Stage 1	592	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	184	554	-	-	1003	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	444	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.6	0	3.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	313	554	1003	-
HCM Lane V/C Ratio	-	-	0.219	0.209	0.157	-
HCM Control Delay (s)	-	-	19.7	13.2	9.3	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0.8	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	975	25	35	750	65	90	45	35	70	60	100
Future Volume (veh/h)	115	975	25	35	750	65	90	45	35	70	60	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1737	1900	1604	1826	1900	1900	1900	1900	1900	1900	1248
Adj Flow Rate, veh/h	135	1147	29	41	882	76	106	53	41	82	71	118
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	11	0	20	5	0	0	0	0	0	0	44
Cap, veh/h	158	893	23	117	840	72	50	16	496	46	27	326
Arrive On Green	0.06	0.53	0.53	0.07	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1626	1687	43	1527	1657	143	0	51	1610	0	89	1058
Grp Volume(v), veh/h	135	0	1176	41	0	958	159	0	41	153	0	118
Grp Sat Flow(s),veh/h/ln	1626	0	1729	1527	0	1800	51	0	1610	89	0	1058
Q Serve(g_s), s	5.4	0.0	63.5	1.5	0.0	60.8	0.0	0.0	2.2	0.0	0.0	10.4
Cycle Q Clear(g_c), s	5.4	0.0	63.5	1.5	0.0	60.8	37.0	0.0	2.2	37.0	0.0	10.4
Prop In Lane	1.00		0.02	1.00		0.08	0.67		1.00	0.54		1.00
Lane Grp Cap(c), veh/h	158	0	916	117	0	912	66	0	496	73	0	326
V/C Ratio(X)	0.86	0.00	1.28	0.35	0.00	1.05	2.42	0.00	0.08	2.08	0.00	0.36
Avail Cap(c_a), veh/h	169	0	916	162	0	912	66	0	496	73	0	326
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.68	0.00	0.68	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.1	0.0	28.2	27.1	0.0	0.0	51.2	0.0	29.5	46.5	0.0	32.3
Incr Delay (d2), s/veh	29.5	0.0	136.4	0.5	0.0	38.8	680.5	0.0	0.1	530.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	59.6	0.6	0.0	9.8	14.5	0.0	0.9	13.1	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	0.0	164.6	27.6	0.0	38.8	731.7	0.0	29.5	576.6	0.0	32.8
LnGrp LOS	E	A	F	C	A	F	F	A	C	F	A	C
Approach Vol, veh/h		1311			999			200			271	
Approach Delay, s/veh		153.9			38.3			587.8			339.8	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	68.5		42.0	12.2	65.8		42.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	8.0	60.0		37.0	8.0	60.0		37.0
Max Q Clear Time (g_c+I1), s	3.5	65.5		39.0	7.4	62.8		39.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	161.7
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1005	30	10	770	40	165	60	50	60	95	55
Future Volume (veh/h)	25	1005	30	10	770	40	165	60	50	60	95	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1900	1900	1826	1900	1811	1900	1900	1900	1870	1900
Adj Flow Rate, veh/h	26	1026	31	10	786	41	168	61	51	61	97	56
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	4	0	0	5	0	6	0	0	0	2	0
Cap, veh/h	335	1035	31	436	1002	52	334	240	201	380	279	161
Arrive On Green	1.00	1.00	1.00	0.77	0.77	0.77	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	673	1777	54	542	1720	90	1195	956	800	1301	1112	642
Grp Volume(v), veh/h	26	0	1057	10	0	827	168	0	112	61	0	153
Grp Sat Flow(s),veh/h/ln	673	0	1831	542	0	1810	1195	0	1756	1301	0	1755
Q Serve(g_s), s	1.1	0.0	0.0	0.3	0.0	15.8	8.1	0.0	3.1	2.4	0.0	4.3
Cycle Q Clear(g_c), s	16.9	0.0	0.0	0.3	0.0	15.8	12.3	0.0	3.1	5.4	0.0	4.3
Prop In Lane	1.00		0.03	1.00		0.05	1.00		0.46	1.00		0.37
Lane Grp Cap(c), veh/h	335	0	1066	436	0	1054	334	0	441	380	0	440
V/C Ratio(X)	0.08	0.00	0.99	0.02	0.00	0.78	0.50	0.00	0.25	0.16	0.00	0.35
Avail Cap(c_a), veh/h	335	0	1066	436	0	1054	512	0	702	574	0	702
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.12	0.00	0.12	0.09	0.00	0.09	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.8	0.0	0.0	2.9	0.0	4.6	23.5	0.0	18.0	20.2	0.0	18.4
Incr Delay (d2), s/veh	0.1	0.0	7.7	0.0	0.0	0.6	0.9	0.0	0.2	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.3	0.0	0.0	2.7	2.2	0.0	1.2	0.7	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.9	0.0	7.7	2.9	0.0	5.2	24.4	0.0	18.2	20.3	0.0	18.8
LnGrp LOS	A	A	A	A	A	A	C	A	B	C	A	B
Approach Vol, veh/h		1083			837			280			214	
Approach Delay, s/veh		7.6			5.1			21.9			19.2	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.9		20.1		39.9		20.1				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		26.0		24.0		26.0		24.0				
Max Q Clear Time (g_c+I1), s		18.9		7.4		17.8		14.3				
Green Ext Time (p_c), s		5.3		0.8		4.8		0.7				

Intersection Summary			
HCM 6th Ctrl Delay			9.4
HCM 6th LOS			A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	670	65	60	645	60	160	295	35	135	200	115
Future Volume (veh/h)	245	670	65	60	645	60	160	295	35	135	200	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1900	1900	1826	1870	1885	1870	1900	1885	1900	1885
Adj Flow Rate, veh/h	250	684	66	61	658	61	163	301	36	138	204	117
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	2	0	0	5	2	1	2	0	1	0	1
Cap, veh/h	180	845	82	78	735	68	150	334	40	150	231	132
Arrive On Green	0.20	1.00	1.00	0.09	0.89	0.89	0.08	0.20	0.20	0.08	0.20	0.20
Sat Flow, veh/h	1795	1679	162	1810	1646	153	1795	1639	196	1795	1133	650
Grp Volume(v), veh/h	250	0	750	61	0	719	163	0	337	138	0	321
Grp Sat Flow(s),veh/h/ln	1795	0	1841	1810	0	1798	1795	0	1835	1795	0	1783
Q Serve(g_s), s	12.0	0.0	0.0	4.0	0.0	25.7	10.0	0.0	21.5	9.2	0.0	21.0
Cycle Q Clear(g_c), s	12.0	0.0	0.0	4.0	0.0	25.7	10.0	0.0	21.5	9.2	0.0	21.0
Prop In Lane	1.00		0.09	1.00		0.08	1.00		0.11	1.00		0.36
Lane Grp Cap(c), veh/h	180	0	926	78	0	803	150	0	374	150	0	363
V/C Ratio(X)	1.39	0.00	0.81	0.78	0.00	0.90	1.09	0.00	0.90	0.92	0.00	0.88
Avail Cap(c_a), veh/h	180	0	926	151	0	803	150	0	459	150	0	446
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.00	0.44	0.75	0.00	0.75	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.0	0.0	0.0	54.2	0.0	4.9	55.0	0.0	46.6	54.6	0.0	46.4
Incr Delay (d2), s/veh	191.1	0.0	3.5	4.6	0.0	11.6	99.5	0.0	17.6	50.2	0.0	15.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.3	0.0	0.9	1.9	0.0	5.0	8.7	0.0	11.7	6.3	0.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	239.1	0.0	3.5	58.9	0.0	16.5	154.5	0.0	64.2	104.9	0.0	61.9
LnGrp LOS	F	A	A	E	A	B	F	A	E	F	A	E
Approach Vol, veh/h		1000			780			500			459	
Approach Delay, s/veh		62.4			19.8			93.6			74.8	
Approach LOS		E			B			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	65.4	15.0	29.4	17.0	58.6	15.0	29.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	10.0	50.0	10.0	30.0	12.0	48.0	10.0	30.0
Max Q Clear Time (g_c+I1), s	6.0	2.0	12.0	23.0	14.0	27.7	11.2	23.5
Green Ext Time (p_c), s	0.0	10.2	0.0	1.0	0.0	7.5	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	58.1
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	825	10	10	770	25	30	60	60	110	60	25
Future Volume (veh/h)	25	825	10	10	770	25	30	60	60	110	60	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1885	1900	1648	1856	1900	1826	1781	1900	1900	1856	1900
Adj Flow Rate, veh/h	26	859	10	10	802	26	31	62	62	115	62	26
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	1	0	17	3	0	5	8	0	0	3	0
Cap, veh/h	342	1189	14	379	1143	37	313	158	158	284	240	101
Arrive On Green	0.85	0.85	0.85	0.64	0.64	0.64	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	641	1860	22	561	1787	58	1278	817	817	1287	1241	521
Grp Volume(v), veh/h	26	0	869	10	0	828	31	0	124	115	0	88
Grp Sat Flow(s),veh/h/ln	641	0	1881	561	0	1845	1278	0	1634	1287	0	1762
Q Serve(g_s), s	1.4	0.0	10.7	0.6	0.0	17.6	1.3	0.0	4.0	5.1	0.0	2.5
Cycle Q Clear(g_c), s	19.0	0.0	10.7	11.3	0.0	17.6	3.8	0.0	4.0	9.1	0.0	2.5
Prop In Lane	1.00		0.01	1.00		0.03	1.00		0.50	1.00		0.30
Lane Grp Cap(c), veh/h	342	0	1203	379	0	1180	313	0	317	284	0	341
V/C Ratio(X)	0.08	0.00	0.72	0.03	0.00	0.70	0.10	0.00	0.39	0.40	0.00	0.26
Avail Cap(c_a), veh/h	342	0	1203	379	0	1180	598	0	681	571	0	734
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.41	0.00	0.41	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	0.0	2.4	8.9	0.0	7.1	22.1	0.0	21.1	25.1	0.0	20.5
Incr Delay (d2), s/veh	0.2	0.0	1.6	0.1	0.0	3.5	0.1	0.0	0.6	0.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.9	0.1	0.0	6.2	0.4	0.0	1.5	1.6	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.2	0.0	4.0	9.0	0.0	10.6	22.2	0.0	21.7	25.8	0.0	20.8
LnGrp LOS	A	A	A	A	A	B	C	A	C	C	A	C
Approach Vol, veh/h		895			838			155			203	
Approach Delay, s/veh		4.1			10.5			21.8			23.6	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.4		16.6		43.4		16.6				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		25.0		25.0		25.0		25.0				
Max Q Clear Time (g_c+I1), s		21.0		11.1		19.6		6.0				
Green Ext Time (p_c), s		2.5		0.5		3.1		0.6				
Intersection Summary												
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			A									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	485	235	135	440	45	215	225	110	100	245	80
Future Volume (veh/h)	95	485	235	135	440	45	215	225	110	100	245	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1856	1856	1841	1841	1841	1826	1856	1870	1856	1811
Adj Flow Rate, veh/h	99	505	245	141	458	47	224	234	115	104	255	83
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	3	3	4	4	4	5	3	2	3	6
Cap, veh/h	125	438	212	169	648	66	252	326	160	129	283	92
Arrive On Green	0.07	0.37	0.37	0.10	0.39	0.39	0.14	0.28	0.28	0.07	0.21	0.21
Sat Flow, veh/h	1810	1189	577	1767	1642	168	1753	1156	568	1781	1341	436
Grp Volume(v), veh/h	99	0	750	141	0	505	224	0	349	104	0	338
Grp Sat Flow(s),veh/h/ln	1810	0	1766	1767	0	1810	1753	0	1724	1781	0	1777
Q Serve(g_s), s	5.9	0.0	40.5	8.6	0.0	25.8	13.8	0.0	20.0	6.3	0.0	20.4
Cycle Q Clear(g_c), s	5.9	0.0	40.5	8.6	0.0	25.8	13.8	0.0	20.0	6.3	0.0	20.4
Prop In Lane	1.00		0.33	1.00		0.09	1.00		0.33	1.00		0.25
Lane Grp Cap(c), veh/h	125	0	650	169	0	714	252	0	486	129	0	376
V/C Ratio(X)	0.79	0.00	1.15	0.84	0.00	0.71	0.89	0.00	0.72	0.80	0.00	0.90
Avail Cap(c_a), veh/h	181	0	650	177	0	714	255	0	486	162	0	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.4	0.0	34.8	48.9	0.0	28.0	46.3	0.0	35.5	50.2	0.0	42.2
Incr Delay (d2), s/veh	8.6	0.0	86.1	26.5	0.0	5.8	28.5	0.0	4.9	16.4	0.0	18.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	32.4	5.0	0.0	12.1	7.9	0.0	8.9	3.4	0.0	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	0.0	120.8	75.4	0.0	33.8	74.8	0.0	40.5	66.6	0.0	60.5
LnGrp LOS	E	A	F	E	A	C	E	A	D	E	A	E
Approach Vol, veh/h		849			646			573			442	
Approach Delay, s/veh		113.6			42.9			53.9			61.9	
Approach LOS		F			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	45.5	20.8	28.2	12.6	48.4	13.0	36.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	35.0	16.0	28.0	11.0	35.0	10.0	27.0
Max Q Clear Time (g_c+I1), s	10.6	42.5	15.8	22.4	7.9	27.8	8.3	22.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	2.7	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	72.7
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	245	40	0	230	0	35	20	5	120	10	25
Future Vol, veh/h	10	245	40	0	230	0	35	20	5	120	10	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	70	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	92	92	94	94	92	92	92	94	92	94
Heavy Vehicles, %	0	4	0	0	6	9	0	0	0	0	0	0
Mvmt Flow	11	261	43	0	245	0	38	22	5	128	11	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	245	0	0	304	0	0	569	550	283	563	571	245
Stage 1	-	-	-	-	-	-	305	305	-	245	245	-
Stage 2	-	-	-	-	-	-	264	245	-	318	326	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1333	-	-	1268	-	0	436	446	761	440	434	799
Stage 1	-	-	-	-	-	0	709	666	-	763	707	-
Stage 2	-	-	-	-	-	0	746	707	-	698	652	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1333	-	-	1268	-	-	411	442	761	418	431	799
Mov Cap-2 Maneuver	-	-	-	-	-	-	411	442	-	418	431	-
Stage 1	-	-	-	-	-	-	703	661	-	757	707	-
Stage 2	-	-	-	-	-	-	710	707	-	665	647	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	14.7	17.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	438	1333	-	-	1268	-	454
HCM Lane V/C Ratio	0.149	0.008	-	-	-	-	0.364
HCM Control Delay (s)	14.7	7.7	-	-	0	-	17.4
HCM Lane LOS	B	A	-	-	A	-	C
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	1.6

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	155	20	55	35	10	5	45	50	25	20	10
Future Vol, veh/h	5	155	20	55	35	10	5	45	50	25	20	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	13	0	0	0	0	15	0	0	0
Mvmt Flow	7	228	29	81	51	15	7	66	74	37	29	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	66	0	0	257	0	0	500	485	243	548	492	59
Stage 1	-	-	-	-	-	-	257	257	-	221	221	-
Stage 2	-	-	-	-	-	-	243	228	-	327	271	-
Critical Hdwy	4.1	-	-	4.23	-	-	7.1	6.5	6.35	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.317	-	-	3.5	4	3.435	3.5	4	3.3
Pot Cap-1 Maneuver	1549	-	-	1246	-	-	484	485	765	450	481	1012
Stage 1	-	-	-	-	-	-	752	699	-	786	724	-
Stage 2	-	-	-	-	-	-	765	719	-	690	689	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1549	-	-	1246	-	-	428	450	765	341	446	1012
Mov Cap-2 Maneuver	-	-	-	-	-	-	428	450	-	341	446	-
Stage 1	-	-	-	-	-	-	748	696	-	782	675	-
Stage 2	-	-	-	-	-	-	672	670	-	562	686	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	4.4	13.6	15.3
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	565	1549	-	-	1246	-	-	430
HCM Lane V/C Ratio	0.26	0.005	-	-	0.065	-	-	0.188
HCM Control Delay (s)	13.6	7.3	0	-	8.1	0	-	15.3
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1	0	-	-	0.2	-	-	0.7

Intersection												
Int Delay, s/veh	86											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	130	100	5	80	80	60	130	5	35	85	20
Future Vol, veh/h	45	130	100	5	80	80	60	130	5	35	85	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	60	60	60	60	60	60	60	60	60
Heavy Vehicles, %	17	0	0	0	0	0	0	0	0	21	0	0
Mvmt Flow	75	217	167	8	133	133	100	217	8	58	142	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	829	700	159	888	712	221	175	0	0	225	0	0
Stage 1	275	275	-	421	421	-	-	-	-	-	-	-
Stage 2	554	425	-	467	291	-	-	-	-	-	-	-
Critical Hdwy	7.27	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.31	-	-
Critical Hdwy Stg 1	6.27	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.27	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.653	4	3.3	3.5	4	3.3	2.2	-	-	2.389	-	-
Pot Cap-1 Maneuver	273	366	892	267	360	824	1414	-	-	1239	-	-
Stage 1	700	686	-	614	592	-	-	-	-	-	-	-
Stage 2	491	590	-	580	675	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	142	324	892	93	319	824	1414	-	-	1239	-	-
Mov Cap-2 Maneuver	142	324	-	93	319	-	-	-	-	-	-	-
Stage 1	650	654	-	570	550	-	-	-	-	-	-	-
Stage 2	290	548	-	301	643	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	221.9	29.8	2.4	2
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1414	-	-	331	411	1239	-	-
HCM Lane V/C Ratio	0.071	-	-	1.385	0.669	0.047	-	-
HCM Control Delay (s)	7.7	-	-	221.9	29.8	8	-	-
HCM Lane LOS	A	-	-	F	D	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	23.3	4.7	0.1	-	-

Intersection	
Int Delay, s/veh	37.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	65	200	10	35	60	145	390	20	45	320	50
Future Vol, veh/h	25	65	200	10	35	60	145	390	20	45	320	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	1	0	4	0	1	2	0	0	1	0
Mvmt Flow	28	72	222	11	39	67	161	433	22	50	356	56

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1303	1261	384	1397	1278	444	412	0	0	455	0	0
Stage 1	484	484	-	766	766	-	-	-	-	-	-	-
Stage 2	819	777	-	631	512	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.1	6.54	6.2	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.309	3.5	4.036	3.3	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	139	172	666	120	165	618	1152	-	-	1116	-	-
Stage 1	568	555	-	398	409	-	-	-	-	-	-	-
Stage 2	372	410	-	472	533	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	84	141	666	42	135	618	1152	-	-	1116	-	-
Mov Cap-2 Maneuver	84	141	-	42	135	-	-	-	-	-	-	-
Stage 1	488	530	-	342	352	-	-	-	-	-	-	-
Stage 2	254	353	-	259	509	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	150	57.8	2.3	0.9
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1152	-	-	274	177	1116	-	-
HCM Lane V/C Ratio	0.14	-	-	1.176	0.659	0.045	-	-
HCM Control Delay (s)	8.6	-	-	150	57.8	8.4	-	-
HCM Lane LOS	A	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	14.4	3.8	0.1	-	-

Intersection	
Int Delay, s/veh	17.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	0	25	0	335	0	45	15	420	55	0
Future Vol, veh/h	10	10	0	25	0	335	0	45	15	420	55	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	180	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	6	0	5	0	13	0	6	0	0
Mvmt Flow	13	13	0	32	0	435	0	58	19	545	71	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1446	1238	71	1236	1229	68	71	0	0	77	0	0
Stage 1	1161	1161	-	68	68	-	-	-	-	-	-	-
Stage 2	285	77	-	1168	1161	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.16	6.5	6.25	4.1	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.16	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.16	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.554	4	3.345	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	111	177	997	150	179	987	1542	-	-	1497	-	-
Stage 1	240	272	-	932	842	-	-	-	-	-	-	-
Stage 2	727	835	-	231	272	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	45	113	997	99	114	987	1542	-	-	1497	-	-
Mov Cap-2 Maneuver	45	113	-	99	114	-	-	-	-	-	-	-
Stage 1	240	173	-	932	842	-	-	-	-	-	-	-
Stage 2	407	835	-	136	173	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	95.3	27.9	0	7.8
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1542	-	-	64	608	1497	-	-
HCM Lane V/C Ratio	-	-	-	0.406	0.769	0.364	-	-
HCM Control Delay (s)	0	-	-	95.3	27.9	8.8	-	-
HCM Lane LOS	A	-	-	F	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.5	7.1	1.7	-	-

Intersection	
Int Delay, s/veh	105.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	145	0	340	0	0	0	120	220	0	0	370	130
Future Vol, veh/h	145	0	340	0	0	0	120	220	0	0	370	130
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	1	0	4	0	0	10	6	10	0	4	2	4
Mvmt Flow	165	0	386	0	0	0	136	250	0	0	420	148

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1016	1016	494	1209	1090	250	568	0	0	250	0	0
Stage 1	494	494	-	522	522	-	-	-	-	-	-	-
Stage 2	522	522	-	687	568	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.24	7.1	6.5	6.3	4.16	-	-	4.14	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.336	3.5	4	3.39	2.254	-	-	2.236	-	-
Pot Cap-1 Maneuver	217	240	571	161	217	770	985	-	-	1304	-	-
Stage 1	559	550	-	542	534	-	-	-	-	-	-	-
Stage 2	540	534	-	440	510	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	190	202	571	46	182	770	985	-	-	1304	-	-
Mov Cap-2 Maneuver	190	202	-	46	182	-	-	-	-	-	-	-
Stage 1	470	550	-	455	449	-	-	-	-	-	-	-
Stage 2	454	449	-	142	510	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	285.7	0	3.3	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	985	-	-	357	-	1304	-	-
HCM Lane V/C Ratio	0.138	-	-	1.544	-	-	-	-
HCM Control Delay (s)	9.2	0	-	285.7	0	0	-	-
HCM Lane LOS	A	A	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	30.9	-	0	-	-

Intersection	
Int Delay, s/veh	28.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations										
Traffic Vol, veh/h	0	0	0	0	840	260	295	0	0	0
Future Vol, veh/h	0	0	0	0	840	260	295	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None	-	-
Storage Length	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	0	-	0	-
Grade, %	-	0	-	-	0	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	4	5	9	0	0	0
Mvmt Flow	0	0	0	0	857	265	301	0	0	0

Major/Minor	Major2			Minor1	
Conflicting Flow All	-	-	0	990	-
Stage 1	-	-	-	0	-
Stage 2	-	-	-	990	-
Critical Hdwy	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	-	-	-	3.5	-
Pot Cap-1 Maneuver	0	-	-	276	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	363	0
Platoon blocked, %		-	-		
Mov Cap-1 Maneuver	-	-	-	276	-
Mov Cap-2 Maneuver	-	-	-	276	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	363	-

Approach	WB	NB
HCM Control Delay, s	0	133
HCM LOS		F

Minor Lane/Major Mvmt	NBLn1	WBT	WBR
Capacity (veh/h)	276	-	-
HCM Lane V/C Ratio	1.128	-	-
HCM Control Delay (s)	133	-	-
HCM Lane LOS	F	-	-
HCM 95th %tile Q(veh)	13.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	195	0	0	0	0	0	305	1365	0	0	0
Future Volume (Veh/h)	0	195	0	0	0	0	0	305	1365	0	0	0
Sign Control		Yield			Yield			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	0	199	0	0	0	0	0	311	1393	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1008	1704	0	1107	1008	1008	0			1704		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1008	1704	0	1107	1008	1008	0			1704		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	0	100	0	100	100	100			100		
cM capacity (veh/h)	221	93	1091	0	243	295	1636			378		

Direction, Lane #	EB 1	NE 1
Volume Total	199	1704
Volume Left	0	0
Volume Right	0	1393
cSH	93	1700
Volume to Capacity	2.15	1.00
Queue Length 95th (ft)	439	0
Control Delay (s)	626.6	0.0
Lane LOS	F	
Approach Delay (s)	626.6	0.0
Approach LOS	F	

Intersection Summary			
Average Delay	65.5		
Intersection Capacity Utilization	117.1%	ICU Level of Service	H
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Vol, veh/h	0	0	0	0	850	0	195	0	0	0
Future Vol, veh/h	0	0	0	0	850	0	195	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	-	None	-	-	None	-	None	-	-
Storage Length	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	0	-	0	-
Grade, %	-	0	-	-	0	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	867	0	199	0	0	0

Major/Minor	Major2			Minor2	
Conflicting Flow All	-	-	0	867	-
Stage 1	-	-	-	867	-
Stage 2	-	-	-	0	-
Critical Hdwy	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	3.5	-
Pot Cap-1 Maneuver	0	-	0	326	0
Stage 1	0	-	0	415	0
Stage 2	0	-	0	-	0
Platoon blocked, %		-			
Mov Cap-1 Maneuver	-	-	-	326	-
Mov Cap-2 Maneuver	-	-	-	326	-
Stage 1	-	-	-	415	-
Stage 2	-	-	-	-	-

Approach	WB	SB
HCM Control Delay, s	0	31.9
HCM LOS		D

Minor Lane/Major Mvmt	WBT	SBLn1
Capacity (veh/h)	-	326
HCM Lane V/C Ratio	-	0.61
HCM Control Delay (s)	-	31.9
HCM Lane LOS	-	D
HCM 95th %tile Q(veh)	-	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	25	40	1475	805	210
Future Volume (Veh/h)	100	25	40	1475	805	210
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	106	27	43	1569	856	223
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	None	
Median storage veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2622	540	1079			
vC1, stage 1 conf vol	968					
vC2, stage 2 conf vol	1655					
vCu, unblocked vol	2622	540	1079			
tC, single (s)	6.9	7.3	4.3			
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.5	2.3			
p0 queue free %	9	94	93			
cM capacity (veh/h)	117	443	586			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	133	43	1569	571	508
Volume Left	106	43	0	0	0
Volume Right	27	0	0	0	223
cSH	137	586	1700	1700	1700
Volume to Capacity	0.97	0.07	0.92	0.34	0.30
Queue Length 95th (ft)	170	6	0	0	0
Control Delay (s)	131.7	11.6	0.0	0.0	0.0
Lane LOS	F	B			
Approach Delay (s)	131.7	0.3		0.0	
Approach LOS	F				

Intersection Summary			
Average Delay	6.4		
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		

Intersection						
Int Delay, s/veh	2.6					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	60	1455	20	85	745
Future Vol, veh/h	5	60	1455	20	85	745
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	250	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	65	1565	22	91	801

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2148	1565	0	0	1587	0
Stage 1	1565	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Critical Hdwy	6.6	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	48	139	-	-	419	-
Stage 1	191	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	38	139	-	-	419	-
Mov Cap-2 Maneuver	38	-	-	-	-	-
Stage 1	191	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	75.9	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	115	419	-
HCM Lane V/C Ratio	-	-	0.608	0.218	-
HCM Control Delay (s)	-	-	75.9	16	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	3	0.8	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	935	20	0	1065	0	0	0	0	0	0	10
Future Vol, veh/h	0	935	20	0	1065	0	0	0	0	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	300	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	3	8	0	6	0	0	0	0	0	0	17
Mvmt Flow	0	1016	22	0	1158	0	0	0	0	0	0	11

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	-	0	-	-	-	0				-	-	1158
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	-	-	-				-	-	-
Critical Hdwy	-	-	-	-	-	-				-	-	6.37
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-				-	-	-
Follow-up Hdwy	-	-	-	-	-	-				-	-	3.453
Pot Cap-1 Maneuver	0	-	0	0	-	0				0	0	222
Stage 1	0	-	0	0	-	0				0	0	-
Stage 2	0	-	0	0	-	0				0	0	-
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	-	-	-	-	-	-				-	0	222
Mov Cap-2 Maneuver	-	-	-	-	-	-				-	0	-
Stage 1	-	-	-	-	-	-				-	0	-
Stage 2	-	-	-	-	-	-				-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	22
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	222
HCM Lane V/C Ratio	-	-	0.049
HCM Control Delay (s)	-	-	22
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.2

Intersection	
Int Delay, s/veh	34.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	315	670	90	365	525
Future Vol, veh/h	30	315	670	90	365	525
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	5	0	2	1
Mvmt Flow	33	350	744	100	406	583

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2189	794	0	0	844	0
Stage 1	794	-	-	-	-	-
Stage 2	1395	-	-	-	-	-
Critical Hdwy	6.4	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	51	388	-	-	792	-
Stage 1	449	-	-	-	-	-
Stage 2	232	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 25	388	-	-	792	-
Mov Cap-2 Maneuver	89	-	-	-	-	-
Stage 1	449	-	-	-	-	-
Stage 2	113	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	183.5	0	5.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	300	792	-
HCM Lane V/C Ratio	-	-	1.278	0.512	-
HCM Control Delay (s)	-	-	183.5	14.2	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	18.3	3	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.2					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	10	10	760	555	15
Future Vol, veh/h	5	10	10	760	555	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	13	5	1	0
Mvmt Flow	6	11	11	844	617	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1492	626	634	0	-	0
Stage 1	626	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.23	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.317	-	-	-
Pot Cap-1 Maneuver	137	488	898	-	-	-
Stage 1	537	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	135	488	898	-	-	-
Mov Cap-2 Maneuver	273	-	-	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	415	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	898	-	387	-	-
HCM Lane V/C Ratio	0.012	-	0.043	-	-
HCM Control Delay (s)	9.1	-	14.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	285	80	55	35	140	670	5	670
Future Volume (vph)	285	80	55	35	140	670	5	670
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.5	9.5	9.5	9.5	10.0	28.0	10.0	26.0
Total Split (s)	15.0	20.0	15.0	20.0	15.0	30.0	15.0	30.0
Total Split (%)	18.8%	25.0%	18.8%	25.0%	18.8%	37.5%	18.8%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	10.7	12.7	7.3	9.1	9.0	37.8	5.4	25.5
Actuated g/C Ratio	0.15	0.18	0.11	0.13	0.13	0.55	0.08	0.37
v/c Ratio	1.10	0.68	0.31	0.25	0.63	0.74	0.04	1.18
Control Delay	116.7	24.4	35.6	24.0	44.8	22.5	34.4	120.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	116.7	24.4	35.6	24.0	44.8	22.5	34.4	120.8
LOS	F	C	D	C	D	C	C	F
Approach Delay		71.9		30.1		26.1		120.2
Approach LOS		E		C		C		F

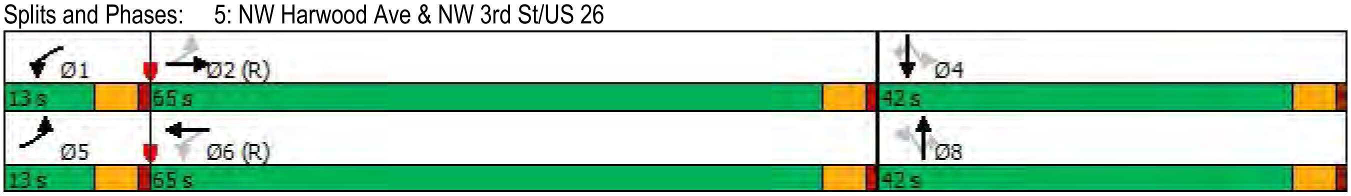
Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 69.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 68.9	Intersection LOS: E
Intersection Capacity Utilization 84.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: N Main St & NW 10th St/NE 10th St

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	115	975	35	750	90	45	35	70	60	100
Future Volume (vph)	115	975	35	750	90	45	35	70	60	100
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2	1	6		8			4	
Permitted Phases	2		6		8		8	4		4
Detector Phase	5	2	1	6	8	8	8	4	4	4
Switch Phase										
Minimum Initial (s)	6.0	10.0	6.0	10.0	6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	29.0	11.0	29.0	27.0	27.0	27.0	27.0	27.0	27.0
Total Split (s)	13.0	65.0	13.0	65.0	42.0	42.0	42.0	42.0	42.0	42.0
Total Split (%)	10.8%	54.2%	10.8%	54.2%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Min	None	C-Min	None	None	None	None	None	None
Act Effct Green (s)	89.3	81.1	80.7	74.5		19.9	19.9		19.9	19.9
Actuated g/C Ratio	0.74	0.68	0.67	0.62		0.17	0.17		0.17	0.17
v/c Ratio	0.52	1.02	0.32	0.86		0.91	0.13		0.85	0.42
Control Delay	14.4	53.4	15.6	26.2		96.2	4.6		84.1	11.4
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	14.4	53.4	15.6	26.2		96.2	4.6		84.1	11.4
LOS	B	D	B	C		F	A		F	B
Approach Delay		49.4		25.8		77.4			52.4	
Approach LOS		D		C		E			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 13 (11%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 43.2	Intersection LOS: D
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

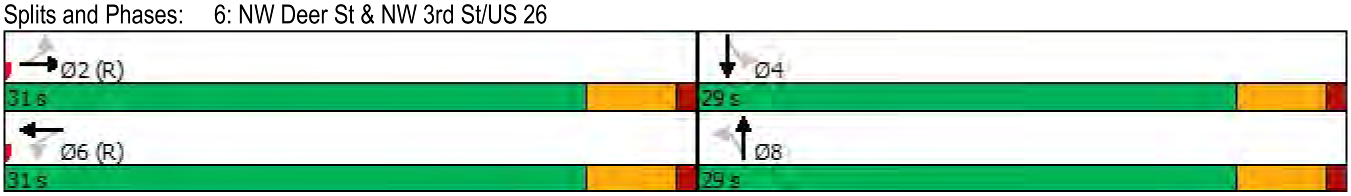
Splits and Phases: 5: NW Harwood Ave & NW 3rd St/US 26



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	1005	10	770	165	60	60	95
Future Volume (vph)	25	1005	10	770	165	60	60	95
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	31.0	31.0	31.0	31.0	29.0	29.0	29.0	29.0
Total Split (%)	51.7%	51.7%	51.7%	51.7%	48.3%	48.3%	48.3%	48.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Min	C-Min	C-Min	C-Min	None	None	None	None
Act Effct Green (s)	40.0	40.0	40.0	40.0	14.0	14.0	13.0	13.0
Actuated g/C Ratio	0.67	0.67	0.67	0.67	0.23	0.23	0.22	0.22
v/c Ratio	0.09	0.87	0.08	0.69	0.61	0.25	0.22	0.36
Control Delay	6.9	20.8	6.5	10.0	29.5	12.4	18.7	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.9	20.8	6.5	10.0	29.5	12.4	18.7	13.8
LOS	A	C	A	A	C	B	B	B
Approach Delay		20.5		9.9		22.6		15.2
Approach LOS		C		A		C		B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 22 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 16.6	Intersection LOS: B
Intersection Capacity Utilization 84.7%	ICU Level of Service E
Analysis Period (min) 15	

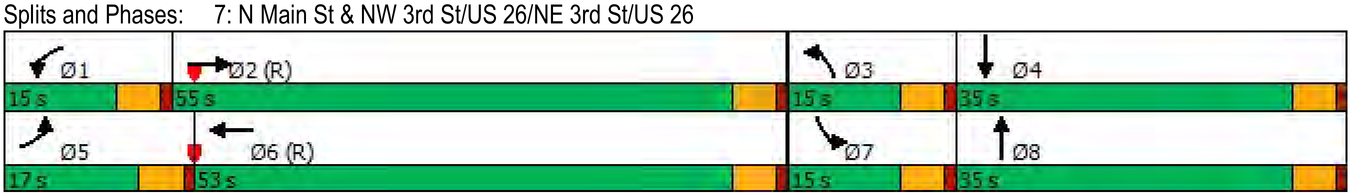
Splits and Phases: 6: NW Deer St & NW 3rd St/US 26



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	245	670	60	645	160	295	135	200
Future Volume (vph)	245	670	60	645	160	295	135	200
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	8.0	5.0	8.0
Minimum Split (s)	10.0	27.0	10.0	27.0	10.0	27.0	10.0	27.0
Total Split (s)	17.0	55.0	15.0	53.0	15.0	35.0	15.0	35.0
Total Split (%)	14.2%	45.8%	12.5%	44.2%	12.5%	29.2%	12.5%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	C-Min	None	None	None	None
Act Effct Green (s)	16.5	58.4	8.1	48.0	10.0	25.5	10.0	25.5
Actuated g/C Ratio	0.14	0.49	0.07	0.40	0.08	0.21	0.08	0.21
v/c Ratio	1.02	0.83	0.50	1.00	1.10	0.86	0.93	0.81
Control Delay	104.9	41.6	67.0	66.3	154.3	65.0	113.0	57.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	104.9	41.6	67.0	66.3	154.3	65.0	113.0	57.2
LOS	F	D	E	E	F	E	F	E
Approach Delay		57.4		66.4		94.1		74.0
Approach LOS		E		E		F		E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 46 (38%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 69.4	Intersection LOS: E
Intersection Capacity Utilization 94.2%	ICU Level of Service F
Analysis Period (min) 15	

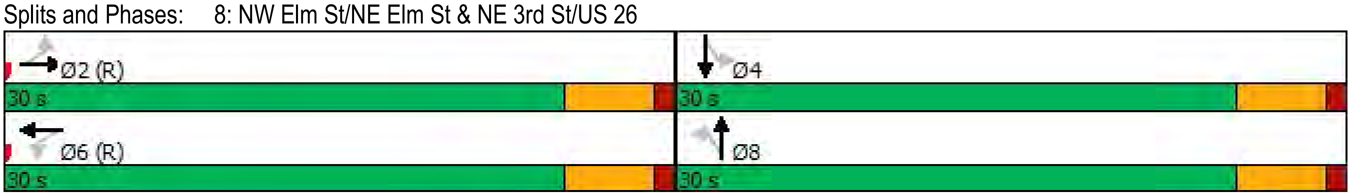
Splits and Phases: 7: N Main St & NW 3rd St/US 26/NE 3rd St/US 26



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	825	10	770	30	60	110	60
Future Volume (vph)	25	825	10	770	30	60	110	60
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Min	C-Min	C-Min	C-Min	None	None	None	None
Act Effct Green (s)	42.8	42.8	42.8	42.8	10.2	10.2	10.3	10.3
Actuated g/C Ratio	0.71	0.71	0.71	0.71	0.17	0.17	0.17	0.17
v/c Ratio	0.08	0.65	0.04	0.63	0.14	0.37	0.52	0.27
Control Delay	4.3	8.5	5.4	10.2	20.6	14.5	30.1	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	8.5	5.4	10.2	20.6	14.5	30.1	17.2
LOS	A	A	A	B	C	B	C	B
Approach Delay		8.4		10.2		15.7		24.5
Approach LOS		A		B		B		C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 25 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 65.1%	ICU Level of Service C
Analysis Period (min) 15	

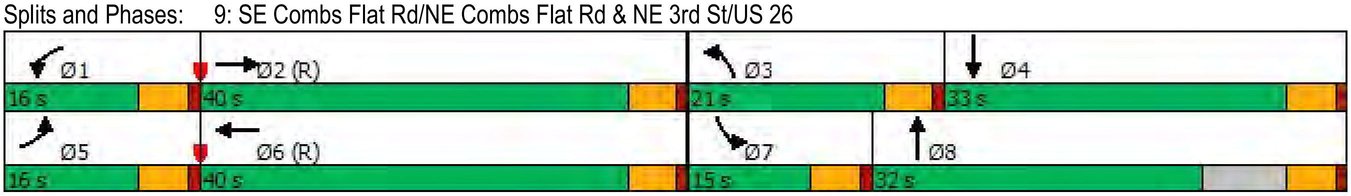
Splits and Phases: 8: NW Elm St/NE Elm St & NE 3rd St/US 26



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	95	485	135	440	215	225	100	245
Future Volume (vph)	95	485	135	440	215	225	100	245
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	8.0	5.0	8.0
Minimum Split (s)	10.0	29.0	10.0	29.0	10.0	32.0	10.0	32.0
Total Split (s)	16.0	40.0	16.0	40.0	21.0	32.0	15.0	33.0
Total Split (%)	14.5%	36.4%	14.5%	36.4%	19.1%	29.1%	13.6%	30.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	C-Min	None	None	None	None
Act Effct Green (s)	9.4	38.8	11.5	40.9	15.6	30.6	9.1	24.2
Actuated g/C Ratio	0.09	0.35	0.10	0.37	0.14	0.28	0.08	0.22
v/c Ratio	0.64	1.18	0.77	0.75	0.91	0.70	0.71	0.85
Control Delay	67.5	128.5	75.5	40.1	86.4	41.0	74.8	59.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.5	128.5	75.5	40.1	86.4	41.0	74.8	59.0
LOS	E	F	E	D	F	D	E	E
Approach Delay		121.3		47.8		58.7		62.7
Approach LOS		F		D		E		E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 16 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 77.8	Intersection LOS: E
Intersection Capacity Utilization 93.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: SE Combs Flat Rd/NE Combs Flat Rd & NE 3rd St/US 26



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	297	281	57	52	146	750	5	792
v/c Ratio	1.10	0.68	0.31	0.25	0.63	0.74	0.04	1.18
Control Delay	116.7	24.4	35.6	24.0	44.8	22.5	34.4	120.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	116.7	24.4	35.6	24.0	44.8	22.5	34.4	120.8
Queue Length 50th (ft)	~164	62	24	15	63	236	2	~463
Queue Length 95th (ft)	#340	148	60	45	#149	#649	13	#753
Internal Link Dist (ft)		263		320		233		304
Turn Bay Length (ft)	70		120		100		100	
Base Capacity (vph)	271	481	271	354	261	1010	266	672
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.10	0.58	0.21	0.15	0.56	0.74	0.02	1.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	135	1176	41	958	159	41	153	118
v/c Ratio	0.52	1.02	0.32	0.86	0.91	0.13	0.85	0.42
Control Delay	14.4	53.4	15.6	26.2	96.2	4.6	84.1	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.4	53.4	15.6	26.2	96.2	4.6	84.1	11.4
Queue Length 50th (ft)	25	~989	4	501	122	0	116	0
Queue Length 95th (ft)	64	#1240	m12	#947	177	12	168	42
Internal Link Dist (ft)		426		998	167		287	
Turn Bay Length (ft)	150		150					
Base Capacity (vph)	263	1155	153	1116	324	542	335	427
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	1.02	0.27	0.86	0.49	0.08	0.46	0.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	26	1057	10	827	168	112	61	153
v/c Ratio	0.09	0.87	0.08	0.69	0.61	0.25	0.22	0.36
Control Delay	6.9	20.8	6.5	10.0	29.5	12.4	18.7	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.9	20.8	6.5	10.0	29.5	12.4	18.7	13.8
Queue Length 50th (ft)	5	528	2	269	55	20	18	29
Queue Length 95th (ft)	m9	m#760	m3	m285	95	47	39	61
Internal Link Dist (ft)		998		871		243		228
Turn Bay Length (ft)	150		135		100		100	
Base Capacity (vph)	287	1215	133	1202	473	735	520	742
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.87	0.08	0.69	0.36	0.15	0.12	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	250	750	61	719	163	337	138	321
v/c Ratio	1.02	0.83	0.50	1.00	1.10	0.86	0.93	0.81
Control Delay	104.9	41.6	67.0	66.3	154.3	65.0	113.0	57.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	104.9	41.6	67.0	66.3	154.3	65.0	113.0	57.2
Queue Length 50th (ft)	~215	611	49	~582	~143	247	108	220
Queue Length 95th (ft)	m#336	m#798	m79	#825	#283	346	#235	315
Internal Link Dist (ft)		871		1198		244		241
Turn Bay Length (ft)	150		160		100		100	
Base Capacity (vph)	245	899	150	719	148	463	148	464
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.83	0.41	1.00	1.10	0.73	0.93	0.69

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	26	869	10	828	31	126	115	89
v/c Ratio	0.08	0.65	0.04	0.63	0.14	0.37	0.52	0.27
Control Delay	4.3	8.5	5.4	10.2	20.6	14.5	30.1	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	8.5	5.4	10.2	20.6	14.5	30.1	17.2
Queue Length 50th (ft)	2	196	1	149	10	20	38	20
Queue Length 95th (ft)	m7	m372	7	#361	27	54	74	48
Internal Link Dist (ft)		1198		878		242		228
Turn Bay Length (ft)	150		150		100		100	
Base Capacity (vph)	326	1339	269	1310	527	740	535	756
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.65	0.04	0.63	0.06	0.17	0.21	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	99	750	141	505	224	349	104	338
v/c Ratio	0.64	1.18	0.77	0.75	0.91	0.70	0.71	0.85
Control Delay	67.5	128.5	75.5	40.1	86.4	41.0	74.8	59.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.5	128.5	75.5	40.1	86.4	41.0	74.8	59.0
Queue Length 50th (ft)	68	~672	96	318	157	205	72	218
Queue Length 95th (ft)	124	#908	#207	#523	#299	300	#147	#318
Internal Link Dist (ft)		2931		1731		2397		344
Turn Bay Length (ft)	180		180		230		120	
Base Capacity (vph)	180	637	188	672	252	551	160	459
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	1.18	0.75	0.75	0.89	0.63	0.65	0.74

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

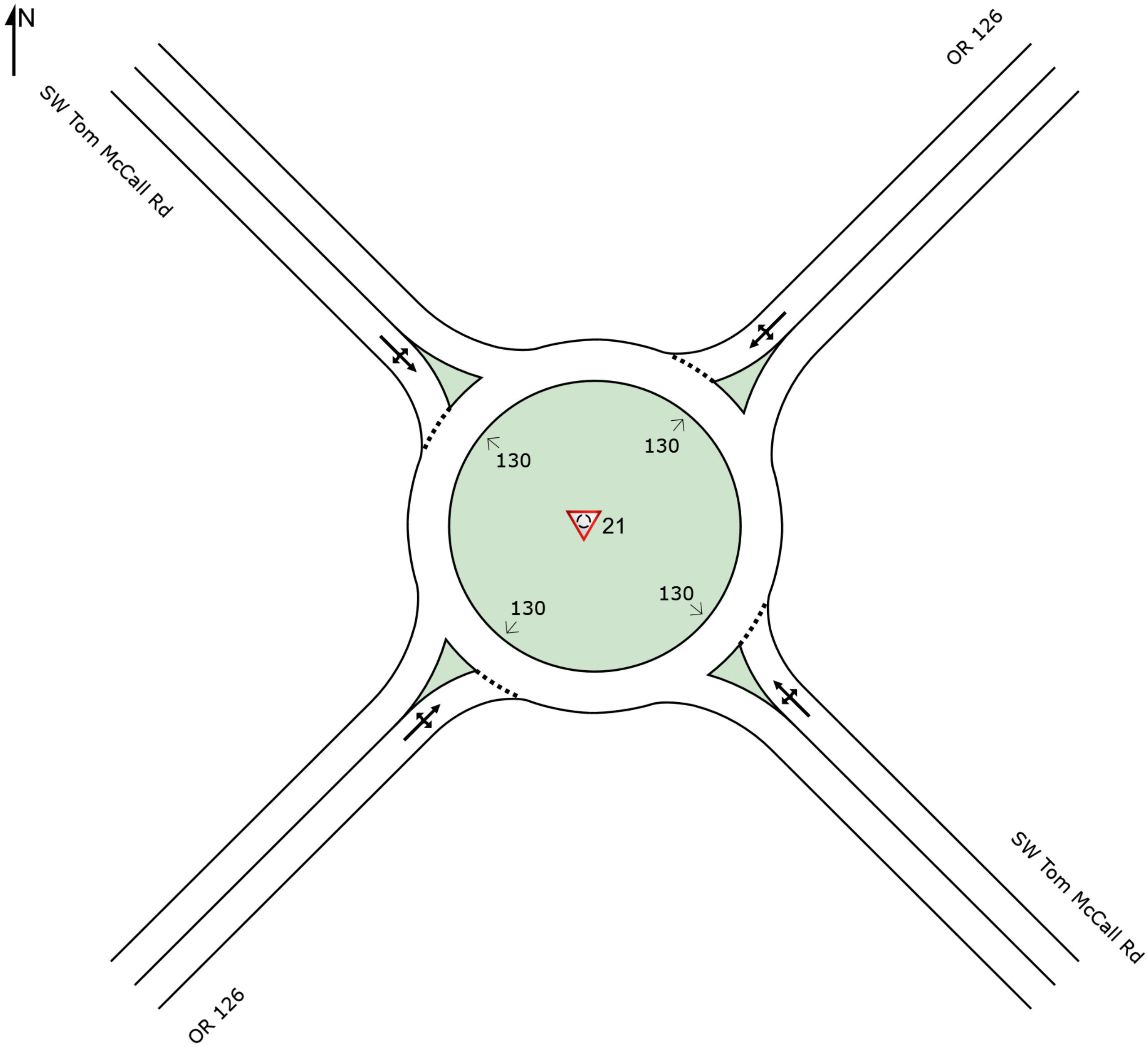
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

SITE LAYOUT

Site: 21 [SW Tom McCall Rd & OR 126 (Site Folder: Existing-PM-Peak)]

New Site
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: PARAMETRIX | Licence: NETWORK / 1PC | Created: Wednesday, August 16, 2023 10:30:43 AM
Project: \\parametrix.com\pmx\Port\Projects\Clients\2395-ODOT\274-2395-121 PrinevilleTSPUpdate'22\02WBS\Task 5 System Inventory and Needs Analysis\Traffic Analysis\05Analysis\Sidra\SW Tom McCall Rd - OR 126_EW Review.sip9

MOVEMENT SUMMARY

Site: 21 [SW Tom McCall Rd & OR 126 (Site Folder: Existing-PM-Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
SouthEast: SW Tom McCall Rd														
3x	L2	285	5.0	306	5.0	1.840	419.2	LOS F	100.5	2604.0	1.00	3.35	7.56	4.8
8x	T1	5	0.0	5	0.0	1.840	411.9	LOS F	100.5	2604.0	1.00	3.35	7.56	4.8
18x	R2	240	4.0	258	4.0	1.840	412.6	LOS F	100.5	2604.0	1.00	3.35	7.56	4.8
Approach		530	4.5	570	4.5	1.840	416.1	LOS F	100.5	2604.0	1.00	3.35	7.56	4.8
NorthEast: OR 126														
1x	L2	55	24.0	59	24.0	0.678	12.8	LOS B	7.0	184.0	0.71	0.54	0.71	35.8
6x	T1	575	5.0	618	5.0	0.678	5.0	LOS A	7.0	184.0	0.71	0.54	0.71	36.2
16x	R2	60	3.0	65	3.0	0.678	5.3	LOS A	7.0	184.0	0.71	0.54	0.71	34.9
Approach		690	6.3	742	6.3	0.678	5.7	LOS A	7.0	184.0	0.71	0.54	0.71	36.0
NorthWest: SW Tom McCall Rd														
7x	L2	405	2.0	435	2.0	1.130	99.2	LOS F	45.1	1157.3	1.00	2.43	4.79	15.1
4x	T1	20	42.0	22	42.0	1.130	96.8	LOS F	45.1	1157.3	1.00	2.43	4.79	15.0
14x	R2	205	2.0	220	2.0	1.130	92.7	LOS F	45.1	1157.3	1.00	2.43	4.79	14.9
Approach		630	3.3	677	3.3	1.130	97.0	LOS F	45.1	1157.3	1.00	2.43	4.79	15.0
SouthWest: OR 126														
5x	L2	10	13.0	11	13.0	1.194	111.1	LOS F	72.6	1891.5	1.00	2.88	5.45	14.3
2x	T1	920	5.0	989	5.0	1.194	103.5	LOS F	72.6	1891.5	1.00	2.88	5.45	14.4
12x	R2	5	25.0	5	25.0	1.194	105.5	LOS F	72.6	1891.5	1.00	2.88	5.45	14.1
Approach		935	5.2	1005	5.2	1.194	103.6	LOS F	72.6	1891.5	1.00	2.88	5.45	14.4
All Vehicles		2785	4.9	2995	4.9	1.840	137.3	LOS F	100.5	2604.0	0.93	2.29	4.53	11.8

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

ROUNDABOUT ANALYSIS

Site: 21 [SW Tom McCall Rd & OR 126 (Site Folder: Existing-PM-Peak)]

New Site
Site Category: (None)
Roundabout

Roundabout Basic Parameters

Location	Name	Central Island Diam ft	Circ Width ft	Insc Diam ft	Entry Radius ft	Entry Angle °	Circ Lanes	Entry Lanes	Av.Entry Lane Width ft	App. Dist ft	Prop Queued Upstr Signal	Extra Bunching %
SouthEast	SW Tom McCall Rd	130.00	20.00	170.0	90.0	30.0	1	1	15.00	1600.0	NA[5]	0.0
NorthEast	OR 126	130.00	20.00	170.0	90.0	30.0	1	1	15.00	1600.0	NA[5]	0.0
NorthWest	SW Tom McCall Rd	130.00	20.00	170.0	90.0	30.0	1	1	15.00	1600.0	NA[5]	0.0
SouthWest	OR 126	130.00	20.00	170.0	90.0	30.0	1	1	15.00	1600.0	NA[5]	0.0

Roundabout Capacity Model: SIDRA Standard
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

5 Not Applicable (single Site analysis or unconnected Site in Network analysis).

Roundabout Entry and Circulating / Exiting Stream Parameters

To Approach	Turn	Lane No	Lane Type	Opng Flow veh/h	Opng Flow pcu/h	In-Bunch Hdwy sec	Prop. Bunched	Cap Const Effect	Priority Sharing	OD Factor	HVE for Entry	Critical Gap [Hdwy sec	Dist] ft	Follow-up Hdwy sec
SouthEast: SW Tom McCall Rd Environment Factor: 1.10 Entry/Circ Flow Adjustment: None														
SouthWest	L2	1	Dominant	1224	1274	2.00	0.842	Yes	Yes[10]	0.670	1.05	3.18	111.2	2.20
NorthWest	T1	1	Dominant	1224	1274	2.00	0.842	Yes	Yes[10]	0.670	1.00	3.02	105.9	2.09
NorthEast	R2	1	Dominant	1224	1274	2.00	0.842	Yes	Yes[10]	0.670	1.04	3.14	110.2	2.18
NorthEast: OR 126 Environment Factor: 1.10 Entry/Circ Flow Adjustment: None														
SouthEast	L2	1	Dominant	177	187	2.00	0.203	Yes	No	0.953	1.24	5.27	132.5	3.10
SouthWest	T1	1	Dominant	177	187	2.00	0.203	Yes	Yes[10]	0.953	1.05	4.46	112.2	2.63
NorthWest	R2	1	Dominant	177	187	2.00	0.203	Yes	Yes[10]	0.953	1.03	4.37	110.1	2.58
NorthWest: SW Tom McCall Rd Environment Factor: 1.10 Entry/Circ Flow Adjustment: None														
NorthEast	L2	1	Dominant	843	896	2.00	0.686	Yes	Yes[10]	0.814	1.02	3.43	119.1	2.28
SouthEast	T1	1	Dominant	843	896	2.00	0.686	Yes	Yes[10]	0.814	1.42	4.78	165.9	3.17
SouthWest	R2	1	Dominant	843	896	2.00	0.686	Yes	Yes[10]	0.814	1.02	3.43	119.1	2.28
SouthWest: OR 126 Environment Factor: 1.10 Entry/Circ Flow Adjustment: None														
NorthWest	L2	1	Dominant	466	496	2.00	0.455	Yes	Yes[10]	0.885	1.13	4.32	110.1	2.70
NorthEast	T1	1	Dominant	466	496	2.00	0.455	Yes	Yes[10]	0.885	1.05	4.01	102.3	2.50
SouthEast	R2	1	Dominant	466	496	2.00	0.455	Yes	Yes[10]	0.885	1.25	4.78	121.7	2.98

Roundabout Capacity Model: SIDRA Standard
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

10 Priority sharing means Follow-up Headway plus Intra-bunch Headway is larger than the Critical Gap.

Circulating Lane Flow Rates			
Circ. Lane No	Circulating Flow Rate		
	veh/h	pcu/h	Percent
SouthEast: SW Tom McCall Rd			
Lane 1	1224	1274	100.0
Approach	1224	1274	
NorthEast: OR 126			
Lane 1	177	187	100.0
Approach	177	187	
NorthWest: SW Tom McCall Rd			
Lane 1	843	896	100.0
Approach	843	896	
SouthWest: OR 126			
Lane 1	466	496	100.0
Approach	466	496	

Roundabout Capacity Model: The SIDRA Standard roundabout capacity model option is in use. This model takes into account the total circulating flow as well as the effect of flow distribution in circulating lanes on the entry capacity results.

Gap Acceptance Cycle Parameters (Lanes)					
Opposed Lane	Cycle Time sec	Blocked Time sec	Unblocked Time sec	Unblocked Time Ratio	Minimum Delay sec
SouthEast: SW Tom McCall Rd					
1	33.30	26.98	6.32	0.190	11.5
NorthEast: OR 126					
1	28.51	5.49	23.02	0.807	0.6
NorthWest: SW Tom McCall Rd					
1	19.77	12.20	7.57	0.383	4.5
SouthWest: OR 126					
1	18.56	7.65	10.92	0.588	1.8

Roundabout Capacity Model: SIDRA Standard
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

Gap Acceptance Cycle Parameters (Movements)							
To Approach	Turn	Opsd Lane No	Cycle Time sec	Blocked Time sec	Unblocked Time sec	Unblocked Time Ratio	Minimum Delay sec
SouthEast: SW Tom McCall Rd							
SouthWest	L2	1	33.39	27.07	6.33	0.189	11.6
NorthWest	T1	1	32.44	26.17	6.27	0.193	11.1
NorthEast	R2	1	33.20	26.88	6.32	0.190	11.5
NorthEast: OR 126							
SouthEast	L2	1	29.51	6.27	23.24	0.787	0.8
SouthWest	T1	1	28.44	5.43	23.00	0.809	0.6
NorthWest	R2	1	28.32	5.35	22.98	0.811	0.6
NorthWest: SW Tom McCall Rd							
NorthEast	L2	1	19.63	12.07	7.56	0.385	4.4

t							
SouthEast	T1	1	24.21	16.20	8.00	0.331	6.8
SouthWest	R2	1	19.63	12.07	7.56	0.385	4.4
SouthWest: OR 126							
NorthWest	L2	1	19.15	8.13	11.01	0.575	2.0
NorthEast	T1	1	18.55	7.63	10.92	0.588	1.8
SouthEast	R2	1	20.08	8.92	11.15	0.556	2.4

Roundabout Capacity Model: SIDRA Standard
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

INTERSECTION SUMMARY

Site: 21 [SW Tom McCall Rd & OR 126 (Site Folder: Existing-PM-Peak)]

New Site
Site Category: (None)
Roundabout

Intersection Performance - Hourly Values		
Performance Measure	**Vehicles**	**Persons**
Travel Speed (Average)	11.8 mph	11.8 mph
Travel Distance (Total)	1916.4 veh-mi/h	2299.7 pers-mi/h
Travel Time (Total)	162.9 veh-h/h	195.5 pers-h/h
Desired Speed (Program)	40.0 mph	
Speed Efficiency	0.29	
Travel Time Index	2.16	
Congestion Coefficient	3.40	
Demand Flows (Total)	2995 veh/h	3594 pers/h
Percent Heavy Vehicles (Demand)	4.9 %	
Degree of Saturation	1.840	
Practical Spare Capacity	-53.8 %	
Effective Intersection Capacity	1628 veh/h	
Control Delay (Total)	114.23 veh-h/h	137.08 pers-h/h
Control Delay (Average)	137.3 sec	137.3 sec
Control Delay (Worst Lane)	416.1 sec	
Control Delay (Worst Movement)	419.2 sec	419.2 sec
Geometric Delay (Average)	5.1 sec	
Stop-Line Delay (Average)	132.2 sec	
Idling Time (Average)	105.2 sec	
Intersection Level of Service (LOS)	LOS F	
95% Back of Queue - Vehicles (Worst Lane)	100.5 veh	
95% Back of Queue - Distance (Worst Lane)	2604.0 ft	
Ave. Queue Storage Ratio (Worst Lane)	0.65	
Total Effective Stops	6853 veh/h	8223 pers/h
Effective Stop Rate	2.29	2.29
Proportion Queued	0.93	0.93
Performance Index	703.7	703.7
Cost (Total)	2968.67 $/h	2968.67 $/h
Fuel Consumption (Total)	133.5 gal/h	
Carbon Dioxide (Total)	1198.6 kg/h	
Hydrocarbons (Total)	0.126 kg/h	
Carbon Monoxide (Total)	1.261 kg/h	
NOx (Total)	2.272 kg/h	

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Intersection LOS value for Vehicles is based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Site Model Variability Index (Iterations 3 to N): 3.0 %
Number of Iterations: 9 (Maximum: 10)
Largest change in Lane Degrees of Saturation for the last three Flow-Capacity Iterations: 2.1% 1.3% 0.8%

Intersection Performance - Annual Values		
Performance Measure	**Vehicles**	**Persons**
Demand Flows (Total)	1,437,419 veh/y	1,724,903 pers/y
Delay	54,831 veh-h/y	65,798 pers-h/y
Effective Stops	3,289,319 veh/y	3,947,184 pers/y
Travel Distance	919,886 veh-mi/y	1,103,863 pers-mi/y
Travel Time	78,205 veh-h/y	93,846 pers-h/y
Cost	1,424,960 $/y	1,424,960 $/y
Fuel Consumption	64,067 gal/y	
Carbon Dioxide	575,307 kg/y	

Hydrocarbons	61	kg/y
Carbon Monoxide	605	kg/y
NOx	1,091	kg/y

Appendix C

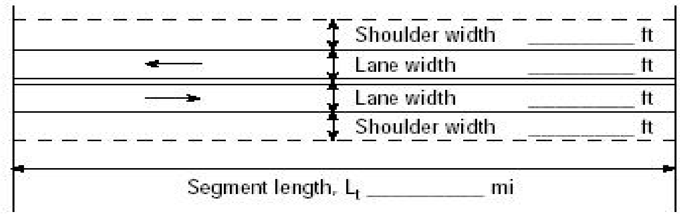
HCS Reports

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET

General Information		**Site Information**	
Analyst		Highway / Direction of Travel	*US 26*
Agency or Company	*Parametrix*	From/To	*0.5 miles E-O Gumpert Rd*
Date Performed	*8/9/2023*	Jurisdiction	
Analysis Time Period	*PM Peak*	Analysis Year	*2022*

Project Description: *Prineville TSP Update*

Input Data



☐ Class I highway ☑ Class II highway ☐ Class III highway

Terrain ☑ Level ☐ Rolling

Analysis direction vol., V_d	*264*veh/h
Opposing direction vol., V_o	*201*veh/h
Shoulder width ft	*6.0*
Lane Width ft	*12.0*
Segment Length mi	*1.0*
Grade Length mi	Up/down
Peak-hour factor, PHF	*0.89*
No-passing zone	*0%*
% Trucks and Buses , P_T	*6* %
% Recreational vehicles, P_R	*0%*
Access points *mi*	*5*/mi

Average Travel Speed

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-11 or 15-12)	*1.4*	*1.5*
Passenger-car equivalents for RVs, E_R (Exhibit 15-11 or 15-13)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV,ATS}=1/ (1+ P_T(E_T-1)+P_R(E_R-1))$	*0.977*	*0.971*
Grade adjustment factor[1], $f_{g,ATS}$ (Exhibit 15-9)	*1.00*	*1.00*
Demand flow rate[2], v_i (pc/h) $v_i=V_i$ / (PHF* $f_{g,ATS}$ * $f_{HV,ATS}$)	*304*	*233*

Free-Flow Speed from Field Measurement		**Estimated Free-Flow Speed**	
		Base free-flow speed[4], BFFS	*55.0 mi/h*
		Adj. for lane and shoulder width,[4] f_{LS}(Exhibit 15-7)	*0.0 mi/h*
Mean speed of sample[3], S_{FM}		Adj. for access points[4], f_A (Exhibit 15-8)	*1.3 mi/h*
Total demand flow rate, both directions, *v*		Free-flow speed, FFS (FSS=BFFS-f_{LS}-f_A)	*53.8 mi/h*
Free-flow speed, FFS=S_{FM}+0.00776(v/ $f_{HV,ATS}$)		Average travel speed, ATS_d=FFS-0.00776($v_{d,ATS}$ + $v_{o,ATS}$) - $f_{np,ATS}$	*48.2 mi/h*
Adj. for no-passing zones, $f_{np,ATS}$ (Exhibit 15-15)	*1.4 mi/h*	Percent free flow speed, PFFS	*89.6 %*

Percent Time-Spent-Following

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T(Exhibit 15-18 or 15-19)	*1.1*	*1.1*
Passenger-car equivalents for RVs, E_R (Exhibit 15-18 or 15-19)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV}=1/ (1+ P_T(E_T-1)+P_R(E_R-1))$	*0.994*	*0.994*
Grade adjustment factor[1], $f_{g,PTSF}$ (Exhibit 15-16 or Ex 15-17)	*1.00*	*1.00*
Directional flow rate[2], v_i(pc/h) $v_i=V_i/(PHF*f_{HV,PTSF}*f_{g,PTSF})$	*298*	*227*
Base percent time-spent-following[4], $BPTSF_d(\%)=100(1-e^{av_d^b})$	*30.8*	
Adj. for no-passing zone, $f_{np,PTSF}$ (Exhibit 15-21)	*15.1*	
Percent time-spent-following, $PTSF_d(\%)=BPTSF_d+f_{np,PTSF}*(v_{d,PTSF} / v_{d,PTSF} + v_{o,PTSF})$	*39.4*	

Level of Service and Other Performance Measures

Level of service, LOS (Exhibit 15-3)	*A*
Volume to capacity ratio, *v/c*	*0.17*

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	*1700*
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	*1700*
Percent Free-Flow Speed $PFFS_d$(Equation 15-11 - Class III only)	*89.6*
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*296.6*
Effective width, Wv (Eq. 15-29) ft	*24.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*4.07*
Bicycle level of service (Exhibit 15-4)	*D*

Notes

1. Note that the adjustment factor for level terrain is 1.00,as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i(v_d or v_o) >=1,700 pc/h, terminate analysis--the LOS is F.
3. For the analysis direction only and for v>200 veh/h.
4. For the analysis direction only
5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.
6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

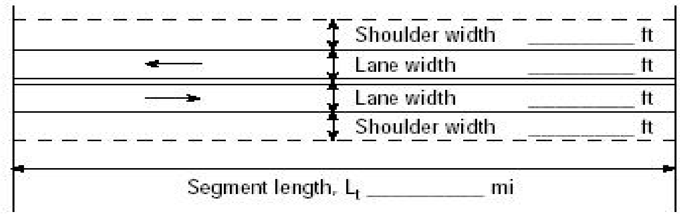
 HCS7™ TwoLane Version 7.4 Generated: 8/10/2023 2:37 PM

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET

General Information		Site Information	
Analyst		Highway / Direction of Travel	*US 26*
Agency or Company	*Parametrix*	From/To	*0.02 miles E-O Barnes Butte Rd*
Date Performed	*8/9/2023*	Jurisdiction	
Analysis Time Period	*PM Peak*	Analysis Year	*2022*

Project Description: *Prineville TSP Update*

Input Data



☐ Class I highway ☑ Class II highway ☐ Class III highway

Terrain ☑ Level ☐ Rolling

Grade Length mi	Up/down
Peak-hour factor, PHF	*0.84*
No-passing zone	*0%*
% Trucks and Buses , P_T	*6* %
% Recreational vehicles, P_R	*0%*
Access points *mi*	*12*/mi

Analysis direction vol., V_d	*184*veh/h
Opposing direction vol., V_o	*247*veh/h
Shoulder width ft	*7.0*
Lane Width ft	*12.0*
Segment Length mi	*1.0*

Average Travel Speed

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-11 or 15-12)	*1.5*	*1.4*
Passenger-car equivalents for RVs, E_R (Exhibit 15-11 or 15-13)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV,ATS}$=1/ (1+ P_T(E_T-1)+P_R(E_R-1))	*0.971*	*0.977*
Grade adjustment factor[1], $f_{g,ATS}$ (Exhibit 15-9)	*1.00*	*1.00*
Demand flow rate[2], v_i (pc/h) v_i=V_i / (PHF* $f_{g,ATS}$ * $f_{HV,ATS}$)	*226*	*301*

Free-Flow Speed from Field Measurement		Estimated Free-Flow Speed	
Mean speed of sample[3], S_{FM}		Base free-flow speed[4], BFFS	*45.0 mi/h*
Total demand flow rate, both directions, *v*		Adj. for lane and shoulder width,[4] f_{LS}(Exhibit 15-7)	*0.0 mi/h*
Free-flow speed, FFS=S_{FM}+0.00776(*v*/ $f_{HV,ATS}$)		Adj. for access points[4], f_A (Exhibit 15-8)	*3.0 mi/h*
Adj. for no-passing zones, $f_{np,ATS}$ (Exhibit 15-15)	*0.9 mi/h*	Free-flow speed, FFS (FSS=BFFS-f_{LS}-f_A)	*42.0 mi/h*
		Average travel speed, ATS_d=FFS-0.00776($v_{d,ATS}$ + $v_{o,ATS}$) - $f_{np,ATS}$	*37.0 mi/h*
		Percent free flow speed, PFFS	*88.1 %*

Percent Time-Spent-Following

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T(Exhibit 15-18 or 15-19)	*1.1*	*1.1*
Passenger-car equivalents for RVs, E_R (Exhibit 15-18 or 15-19)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, f_{HV}=1/ (1+ P_T(E_T-1)+P_R(E_R-1))	*0.994*	*0.994*
Grade adjustment factor[1], $f_{g,PTSF}$ (Exhibit 15-16 or Ex 15-17)	*1.00*	*1.00*
Directional flow rate[2], v_i(pc/h) v_i=V_i/(PHF*$f_{HV,PTSF}$* $f_{g,PTSF}$)	*220*	*296*
Base percent time-spent-following[4], $BPTSF_d$(%)=100(1-$e^{av_d^b}$)	*26.0*	
Adj. for no-passing zone, $f_{np,PTSF}$ (Exhibit 15-21)	*15.1*	
Percent time-spent-following, $PTSF_d$(%)=$BPTSF_d$+$f_{np,PTSF}$ *($v_{d,PTSF}$ / $v_{d,PTSF}$ + $v_{o,PTSF}$)	*32.4*	

Level of Service and Other Performance Measures

Level of service, LOS (Exhibit 15-3)	*A*
Volume to capacity ratio, *v/c*	*0.13*

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	*1700*
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	*1700*
Percent Free-Flow Speed $PFFS_d$(Equation 15-11 - Class III only)	*88.1*
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*219.0*
Effective width, Wv (Eq. 15-29) ft	*26.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*3.42*
Bicycle level of service (Exhibit 15-4)	*C*

Notes

1. Note that the adjustment factor for level terrain is 1.00,as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i(v_d or v_o) >=1,700 pc/h, terminate analysis--the LOS is F.
3. For the analysis direction only and for v>200 veh/h.
4. For the analysis direction only
5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.
6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

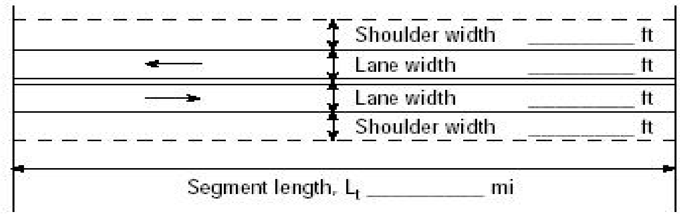
 *HCS*TM TwoLane Version 7.5 Generated: 8/16/2023 11:47 AM

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET

General Information		***Site Information***	
Analyst		Highway / Direction of Travel	*OR-370*
Agency or Company	*Parametrix*	From/To	*0.02 miles W-O NW Wes*
Date Performed	*8/9/2023*	Jurisdiction	
Analysis Time Period	*PM Peak*	Analysis Year	*2022*

Project Description: *Prineville TSP Update*

Input Data



☑ Class I highway ☐ Class II highway ☐ Class III highway

Terrain ☑ Level ☐ Rolling

Analysis direction vol., V_d	*230*veh/h
Opposing direction vol., V_o	*135*veh/h
Shoulder width ft	*5.0*
Lane Width ft	*12.0*
Segment Length mi	*1.0*

Grade Length mi	Up/down
Peak-hour factor, PHF	*0.81*
No-passing zone	*0%*
% Trucks and Buses , P_T	*6* %
% Recreational vehicles, P_R	*0%*
Access points *mi*	*14*/mi

Average Travel Speed

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-11 or 15-12)	*1.4*	*1.6*
Passenger-car equivalents for RVs, E_R (Exhibit 15-11 or 15-13)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV,ATS}$=1/ (1+ P_T(E_T-1)+P_R(E_R-1))	*0.977*	*0.965*
Grade adjustment factor[1], $f_{g,ATS}$ (Exhibit 15-9)	*1.00*	*1.00*
Demand flow rate[2], v_i (pc/h) v_i=V_i / (PHF* $f_{g,ATS}$ * $f_{HV,ATS}$)	*291*	*173*

Free-Flow Speed from Field Measurement		**Estimated Free-Flow Speed**	
Mean speed of sample[3], S_{FM}		Base free-flow speed[4], BFFS	*55.0 mi/h*
Total demand flow rate, both directions, *v*		Adj. for lane and shoulder width,[4] f_{LS}(Exhibit 15-7)	*1.3 mi/h*
Free-flow speed, FFS=S_{FM}+0.00776(*v*/ $f_{HV,ATS}$)		Adj. for access points[4], f_A (Exhibit 15-8)	*3.5 mi/h*
Adj. for no-passing zones, $f_{np,ATS}$ (Exhibit 15-15)	*0.9 mi/h*	Free-flow speed, FFS (FSS=BFFS-f_{LS}-f_A)	*50.2 mi/h*
		Average travel speed, ATS_d=FFS-0.00776($v_{d,ATS}$ + $v_{o,ATS}$) - $f_{np,ATS}$	*45.7 mi/h*
		Percent free flow speed, PFFS	*91.0 %*

Percent Time-Spent-Following

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T(Exhibit 15-18 or 15-19)	*1.1*	*1.1*
Passenger-car equivalents for RVs, E_R (Exhibit 15-18 or 15-19)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, f_{HV}=1/ (1+ P_T(E_T-1)+P_R(E_R-1))	*0.994*	*0.994*
Grade adjustment factor[1], $f_{g,PTSF}$ (Exhibit 15-16 or Ex 15-17)	*1.00*	*1.00*
Directional flow rate[2], v_i(pc/h) v_i=V_i/(PHF*$f_{HV,PTSF}$* $f_{g,PTSF}$)	*286*	*168*
Base percent time-spent-following[4], $BPTSF_d$(%)=100(1-$e^{av_d^b}$)	*29.1*	
Adj. for no-passing zone, $f_{np,PTSF}$ (Exhibit 15-21)	*13.5*	
Percent time-spent-following, $PTSF_d$(%)=$BPTSF_d$+$f_{np,PTSF}$ *($v_{d,PTSF}$ / $v_{d,PTSF}$ + $v_{o,PTSF}$)	*37.6*	

Level of Service and Other Performance Measures

Level of service, LOS (Exhibit 15-3)	*C*
Volume to capacity ratio, *v/c*	*0.17*

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	*1700*
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	*1700*
Percent Free-Flow Speed $PFFS_d$(Equation 15-11 - Class III only)	*91.0*
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*284.0*
Effective width, Wv (Eq. 15-29) ft	*22.00*
Effective speed factor, S_t (Eq. 15-30)	*4.79*
Bicycle level of service score, BLOS (Eq. 15-31)	*4.51*
Bicycle level of service (Exhibit 15-4)	*E*
Notes	

1. Note that the adjustment factor for level terrain is 1.00,as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i(v_d or v_o) >=1,700 pc/h, terminate analysis--the LOS is F.
3. For the analysis direction only and for v>200 veh/h.
4. For the analysis direction only
5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.
6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

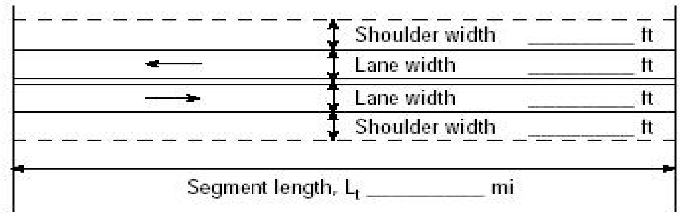
 HCS7™ TwoLane Version 7.4 Generated: 8/11/2023 7:45 AM

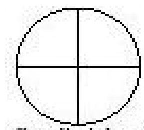
DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET

General Information		Site Information	
Analyst		Highway / Direction of Travel	*OR-380*
Agency or Company	*Parametrix*	From/To	*0.05 miles SE-O Juniper Canyon*
Date Performed	*8/9/2023*	Jurisdiction	
Analysis Time Period	*PM Peak*	Analysis Year	*2022*

Project Description: *Prineville TSP Update*

Input Data





☐ Class I highway ☑ Class II highway ☐ Class III highway

Terrain ☑ Level ☐ Rolling

Analysis direction vol., V_d	*63*veh/h
Opposing direction vol., V_o	*59*veh/h
Shoulder width ft	*4.0*
Lane Width ft	*12.0*
Segment Length mi	*1.0*
Grade Length mi	Up/down
Peak-hour factor, PHF	*0.89*
No-passing zone	*0%*
% Trucks and Buses , P_T	*6* %
% Recreational vehicles, P_R	*0%*
Access points *mi*	*6*/mi

Average Travel Speed

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-11 or 15-12)	*1.9*	*1.9*
Passenger-car equivalents for RVs, E_R (Exhibit 15-11 or 15-13)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV,ATS}=1/(1+P_T(E_T-1)+P_R(E_R-1))$	*0.949*	*0.949*
Grade adjustment factor[1], $f_{g,ATS}$ (Exhibit 15-9)	*1.00*	*1.00*
Demand flow rate[2], v_i (pc/h) $v_i=V_i/(PHF*f_{g,ATS}*f_{HV,ATS})$	*75*	*70*

Free-Flow Speed from Field Measurement		Estimated Free-Flow Speed	
Mean speed of sample[3], S_{FM}		Base free-flow speed[4], BFFS	*45.0* mi/h
Total demand flow rate, both directions, *v*		Adj. for lane and shoulder width,[4] f_{LS}(Exhibit 15-7)	*1.3* mi/h
Free-flow speed, $FFS=S_{FM}+0.00776(v/f_{HV,ATS})$		Adj. for access points[4], f_A (Exhibit 15-8)	*1.5* mi/h
Adj. for no-passing zones, $f_{np,ATS}$ (Exhibit 15-15)	*0.1* mi/h	Free-flow speed, FFS (FSS=BFFS-f_{LS}-f_A)	*42.2* mi/h
		Average travel speed, $ATS_d=FFS-0.00776(v_{d,ATS}+v_{o,ATS})-f_{np,ATS}$	*41.0* mi/h
		Percent free flow speed, PFFS	*97.1* %

Percent Time-Spent-Following

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T(Exhibit 15-18 or 15-19)	*1.1*	*1.1*
Passenger-car equivalents for RVs, E_R (Exhibit 15-18 or 15-19)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV}=1/(1+P_T(E_T-1)+P_R(E_R-1))$	*0.994*	*0.994*
Grade adjustment factor[1], $f_{g,PTSF}$ (Exhibit 15-16 or Ex 15-17)	*1.00*	*1.00*
Directional flow rate[2], v_i(pc/h) $v_i=V_i/(PHF*f_{HV,PTSF}*f_{g,PTSF})$	*71*	*67*
Base percent time-spent-following[4], $BPTSF_d(\%)=100(1-e^{av_d^b})$	*8.5*	
Adj. for no-passing zone, $f_{np,PTSF}$ (Exhibit 15-21)	*9.3*	
Percent time-spent-following, $PTSF_d(\%)=BPTSF_d+f_{np,PTSF}*(v_{d,PTSF}/v_{d,PTSF}+v_{o,PTSF})$	*13.3*	

Level of Service and Other Performance Measures

Level of service, LOS (Exhibit 15-3)	*A*
Volume to capacity ratio, *v/c*	*0.04*

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	*1700*
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	*1700*
Percent Free-Flow Speed $PFFS_d$(Equation 15-11 - Class III only)	*97.1*
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*70.8*
Effective width, Wv (Eq. 15-29) ft	*26.96*
Effective speed factor, S_t (Eq. 15-30)	*4.42*
Bicycle level of service score, BLOS (Eq. 15-31)	*2.40*
Bicycle level of service (Exhibit 15-4)	*B*

Notes

1. Note that the adjustment factor for level terrain is 1.00,as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i(v_d or v_o) >=1,700 pc/h, terminate analysis--the LOS is F.
3. For the analysis direction only and for v>200 veh/h.
4. For the analysis direction only
5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.
6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

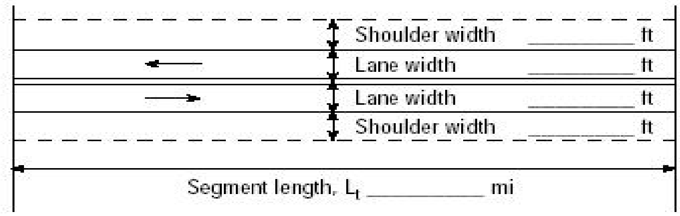
 HCS7™ TwoLane Version 7.4 Generated: 8/11/2023 9:59 AM

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET

General Information		***Site Information***	
Analyst		Highway / Direction of Travel	*OR-27*
Agency or Company	*Parametrix*	From/To	*1.92 miles S of US-26*
Date Performed	*8/9/2023*	Jurisdiction	
Analysis Time Period	*PM Peak*	Analysis Year	*2022*

Project Description: *Prineville TSP Update*

Input Data



Analysis direction vol., V_d	*15*veh/h
Opposing direction vol., V_o	*15*veh/h
Shoulder width ft	*2.0*
Lane Width ft	*11.5*
Segment Length mi	*1.0*

☐ Class I highway ☑ Class II highway ☐ Class III highway

Terrain ☑ Level ☐ Rolling

Grade Length mi	Up/down
Peak-hour factor, PHF	*0.63*
No-passing zone	*0%*
% Trucks and Buses , P_T	*6 %*
% Recreational vehicles, P_R	*0%*
Access points *mi*	*3/mi*

Average Travel Speed

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-11 or 15-12)	*1.9*	*1.9*
Passenger-car equivalents for RVs, E_R (Exhibit 15-11 or 15-13)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV,ATS}$=1/ (1+ P_T (E_T -1)+P_R (E_R -1))	*0.949*	*0.949*
Grade adjustment factor[1], $f_{g,ATS}$ (Exhibit 15-9)	*1.00*	*1.00*
Demand flow rate[2], v_i (pc/h) v_i=V_i / (PHF* $f_{g,ATS}$ * $f_{HV,ATS}$)	*25*	*25*

Free-Flow Speed from Field Measurement		**Estimated Free-Flow Speed**	
Mean speed of sample[3], S_{FM}		Base free-flow speed[4], BFFS	*45.0 mi/h*
Total demand flow rate, both directions, *v*		Adj. for lane and shoulder width,[4] f_{LS}(Exhibit 15-7)	*3.0 mi/h*
Free-flow speed, FFS=S_{FM}+0.00776(*v*/ $f_{HV,ATS}$)		Adj. for access points[4], f_A (Exhibit 15-8)	*0.8 mi/h*
Adj. for no-passing zones, $f_{np,ATS}$ (Exhibit 15-15)	*0.1 mi/h*	Free-flow speed, FFS (FSS=BFFS-f_{LS}-f_A)	*41.3 mi/h*
		Average travel speed, ATS_d=FFS-0.00776($v_{d,ATS}$ + $v_{o,ATS}$) - $f_{np,ATS}$	*40.8 mi/h*
		Percent free flow speed, PFFS	*98.8 %*

Percent Time-Spent-Following

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T(Exhibit 15-18 or 15-19)	*1.1*	*1.1*
Passenger-car equivalents for RVs, E_R (Exhibit 15-18 or 15-19)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, f_{HV}=1/ (1+ P_T(E_T-1)+P_R(E_R-1))	*0.994*	*0.994*
Grade adjustment factor[1], $f_{g,PTSF}$ (Exhibit 15-16 or Ex 15-17)	*1.00*	*1.00*
Directional flow rate[2], v_i(pc/h) v_i=V_i/(PHF*$f_{HV,PTSF}$* $f_{g,PTSF}$)	*24*	*24*
Base percent time-spent-following[4], $BPTSF_d$(%)=100(1-$e^{av_d^b}$)	*3.0*	
Adj. for no-passing zone, $f_{np,PTSF}$ (Exhibit 15-21)	*9.0*	
Percent time-spent-following, $PTSF_d$(%)=$BPTSF_d$+$f_{np,PTSF}$ *($v_{d,PTSF}$ / $v_{d,PTSF}$ + $v_{o,PTSF}$)	*7.5*	

Level of Service and Other Performance Measures

Level of service, LOS (Exhibit 15-3)	*A*
Volume to capacity ratio, *v/c*	*0.01*

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	*1700*
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	*1700*
Percent Free-Flow Speed $PFFS_d$(Equation 15-11 - Class III only)	*98.8*
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*23.8*
Effective width, Wv (Eq. 15-29) ft	*25.99*
Effective speed factor, S_t (Eq. 15-30)	*4.17*
Bicycle level of service score, BLOS (Eq. 15-31)	*1.97*
Bicycle level of service (Exhibit 15-4)	*B*

Notes

1. Note that the adjustment factor for level terrain is 1.00,as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i(v_d or v_o) >=1,700 pc/h, terminate analysis--the LOS is F.
3. For the analysis direction only and for v>200 veh/h.
4. For the analysis direction only
5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.
6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

 HCS7™ TwoLane Version 7.4 Generated: 8/11/2023 12:04 PM

Appendix D

Additional Maps

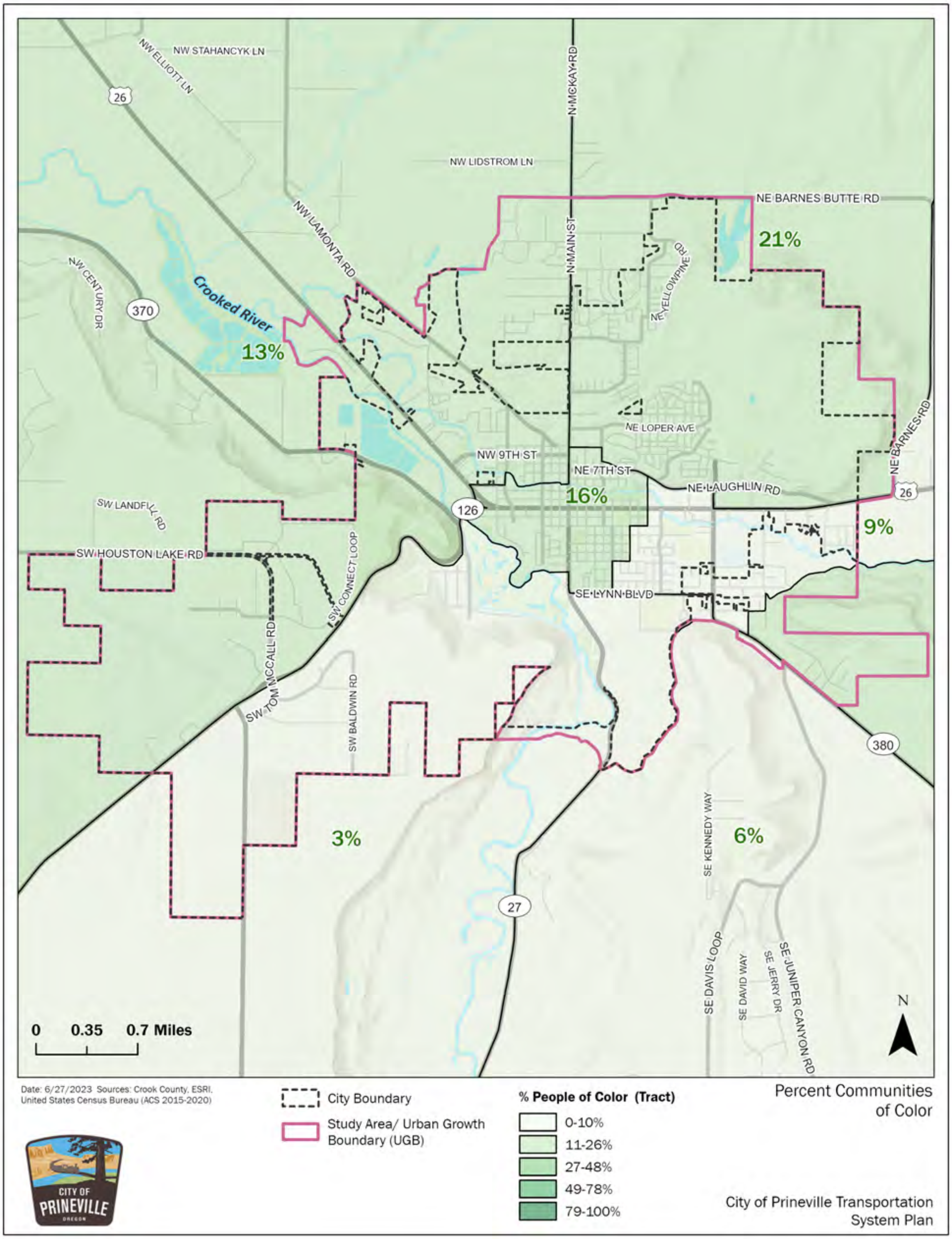


Figure D-1. Percent Communities of Color Population

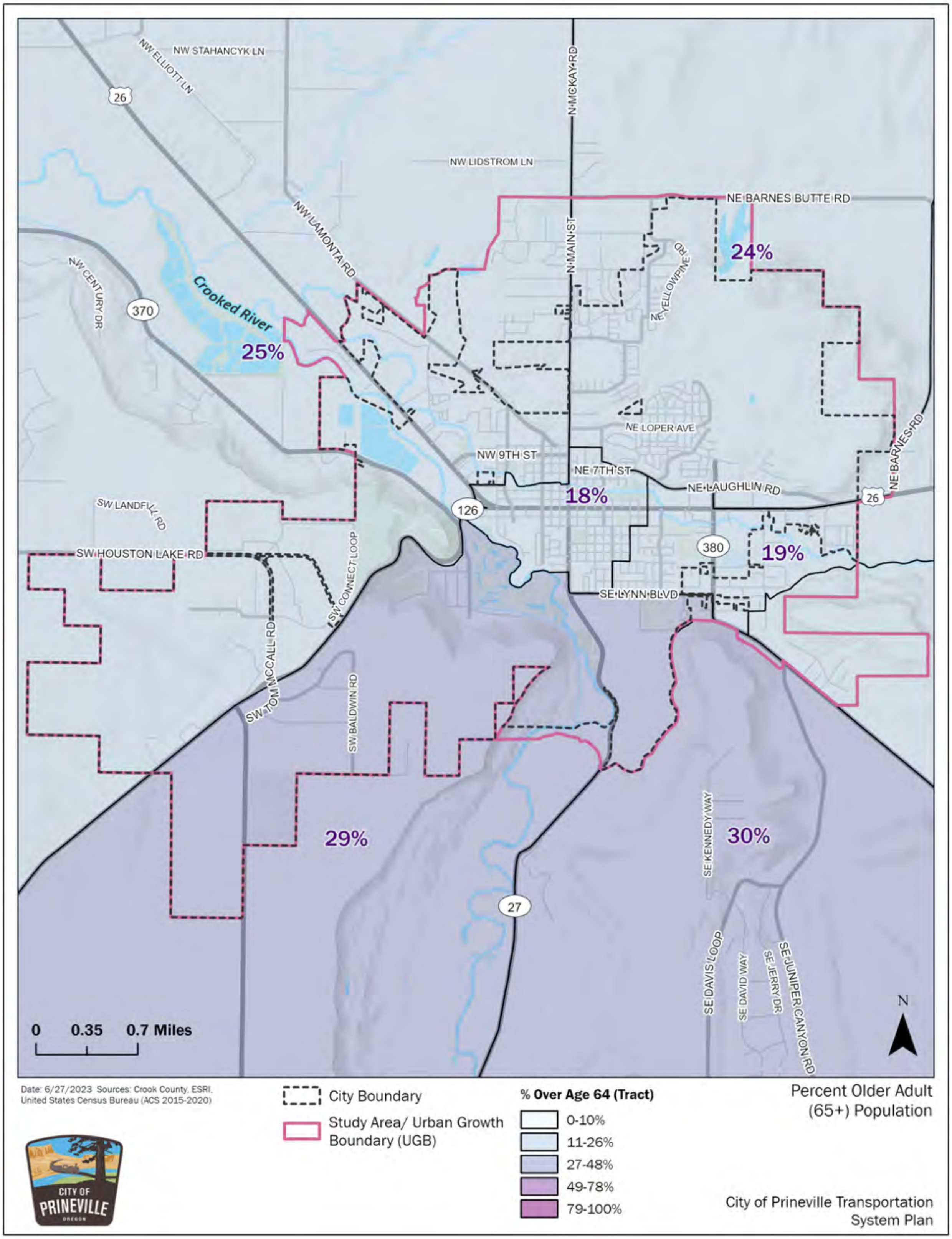


Figure D-2. Percent Older Adult (65+) Population

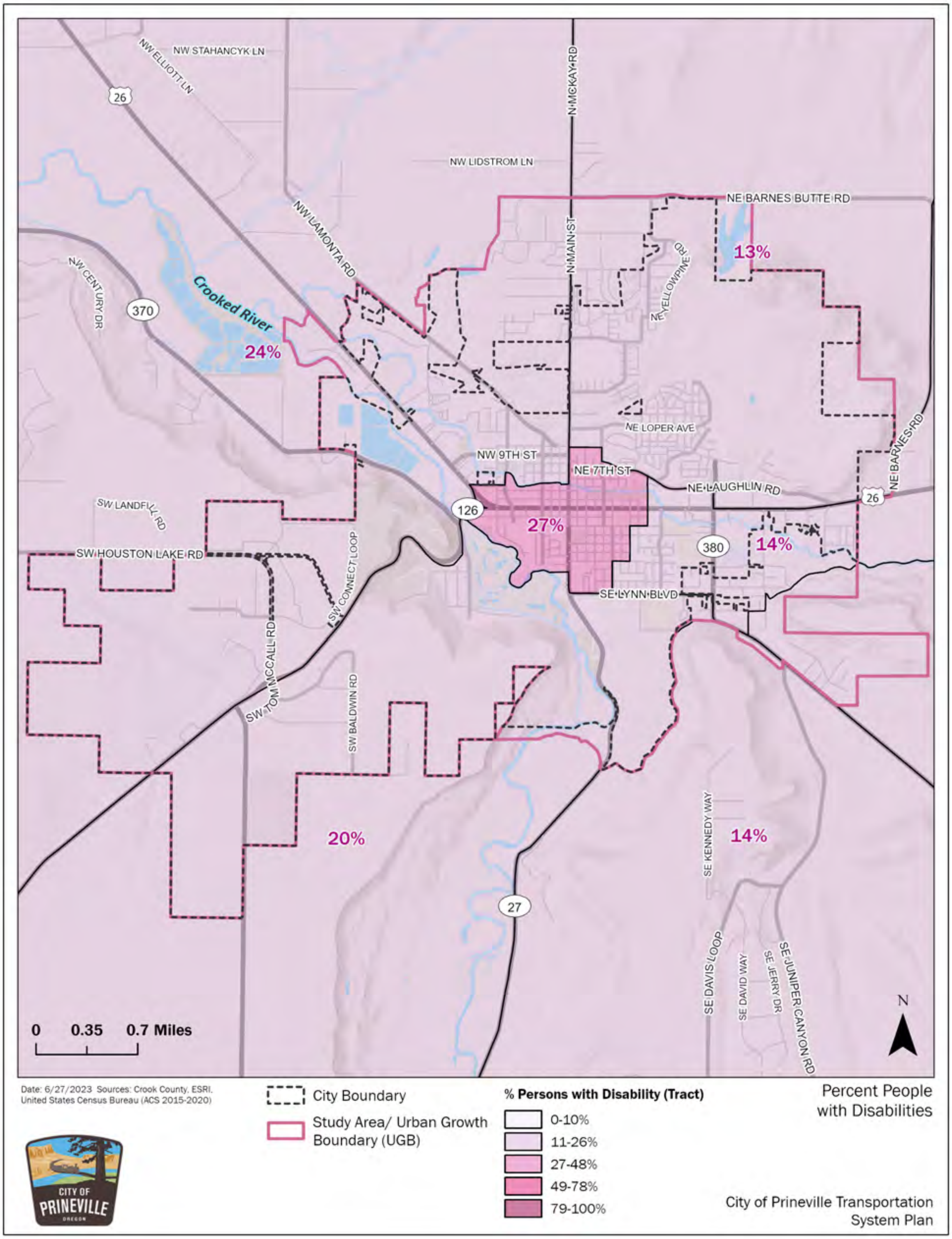


Figure D-3. Percent People with Disabilities

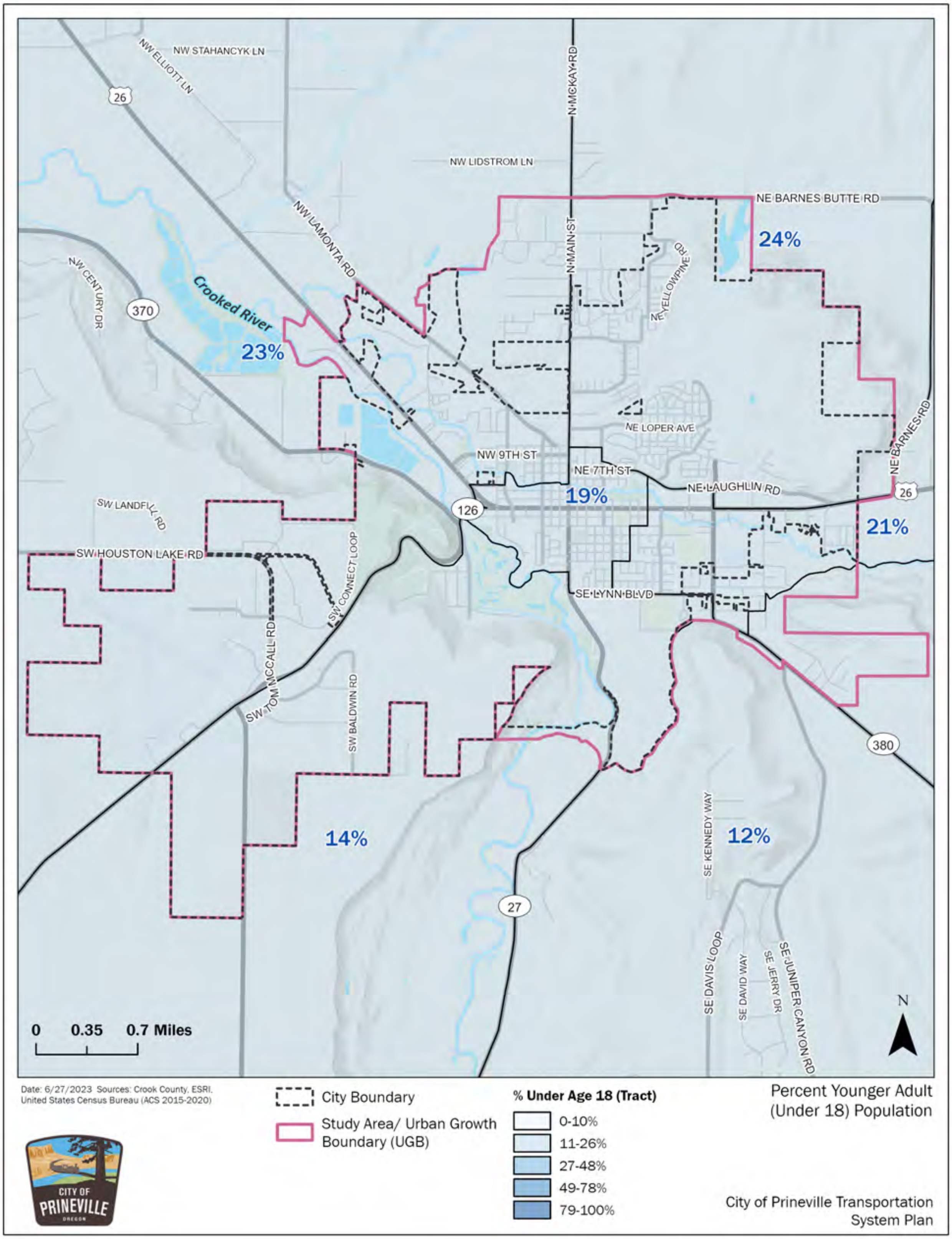


Figure D-4. Percent Younger Adult (Under 18) Population

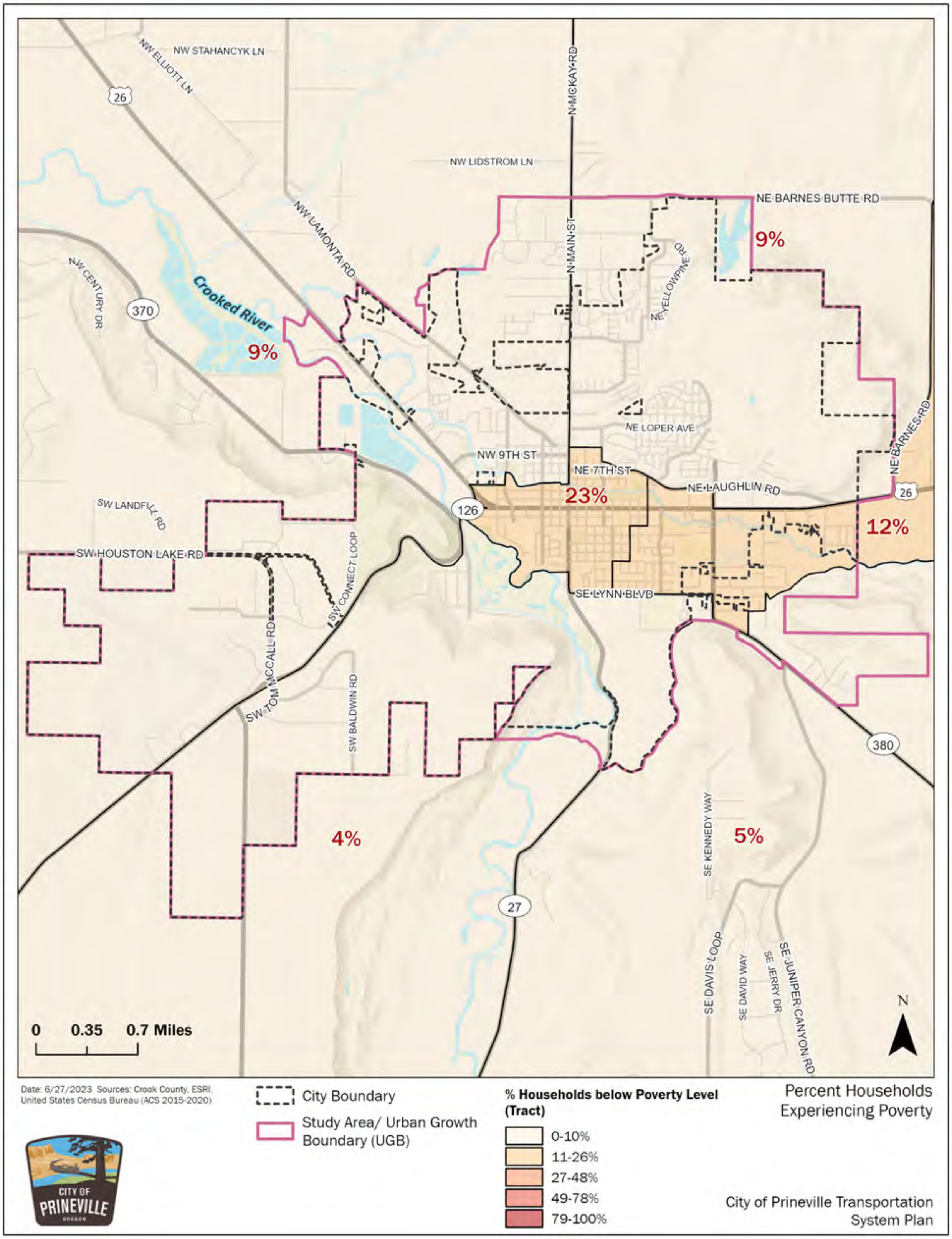


Figure D-5. Percent Households Experiencing Poverty

Appendix D

Future Conditions

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TECHNICAL MEMORANDUM

DATE: January 23, 2024

TO: City of Prineville
Ken Shonkwiler, ODOT R4

FROM: Emily Welter, PE, Ryan Farncomb, Matt Flodin

SUBJECT: Final Technical Memo 3B: Future System Conditions

PROJECT NAME: Prineville TSP Update

This memorandum documents future land use and transportation system conditions in Prineville as a supplement to *Technical Memorandum 3A: Existing Conditions*. This memo includes findings related to the performance of the transportation system under future "no build" conditions; "no build" conditions refer to the transportation system in the year 2045 if no transportation system investments beyond basic maintenance and preservation are made beyond those already programmed. This analysis helps show where the transportation system is likely to be deficient in the future and sets the stage for conversations about future transportation issues that may be addressed by the TSP.

NEEDS AND ISSUES SUMMARY

Future Traffic Volumes

Two scenarios were evaluated: the Future No Build and Future No Build (with High Land Use) scenario. The overall total growth rate for the Future No Build scenario is 6.4% for 2022 to 2045 and the overall total growth rate for the Future No Build (with High Land Use) scenario is 13.6% for 2022 to 2045.

Intersection Operations Analysis

The study intersections were evaluated against mobility targets established by the City, Crook County, and ODOT depending on the jurisdiction. For the unsignalized intersections, v/c ratios and delay were reported for the worst movement and for signalized intersections, the reported v/c ratios and delays represent the overall intersection operations.

Future No Build

Four of the 24 intersections analyzed exceed the mobility target for volume-to-capacity (v/c) ratio, including NW Harwood Avenue/NW 3rd Street (U.S. 26), EB OR 126/EB U.S. 26, OR 126/O'Neil Highway (OR 370), and SW Tom McCall Road/OR 126.

Queue lengths in the 95th percentile exceed the storage length or the space between intersections at four of the 24 intersections analyzed, including N Main Street/NE 10th Street, NW Harwood Avenue/NW 3rd Street (U.S. 26), N Main Street/3rd Street (U.S. 26), and WB OR 126/WB U.S. 26. All of these queue lengths exceed the storage length or the space between intersections by less than 200 feet, or about eight vehicles.

Future No Build (with High Land Use)

Three of the six intersections analyzed exceed the mobility target for volume-to-capacity (v/c) ratio, including WB OR 126/WB U.S. 26, EB OR 126/EB U.S. 26, and SW Tom McCall Road/OR 126.

Queue lengths in the 95th percentile exceed the storage length or the space between intersections at four of the six intersections analyzed, including N Main Street/3rd Street (U.S. 26), WB OR 126/WB U.S. 26, EB OR 126/EB U.S. 26, and SW Tom McCall Road/OR 126. All of these queue lengths exceed the storage length or the space between intersections by less than 230 feet, or about nine vehicles.

FUTURE LAND USE, POPULATION, AND EMPLOYMENT

Future Land Use

The City's UGB provides future development capacity for the next 20 years of growth in Prineville. Figure 1 shows the Comprehensive Plan land use designations. The following areas in Prineville may see substantial growth that could influence transportation system needs:

1. Tom McCall area/Prineville Airport
2. Barnes Butte and the area east of NE Combs Flat Road, north of US 26/NE 3rd
3. Iron Horse site
4. Ochoco Lumber site
5. Area along US 26 between NW Lamonta Rd and NW O Neil Highway, southeast of the Crooked River Wetlands
6. Area around NW Lamonta Rd and NW Lon Smith Rd and the area east near N Main St and NE Peters Rd
7. Along S Main St / S Crooked River Highway near the Crook County Fairgrounds and south to Diversion Canal

Many large properties within the City have been master planned before the previous TSP. Two significant developments on the City's east side have influenced growth in Prineville over the planning period. The Ochoco Lumber site and Iron Horse continue as key redevelopment sites within Prineville given their size and location. The TSP update accounts for planned growth in these areas and other employment lands. Iron Horse is zoned for residential use and is expected to continue to support residential development. The Ochoco Lumber site is zoned as mixed-use, and supports medical office space, mixed-use retail, and residential development. Development of the Ochoco Lumber and Iron Horse properties will require strong multimodal connections between the downtown and the City's east side.

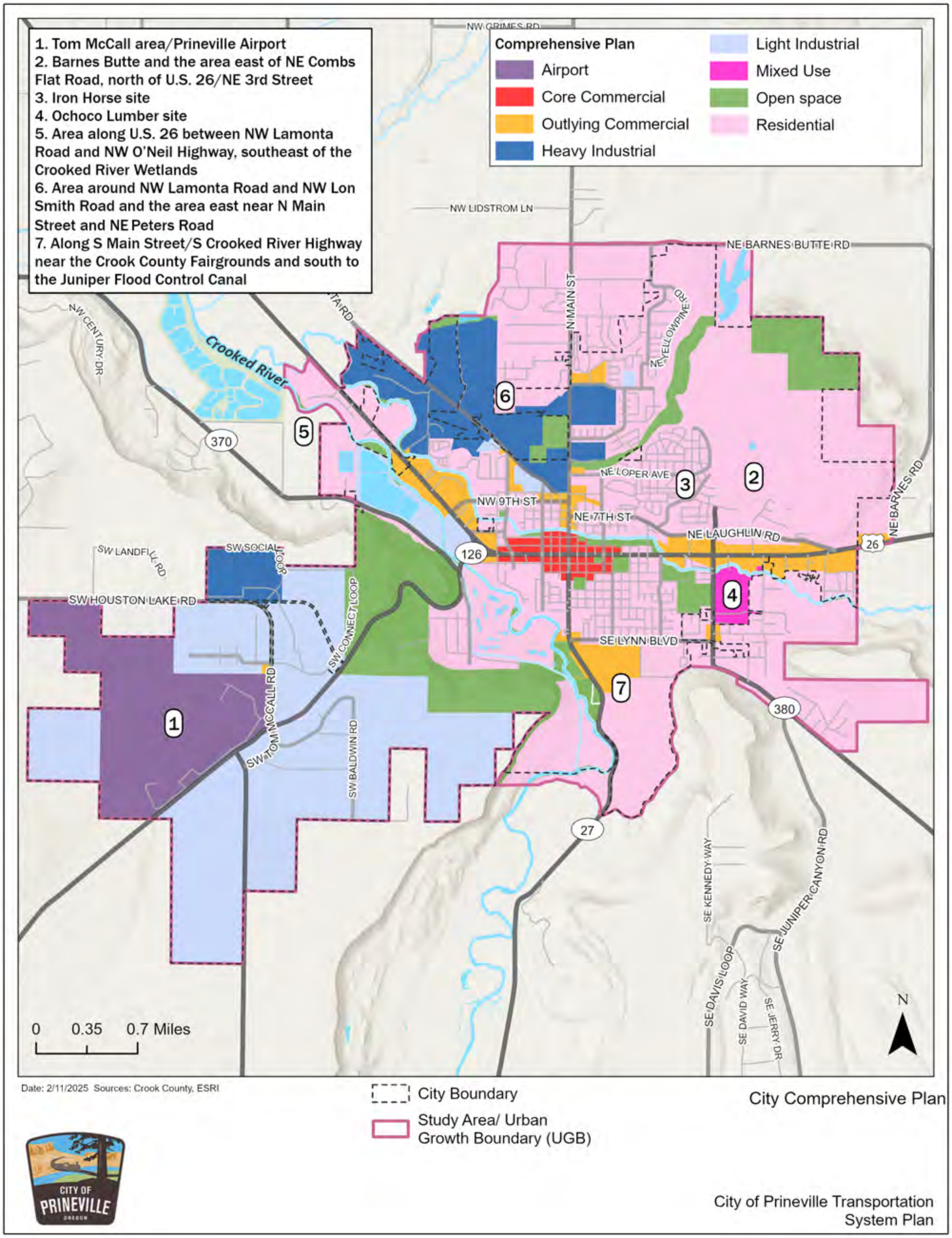


Figure 1: City Comprehensive Plan

Future Population

The 2045 population forecast for Prineville is 17,188 people, based on Portland State University (PSU) Population Center estimates (Table 2). This represents substantial growth of 25% over the next approximately 20 years.

Table 1. Prineville Population Forecast

UGB	2025	2030	2035	2040	2045
Prineville UGB	13,972	14,622	15,274	16,091	17,188

Source: Portland State University Population Research Center, 2022

Employment

According to the Oregon Employment Department, (OED), there were 5,238 jobs in Prineville as of 2019 and a 2045 forecast of 5,689 jobs, representing approximately 9% growth in employment through 2045. Employment growth is forecast to mainly occur within and near downtown and in the Tom McCall Business Park and adjacent industrial lands near the Prineville Airport. These figures are permanent jobs and do not represent temporary jobs related to construction that can substantially impact the transportation system. In the vicinity of the Prineville Airport in particular, hundreds of construction workers have been involved in data center site construction. Based on conversations with the industry, it is anticipated that the number of construction employees engaged at these sites will decrease in the future, with some construction employees present periodically throughout the planning horizon. While these are not permanent jobs, they can have a substantial effect on Prineville’s transportation system. The impacts of construction employment are discussed further in subsequent sections.

FUTURE “NO BUILD” AUTOMOBILE TRANSPORTATION CONDITIONS

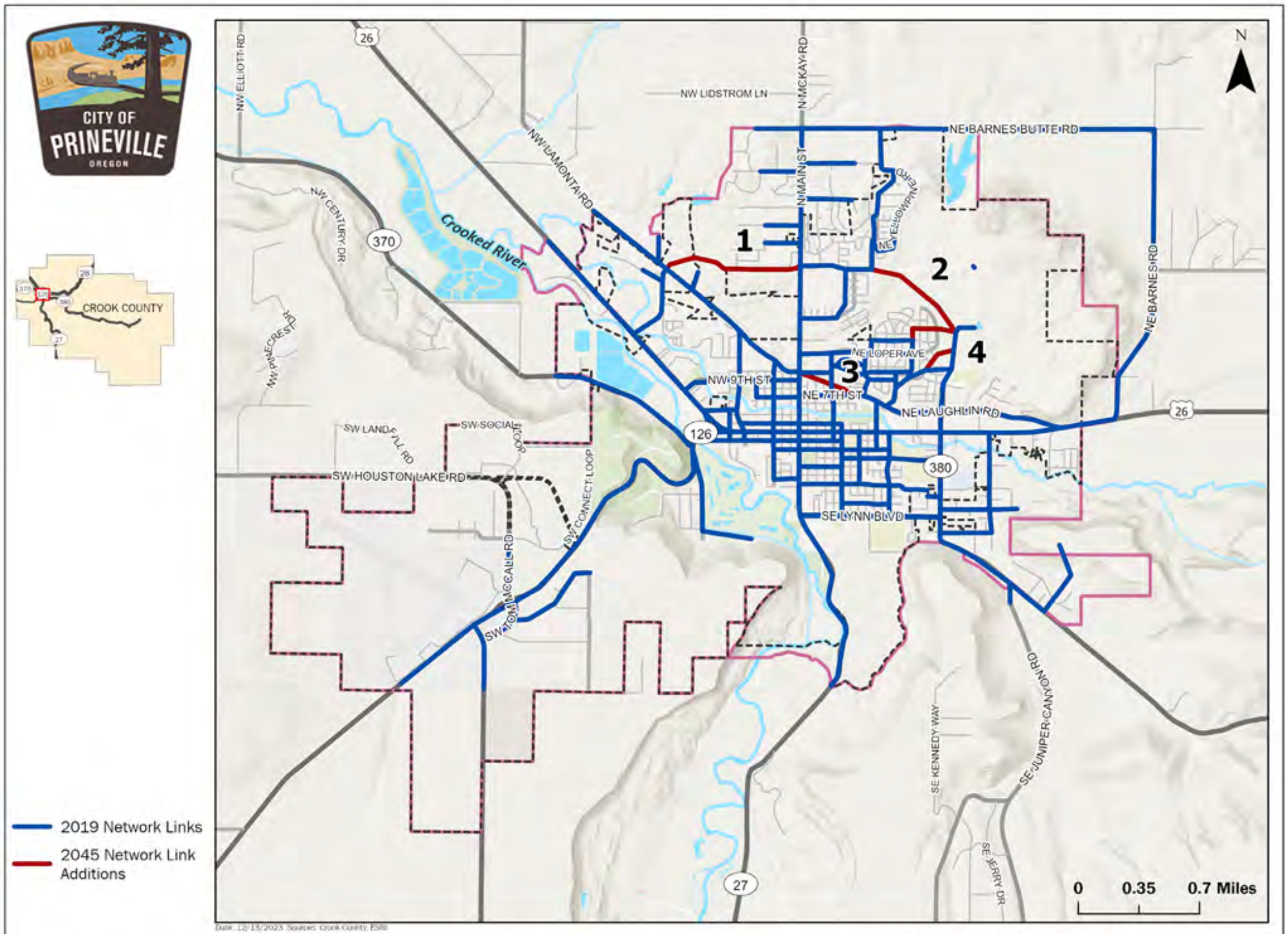
Future Roadway

Roadway Network

Roadway network changes for 2045 were informed by conversations with the City of Prineville and ODOT and based on future known developments and funded roadways. The following additions were made to the roadway network:

1. NE Peters Rd extension between N Main St and NW Lamonta Rd (expected implementation: by 2045 or sooner depending on development)
2. NE Combs Flat Rd extension to NE Peters Rd (expected implementation: between 2026 and 2030)
3. 9th St extension to NE 10th and N Main St intersection and down the current trail system to NE Laughlin Rd (expected implementation: by 2035)
4. NE Hudspeth Rd and NE Rimfire Dr connections to NE Combs Flat Rd extension (expected implementation: between 2026 and 2030)

Figure 2 below shows a map with the locations of each roadway change in the above list.



2045 Updates to the Model Network

Figure 2: 2045 Updates to the Model Network

Travel Demand Modeling

The travel demand modeling for 2045 was coordinated with ODOT's Transportation Planning and Analysis Unit (TPAU). The model in use for Prineville is the Oregon Small Urban Model (OSUM) that includes trip generation, distribution and trip assignment. There is no mode choice step in OSUM. Assignments are produced for the PM Peak hour only. Details around application of travel demand models in Oregon may be found in ODOT's Analysis Procedures Manual chapter 17 (https://www.oregon.gov/odot/Planning/Documents/APMv2.pdf).

Future year land use and networks were provided to TPAU staff to run through the OSUM model. A scenario in which higher construction employment was accounted for (**Future No Build with High Land Use**) was run through the model in addition to the baseline forecast of employment (**Future No Build**) that reflected a 9% growth in the region. This higher employment scenario included increases at two TAZs (in Tom McCall Business park) and resulted in a growth rate of 40% from 2019. It was important to evaluate the potential impact of this increase in employment even if it is temporary. Both growth scenarios were carried through the model and are presented below in the future traffic volumes analysis section.

Future Traffic Volumes

Future traffic forecasts for the horizon year 2045 were developed using linear growth rates from the travel demand model. These growth rates were calculated by comparing intersection peak hour volumes from the 2019 and 2045 demand models. Growth rates were calculated for both the Future No Build and Future No Build (with High Land Use) scenarios. Intersection counts for this study were collected in 2022, so the annual growth rates were used to calculate overall growth rates for 2022 to 2045.

For all 23 study intersections in the Future No Build scenario, the overall annual growth rate between the 2019 and 2045 models was +0.28% for an overall total growth rate of 6.4% for 2022 to 2045. For all 23 study intersections in the Future No Build (with High Land Use) scenario, the overall annual growth rate between the 2019 and 2045 models was +0.59% for an overall total growth rate of 13.6% for 2022 to 2045. Some intersections are expected to have a decrease in volume due to roadway network changes, so different growth rates were calculated for different groups of intersections instead of using the overall total growth rate. These growth rates were applied to the 2022 30 HV[1] intersection volumes to develop the 2045 intersection volumes. All 23 study intersections were evaluated for the Future No Build scenario while only six key intersections were evaluated for the Future No Build (with High Land Use) scenario.

The total growth rates for each intersection group for both the Future No Build and Future No Build (with High Land Use) scenarios are shown in Table 2. The peak hour intersection volumes for the 23 study intersections are shown in Figure 3 through Figure 5.

Table 2. Total Growth Rates from Year 2022 to Year 2045

Intersection Group	Future No Build Total Growth Rates	Future No Build (with High Land Use) Total Growth Rates
Intersections along Main Street (between 7th Street and 10th Street)	-30.1%	n/a
Intersections along US 26	8.1%	8.3%
Intersections along OR 126	14.1%	25.1%
All remaining intersections	16.5%	n/a

[1] 30 HV = 30th highest annual hour of traffic, per Chapter 5 of the ODOT Analysis Procedures Manual Version 2, Oregon Department of Transportation, April 2023.

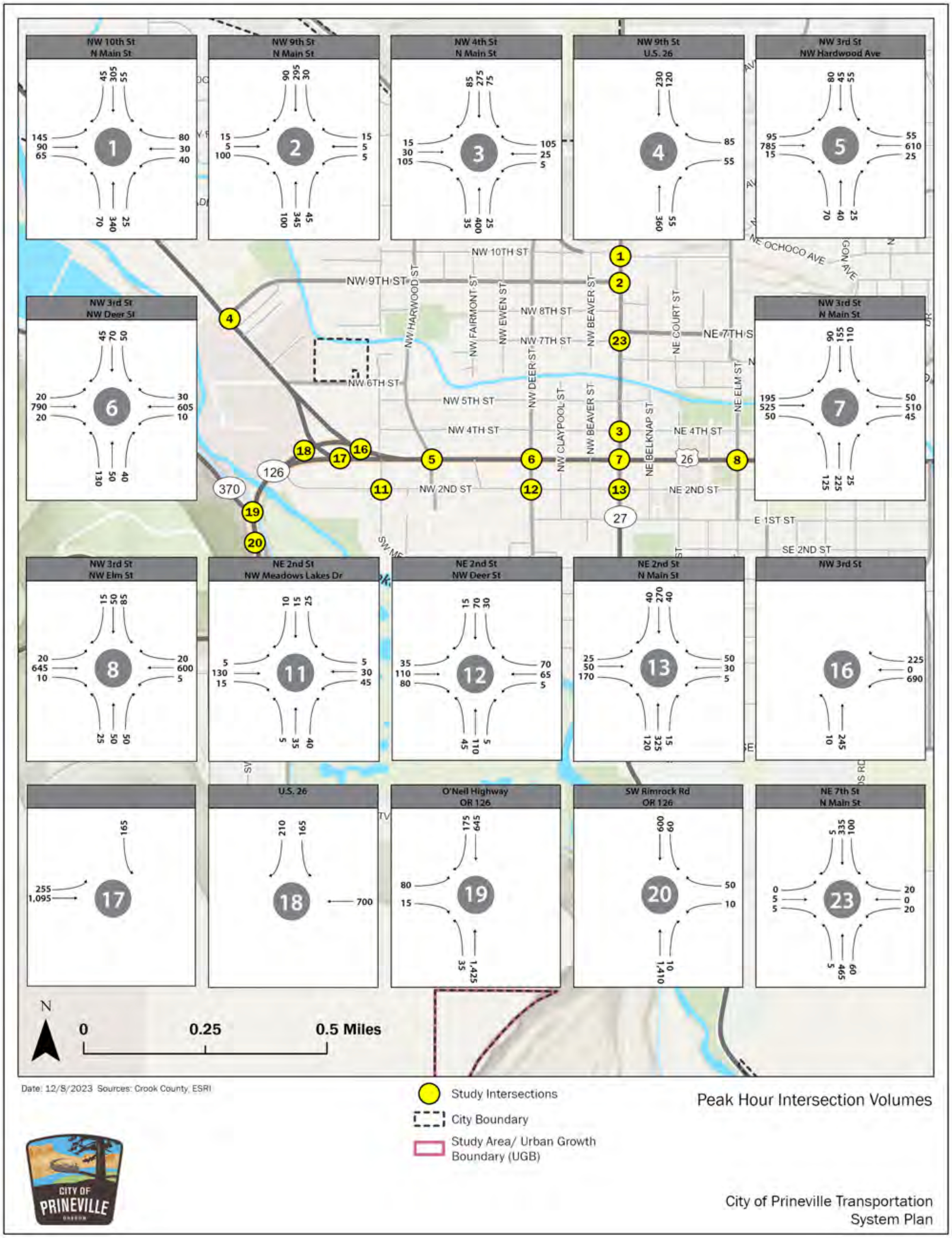


Figure 3. Year 2045 Future No Build Peak Hour Intersection Volumes

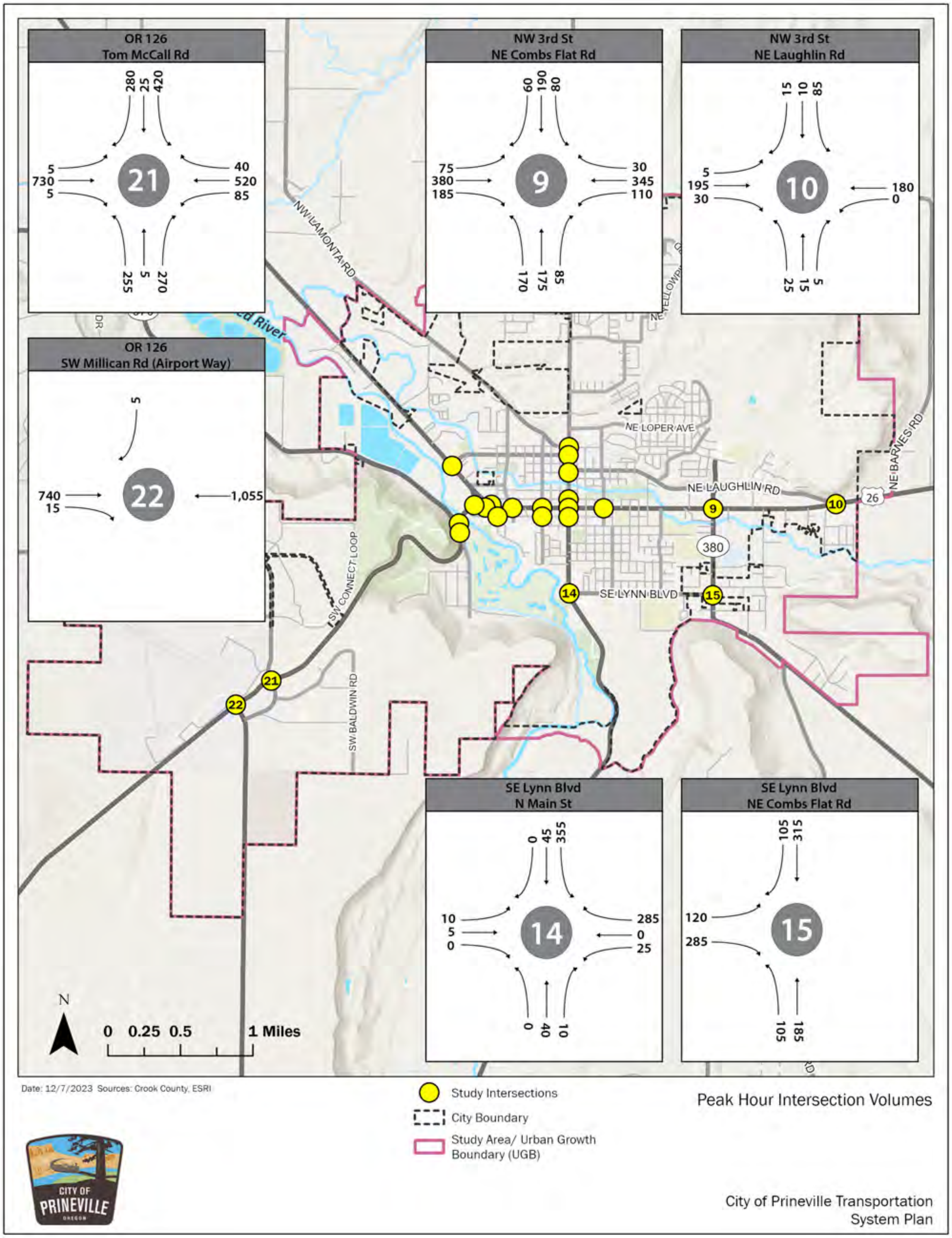


Figure 4. Year 2045 Future No Build Peak Hour Intersection Volumes

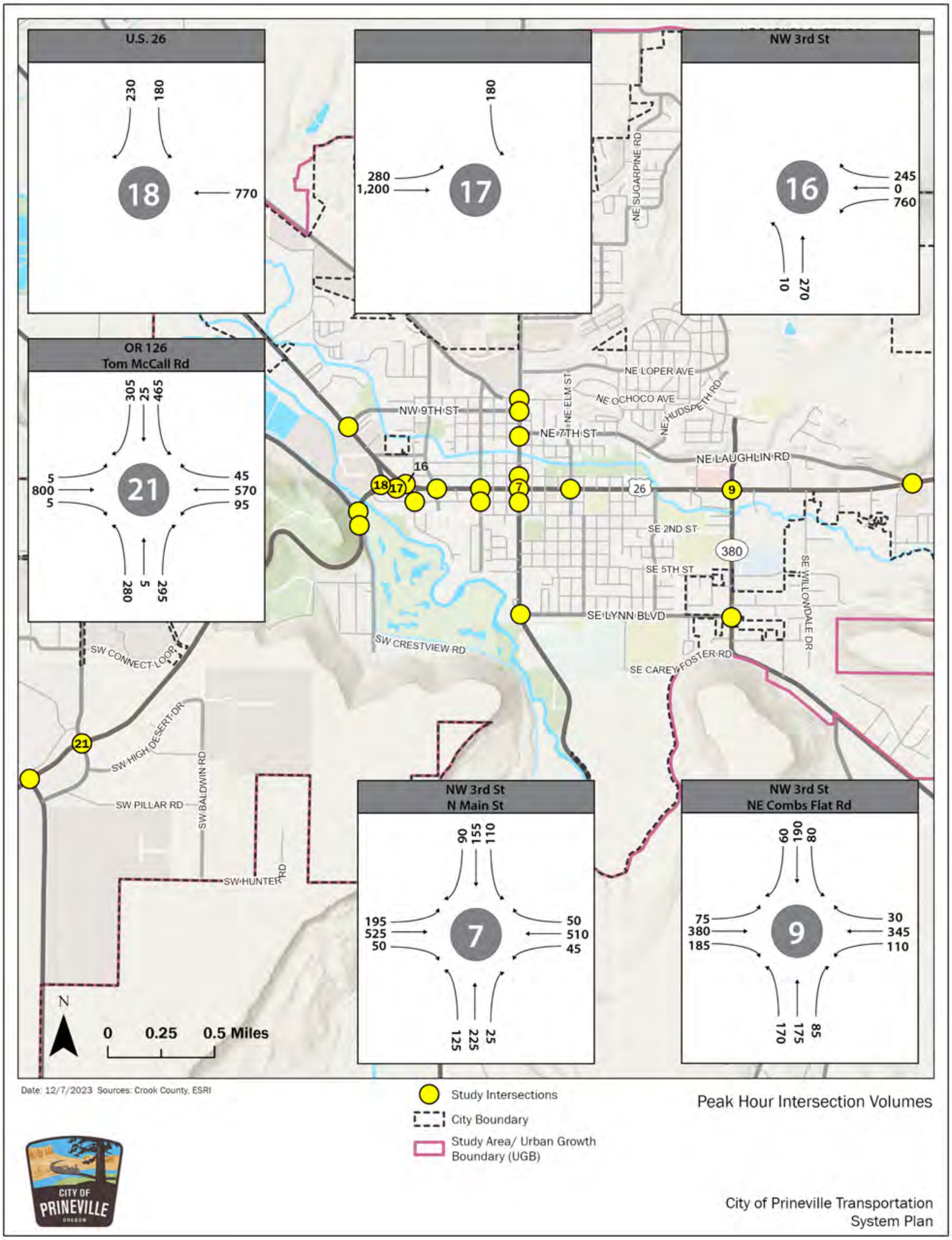


Figure 5. Year 2056 Future No Build (with High Land Use) Peak Hour Intersection Volumes

Note: Only six key intersections were evaluated for the Future No Build (with High Land Use) scenario.

Intersection Operations Analysis

Similar to the Year 2022 Existing Conditions analysis, the Year 2045 intersection operations analyses were compared to mobility targets. State highway mobility targets were developed for the 1999 Oregon Highway Plan (OHP)[2] as a method to gauge reasonable and consistent targets for traffic flow along state highways and are based on volume-to-capacity (v/c) ratio. When programming STIP projects, ODOT refers to future build mobility targets from Table 1200-1 of the Highway Design Manual[3] to consider 20-year growth mitigation. Level of service (LOS) is another metric that describes how well an intersection operates. Intersections receive a LOS grade from "A" to "F", where LOS "A" represents the best conditions with minimal delay at the intersection and LOS "F" represents the worst conditions. As part of the 2013 City of Prineville TSP, the City identified operations standards for LOS, v/c ratio, and 95th percentile queueing. Table 3 and Table 5 show the mobility targets for each study intersection. Additional information regarding intersection mobility targets is documented in Tech Memo #3: Analysis Methodology.

Traffic operations for the 23 study intersections were analyzed using Synchro and SIDRA[4]. Similar to Existing Conditions, intersection #23 was analyzed as two separate two-way stop-control intersections since there is 60 feet of space between NE 7th Street and NW 7th Street.

Delay, v/c ratios, and LOS were reported using Highway Capacity Manual (HCM) 6th Edition reports and HCM 2000 reports when HCM 6th Edition was not applicable and are summarized in Table 3 and Table 5. For the unsignalized intersections, v/c ratios and delay were reported for the worst movement. Volume-to-capacity ratios for the mainlines at two-way stop-controlled intersections were calculated based on ODOT Analysis Procedures Manual guidelines. For signalized intersections, the reported v/c ratios and delays represent the overall intersection operations. Volume-to-capacity ratios at the signalized intersections were calculated based on ODOT Analysis Procedures Manual guidelines for calculating critical intersection v/c ratios from Synchro.

Future No Build

For the Future No Build scenario, four of the 24 intersections analyzed exceed the mobility target for either v/c ratio or LOS (where applicable).

The critical intersection v/c ratios, or the sum of the flow ratios of the critical movements, were calculated based on ODOT APM guidelines for signalized intersections in Chapter 13. One of the intersections that exceeded mobility targets in Existing Conditions would no longer exceed mobility targets in the Future No Build scenario: N Main Street & 3rd Street/U.S. 26 (intersection #7). This is due to one movement that was considered critical in Existing Conditions no longer being considered critical in the Future No Build scenario, which impacts the calculation of critical intersection v/c ratios according to ODOT guidelines. Volumes do increase for every intersection movement at intersection #7 between Existing Conditions and the Future No Build scenario.

Table 3. Year 2045 Future No Build Traffic Operations – V/C Ratio, Delay, and LOS

#	Intersection	Control	Future No Build Mobility Target	V/C ratio	Delay (sec)	LOS	Exceeds Mobility Target?
1	N Main St & NE 10th St	Signalized	LOS E or better	0.58	20	B	No

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[2] 1999 Oregon Highway Plan including amendments November 1999 through January 2023, Oregon Department of Transportation, January 2023.[3] Highway Design Manual, Oregon Department of Transportation, 2023.

[3] Highway Design Manual, Oregon Department of Transportation, 2023.

[4] Synchro is mainly focused on the analysis of signalized intersections and arterials following current HCM methodologies. SIDRA is a lane-based mesoscopic analysis tool typically used for roundabouts.

#	Intersection	Control	Future No Build Mobility Target	V/C ratio	Delay (sec)	LOS	Exceeds Mobility Target?
			v/c ratio < 0.90				
2	N Main St & NW 9th St	TWSC	LOS E or better, v/c ratio < 1.0	0.24	17	C	No
3	N Main St & N 4th St	TWSC	LOS E or better, v/c ratio < 1.0	0.38	19	C	No
4	U.S. 26 & NW 9th St	TWSC	v/c < 0.90	0.13	13	B	No
5	NW Harwood Ave & NW 3rd St/U.S. 26	Signalized	v/c < 0.90	**1.49**	63	E	**Yes**
6	NW Deer St & NW 3rd St/U.S. 26	Signalized	v/c < 0.90	0.70	7	A	No
7	N Main St & 3rd St/U.S. 26	Signalized	v/c < 0.90	0.82	21	C	No
8	NE Elm St & NE 3rd St/U.S. 26	Signalized	v/c < 0.90	0.53	8	A	No
9	NE Combs Flat Rd/OR 380 & NE 3rd St/U.S. 26	Signalized	v/c < 0.90	0.82	32	C	No
10	NE Laughlin Rd & NE 3rd St/U.S. 26	TWSC	v/c < 0.80	0.19	13	B	No
11	NW Meadows Lakes Dr & NW 2nd St	TWSC	LOS E or better, v/c ratio < 1.0	0.08	11	B	No
12	NW Deer St & NW 2nd St	TWSC	LOS E or better, v/c ratio < 1.0	0.36	14	B	No
13	N Main St & N 2nd St	TWSC	LOS E or better, v/c ratio < 1.0	0.59	25	D	No
14	S Main St & SE Lynn Blvd	TWSC	LOS E or better, v/c ratio < 1.0	0.39	29	D	No
15	NE Combs Flat Rd/OR 380 & SE Lynn Blvd	TWSC	v/c < 0.85	0.83	39	E	No
16	WB OR 126 & WB U.S. 26	Ramp	v/c < 0.85	0.72	37	E	No
17	EB OR 126 & EB U.S. 26	Ramp	v/c < 0.85	**1.09**	158	F	**Yes**
18	WB OF 126 & EB U.S. 26	Ramp	v/c < 0.85	0.40	20	C	No
19	OR 126 & O'Neil Highway/OR 370	TWSC	v/c < 0.80	**2.07**	684	F	**Yes**
20	OR 126 & S Rimrock Rd	TWSC	v/c < 0.80	0.44	50	F	No
21	SW Tom McCall Rd & OR 126	Roundabout	v/c < 0.85	**1.22**	49	D	**Yes**
22	SW George Millican Rd & OR 126	TWSC	v/c < 0.85	0.02	19	C	No
23	N Main St & NE 7th St	TWSC	LOS E or better, v/c ratio < 1.0	0.10	14	B	No
24	N Main St & NW 7th St	TWSC	LOS E or better, v/c ratio < 1.0	0.02	12	B	No

Note: Red bold text indicates intersections that exceed the mobility target for either v/c ratio or LOS.

LOS = level of service; sec = seconds; TWSC = two-way stop control; v/c = volume to capacity

The 95th percentile queue lengths were analyzed using Synchro and SIDRA. For the Future No Build scenario, the 95th percentile queue lengths exceeded the storage length or the space between intersections at a single approach at four of the 24 intersections analyzed, including intersections #1, #5, #7, and #16 as shown in Table 4. All of these queues exceed the storage length or the space between intersections by less than 200 feet, or about eight vehicles. Traffic reports are available in Appendix A, Synchro and SIDRA Reports.

Table 4. Year 2045 Future No Build Traffic Operations – Queuing

#	Intersection/Approach	Control	Storage Length (ft)	95th Percentile Queue Length (ft)	Exceeds Storage Length?
1	N Main St & NE 10th St	Signalized			
	Eastbound approach		>1,000	150	No
	Westbound approach		320	60	No
	Northbound approach		230	**250**	**Yes**
	Southbound approach		570	230	No
5	NW Harwood Ave & NW 3rd St/U.S. 26	Signalized			
	Eastbound approach		430	**610**	**Yes**
	Westbound approach		>1,000	390	No
	Northbound approach		240	140	No
	Southbound approach		290	130	No
7	N Main St & 3rd St/U.S. 26	Signalized			
	Eastbound approach		870	590	No
	Westbound approach		>1,000	320	No
	Northbound approach		240	**260**	**Yes**
	Southbound approach		240	240	No
16	WB OR 126 & WB U.S. 26	Ramp			
	Westbound approach		160	0	No
	Northbound approach		100	**230**	**Yes**

Future No Build (with High Land Use)

The team conducted additional analysis on study intersections near the Tom McCall roundabout. For the Future No Build (with High Land Use) scenario, three of the six intersections analyzed exceed the mobility target for either v/c ratio or LOS (where applicable). One of the intersections that did not exceed mobility targets in Existing Conditions would exceed mobility targets in the Future No Build (with High Land Use) scenario: westbound OR 126 and westbound U.S. 26 (intersection #16). This is due to a large increase in volumes along OR 126.

Table 5. Year 2045 Future No Build (with High Land Use) Traffic Operations – V/C Ratio, Delay, and LOS

#	Intersection	Control	Future No Build Mobility Target	V/C ratio	Delay (sec)	LOS	Exceeds Mobility Target?
7	N Main St & 3rd St/U.S. 26	Signalized	v/c < 0.90	0.82	21	C	No
9	NE Combs Flat Rd/OR 380 & NE 3rd St/U.S. 26	Signalized	v/c < 0.90	0.82	32	C	No
16	WB OR 126 & WB U.S. 26	Ramp	v/c < 0.85	**0.88**	61	F	**Yes**
17	EB OR 126 & EB U.S. 26	Ramp	v/c < 0.85	**1.13**	293	F	**Yes**
18	WB OF 126 & EB U.S. 26	Ramp	v/c < 0.85	0.48	23	C	No
21	SW Tom McCall Rd & OR 126	Roundabout	v/c < 0.85	**1.50**	88	F	**Yes**

Note: Red bold text indicates intersections that exceed the mobility target for either v/c ratio or LOS.

LOS = level of service; sec = seconds; TWSC = two-way stop control; v/c = volume to capacity

The 95th percentile queue lengths were analyzed using Synchro. For the Future No Build (with High Land Use) scenario, the 95th percentile queue lengths exceeded the storage length or the space between intersections at a single approach at four of the six intersections analyzed, including intersections #7, #16, #17, and #21 as shown in Table 6. All of these queues exceed the storage length or the space between intersections by less than 230 feet, or about nine vehicles. Traffic reports are available in Appendix B, Synchro and SIDRA Reports.

Table 6. Year 2045 Future No Build (with High Land Use) Traffic Operations – Queuing

#	Intersection/Approach	Control	Storage Length (ft)	95th Percentile Queue Length (ft)	Exceeds Storage Length?
7	N Main St & 3rd St/U.S. 26	Signalized			
	Eastbound approach		870	520	No
	Westbound approach		>1,000	590	No
	Northbound approach		240	**260**	**Yes**
	Southbound approach		240	240	No
16	WB OR 126 & WB U.S. 26	Ramp			
	Westbound approach		160	0	No
	Northbound approach		100	**330**	**Yes**
17	EB OR 126 & EB U.S. 26	Ramp			
	Eastbound approach		280	**310**	**Yes**
	Northbound approach		560	0	No
21	SW Tom McCall Rd & OR 126	Roundabout			
	Eastbound approach		*1,400*	440	No
	Westbound approach		*2,000*	140	No
	Northbound approach		*1,900*	**2,070**	**Yes**
	Southbound approach		*2,000*	1,400	No

Two-Lane Highway Capacity Analysis

Similar to Existing Conditions, McTrans Highway Capacity Software (HCS) 2023, which is based on HCM 6th Edition methodologies, was used to determine the segment LOS and v/c ratio at five roadway segments. The roadway segments were evaluated for the Future No Build scenario only, using an overall total growth rate of +11.3% from 2022 to 2045. Similar to calculating growth rates to develop intersection volumes, as discussed in Future Traffic Volumes above, this growth rate was calculated by comparing intersection peak hour volumes from the 2019 and 2045 demand models for the study intersections along U.S. 26, OR 126, OR 370, and OR 380.

The roadway LOS and v/c ratios were calculated based on roadway characteristics such as highway class, lane and shoulder widths, and terrain, as well as the PM peak hour volumes and heavy vehicle percentages. As shown in Table 7, all five roadway segments operate at LOS A. The two-lane highway capacity analysis results are available in Appendix C, HCS Reports.

Table 7. Year 2045 Future No Build Traffic Operations – Two-Lane Highway Capacity Analysis

#	Segment	PM Peak Hour Volume Both Directions	Segment LOS	Segment V/C Ratio
A	U.S. 26, 0.50 miles east of Gumpert Rd	375 vph	A	0.13
B	U.S. 26, 0.02 miles east of Barnes Rd	345 vph	A	0.09
C	OR 370, 0.02 miles west of Westview Rd	295 vph	A	0.11
D	OR 380, 0.05 mile southeast of Juniper Canyon Rd	100 vph	A	0.03
E	OR 27, 1.92 miles south of U.S. 26 (MP 1.92)	25 vph	A	0.01

LOS = level of service; vph = vehicles per hour

Appendix E

Goals, Objectives, and Evaluation Criteria

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TECHNICAL MEMORANDUM

DATE:	September 15, 2023
TO:	Prineville TSP Project Team
FROM:	Ryan Farncomb, Matt Flodin (Parametrix)
SUBJECT:	FINAL Tech Memo #2: Goals, Objectives, and Evaluation Criteria
PROJECT NAME:	Prineville TSP Update

INTRODUCTION

This memorandum documents the goals, objectives, and evaluation criteria for the Prineville Transportation System Plan (TSP) Update. These will be used to guide development of the TSP, including programs, projects, and standards. The evaluation criteria will be used to prioritize potential transportation system investments.

In this memorandum, the project team proposes targeted updates to the 2013 TSP goals, objectives, and evaluation criteria to ensure the TSP is consistent with the Transportation Planning Rule (TPR) and other applicable statewide plans and policies, such as the Oregon Transportation Plan (OTP).

They will be reviewed by City staff, the Project Advisory Committee, and will be informed by community representative outreach in the first phase of the TSP project. The goals, objectives, and criteria may be revised to incorporate feedback from these groups.

UPDATED GOALS AND OBJECTIVES

The 2013 TSP includes goals, objectives, and evaluation criteria that reflect statewide and local plans, as well as local issues that the TSP seeks to address. These goals and objectives are presented below, along with proposed updates to reflect findings from Technical Memo #1: Plan and Policy Review. Proposed updates also reflect local transportation needs that have emerged or changed since the last TSP was updated.

The prior TSP included a large number of objectives. We recommend reducing the number of goals and objectives to ensure that the priorities of the City are truly reflected; a large number of goals and objectives can make it difficult to identify what the central priorities are for the transportation system.

Goal #1: Ensure a safe, efficient, and accessible transportation system for all users.

Objectives

- 1A. Implement safe routes to school (SRTS) plans and projects, and identify potential engineering components for future SRTS plans for local schools.
- 1B. Reduce crashes in Prineville, particularly higher severity injury and fatal crashes, and those involving more vulnerable roadway users such as pedestrians and bicyclists.
- 1C. Meet applicable City, County, and/or State operational performance measures or identify alternative measures as appropriate in balancing other City goals and needs.

- 1D. Assess impacts to low-income residents, minority populations, elderly populations, youth, and people living with disabilities when implementing transportation infrastructure projects.
- 1E. Implement planned new roadways, connections, and other TSP improvements as part of new development.

Goal #2: Build a complete system of walking and cycling routes that connect neighborhoods to schools, parks, jobs, and other key places.

Objectives

- 2A. Identify new connections for people walking and biking that make it easier and more direct to reach key destinations.
- 2B. Prioritize projects that improve pedestrian and bicycle system connectivity in areas near schools or other areas of high activity.
- 2C. Implement wayfinding and route markings to identify preferred walking and biking routes.
- 2D. Integrate multimodal transportation connections at key community destinations.

Goal #3: Build and maintain the transportation system to support economic development in the region.

Objectives

- 3A. Ensure street designs and improvements to state and local freight routes accommodate truck and rail deliveries.
- 3B. Address critical safety, multimodal access, and capacity bottlenecks on the local roadway and state highway system, including access and mobility to and around the Tom McCall Roundabout and Prineville Airport.
- 3C. Identify transportation alternatives that meet economic development, safety, and capacity needs at the lowest cost and maximize facilities' lifespan.
- 3D. Develop a supportable and sustainable financing method for funding necessary transportation improvements over the life of the TSP.

Goal #4 Improve system performance by balancing mobility and access along main travel routes, including on state highways

Objectives

- 4A. Address capacity constraints and reduce pressure on state highways by developing a comprehensive , local, multimodal network.
- 4B. Implement appropriate access management plans and policies that reflect the desired character and operations of roadways and that are feasible in terms of adoption and enforcement.
- 4C. Coordinate with Cascades East Transit to implement transit improvements included in the 2040 Transit Master Plan to improve transit as a viable alternative to driving.
- 4D. Ensure a well-connected and redundant transportation network to facilitate emergency services and evacuation routes during emergencies.

Goal #5: Minimize the impacts of the transportation system on the natural and built environment.

Objectives

- 5A. Provide pedestrian, cycling, transit, and micromobility options that make short trips in Prineville easy and reduce the need for travelling by car.
- 5B. Choose transportation alternatives that avoid displacing homes and businesses and that maintain Prineville's small-town character.
- 5C. Promote transportation demand management strategies (carpooling, flexible work hours, telecommuting, etc.) to reduce VMT on the transportation system.
- 5D. Ensure transportation improvements lead to a measurable reduction in greenhouse gas emissions.
- 5E. Improve regional connections from Prineville to Central Oregon by enhancing transit services, capitalizing on rail-to-trail opportunities, and promoting carpooling options.
- 5F. Invest in ITS and TSMO treatments to improve efficiency and safety in Prineville's transportation system.

EVALUATION FRAMEWORK

The 2013 TSP included a number of evaluation criteria corresponding to each of the objectives. Table 1 below proposes a simplified evaluation criteria matrix that focuses on criteria that will help evaluate and differentiate transportation alternatives from one another. Evaluation criteria in Table 1 are based on the refined goals and objectives above. Each project will be evaluated using a "Consumer Reports" scale as follows:

● Project meets or fully addresses the criterion

◖ Project partially meets or addresses the criterion

○ Project does not meet or has negative impacts with respect to the criterion

N/A: Not applicable

Table 1. Project and Program Evaluation Criteria

Goal	Criterion	How will we measure?
Goal #1: Ensure a safe, efficient, and accessible transportation system for all users	Project enhances transportation options, access, or mobility for vulnerable populations	• Qualitative assessment of effects on multimodal access or improved mobility options for low-income residents, elderly populations, youth, or people living with disabilities
	Project addresses a known safety issue identified during TSP development	• Qualitative assessment
Goal #2: Build a complete system of walking and cycling routes that connect neighborhoods to schools, parks, jobs, and other key places	Project provides new or enhanced connection for people walking, cycling, or using a mobility device and/or provides connection to a previously unserved destination like a grocery store, neighborhood, school, or recreation site	• Improvement in pedestrian or bicycle LTS, or, • Qualitative assessment
Goal #3: Build and maintain the transportation system to support economic development in the region	Project cost-effectively addresses a transportation need or issue	• Qualitative assessment of the degree to which an alternative or project addresses desired outcomes relative to cost • Cost information for projects will be provided without a rating

Goal	Criterion	How will we measure?
Goal #4: Improve system performance by balancing mobility and access along main travel routes, including on state highways	Project addresses transportation system performance on key state / local highways in town and/or improves the local network so as to reduce pressure on state highways	• Assessment based on traffic analysis and the travel model to determine performance (LOS or V/C ratio) of different alternatives
Goal 5. Minimize the impacts of the transportation system on the natural and built environment	Project minimizes significant right-of-way and/or residential, commercial, or industrial displacements, and/or impacts to known environmental resources	• Compare proposed alternatives/cross-sections to available ROW and street width, as well as available natural resource layers • Qualitative assessment of impacts to existing structures and/or known environmental resources.

v/c = volume to capacity ratio, a measure of traffic congestion. The higher the v/c ratio, the greater the vehicle congestion and associated delay.

LOS = Level of Service, a measure of vehicle delay. Graded "A" through "F," with "A" being free-flow conditions and "F" being gridlock.

Level of Traffic Stress (LTS) is a rating given to a road segment or crossing indicating the traffic stress it imposes on bicyclists and/or pedestrians.

Appendix F

Solutions Analysis and Funding

Final Technical Memorandum #4: Solutions Analysis and Funding Program

Prepared for

City of Prineville

Oregon Department of Transportation

March 2024

Parametrix

Final Technical Memorandum #4: Solutions Analysis and Funding Program

Prepared for

City of Prineville

Oregon Department of Transportation

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Acronyms and Abbreviations

AADT	annual average daily traffic
CET	Cascades East Transit
FY	fiscal year
HDM	Oregon Department of Transportation Highway Design Manual
LOS	level of service
M	million
ODOT	Oregon Department of Transportation
OR	Oregon
ROW	right-of-way
SDC	system development charge
TSMO	Transportation System Management and Operations
TSP	transportation system plan
UGB	urban growth boundary
V/C	volume to capacity

1. Introduction

This report identifies and evaluates draft alternatives for the City of Prineville Transportation System Plan (TSP) Update. The draft alternatives consist of transportation improvement projects, strategies, and potential programs to address transportation needs and opportunities in the city. The draft alternatives have been evaluated based on multiple criteria including TSP goals, technical analysis of benefits and trade-offs, and planning-level costs to develop recommendations and priorities for the TSP. Per the Oregon Department of Transportation (ODOT) requirements, this memorandum has been prepared under the supervision of Emily Welter and Cory Clausen, registered Professional Engineers (PEs) in Oregon.

The solutions analysis considered options for all transportation modes in the city, including driving, biking, walking, transit, and freight. These alternatives include investments that can be made to the City's transportation system, such as physical improvements to roads and crossings, strategies for managing traffic and parking, and boosting transit service throughout town. **The proposed solutions in this report were reviewed by the City, ODOT, and the Project Advisory Committee. These potential solutions will be further reviewed by the public to aid in the selection of the preferred solutions which will be documented in *Technical Memo #5: Preferred Plan*.**

2. Issues and Needs Summary

2.1 Motor Vehicle System

2.1.1 U.S. 26/3rd Street

U.S. 26/3rd Street is the main commercial thoroughfare in Prineville. It provides access to highways such as Oregon (OR) 370, OR 126, and OR 380 and to local destinations including businesses and schools. Third Street consistently has the highest annual average daily traffic (AADT) count with the exception of a small spur to the south of its junction with OR 126 and OR 370. Other notable factors for 3rd Street include the following:

- It has the most crashes in Prineville.
- It is the primary commercial corridor in Prineville, and it is the only east-west through arterial.
- From OR 126 to NE Juniper Street, 3rd Street has the highest percentage of households without a motor vehicle.
- The pavement condition is rated as poor by ODOT.
- The only ODOT TripCheck camera in Prineville is at its intersection with NW Harwood Avenue.
- It is designated as a Truck Route and Reduction Review Route to support freight movement.
- From NE Juniper Street to the east city limits, 3rd Street does not meet the suggested pedestrian crossing standard of 500 to 1,000 feet as described in the ODOT *Blueprint for Urban Design* (ODOT 2020).

2.1.2 Safety

Between 2016 and 2020, there were 534 crashes in Prineville. Nearly all the incidents involved only motorists. The primary contributing factor to crashes was a failure to yield/disregarding the signal, which comprised approximately 32% of all crashes. Inattention ranked as the second highest contributing factor to crashes and comprised approximately 17% of all crashes. Crash highlights are listed below:

- Thirteen crashes affected pedestrians and seven crashes affected cyclists.
- Two crashes resulted in fatalities; both occurred on OR 126 just west of the OR 126 junction with 3rd Street. One crash occurred from a failure to yield the right-of-way when entering the intersection of OR 126/3rd Street, and the second crash occurred from a daytime collision with a boulder due to inattention on a curve of OR 126.
- Intersections were the most common locations for crashes. The primary causes of crashes at intersections included angled and turning movements. The second most common location for crashes was on sections of straight roadway. The primary causes of crashes along straight roadways included rear-end collisions or collisions with a fixed object.
- The most crashes occurred on 3rd Street between OR 126 and NE Combs Flat Road.
- Public feedback has also indicated safety concerns where Combs Flat Road turns north at the south city limits.

2.1.2.1 Intersection Crash Analysis

Crashes at intersections were measured against the critical crash rate; this analysis shows whether intersections have more collisions than would be expected for an intersection of that type. Two intersections exceeded the critical crash rate. These intersections were flagged as having a higher degree of risk than others:

- NW Deer Street and NW 2nd Street
- NE Combs Flat Road and SE Lynn Boulevard

Four intersections had an excessive proportion of angled crashes:

- NW Deer Street and NW 2nd Street
- OR 126 and U.S. 26
- NE Combs Flat Road and NE 3rd Street
- NE Combs Flat Road and SE Lynn Boulevard

Two intersections had an excessive proportion of fixed-object crashes:

- OR 126 and S Rimrock Road
- N Main Street and NW 9th Street

One intersection had an excessive proportion of turning crashes:

- OR 126 and OR 370

Three intersections had an excessive proportion of rear-end crashes:

- SW Tom McCall Road and OR 126

- OR 126 and U.S. 26
- SW George Millican Road and OR 126

Three highway segments within Prineville city limits have crash rates higher than the statewide crash rate of similar facilities:

- OR 27
- U.S. 26 east of OR 126
- U.S. 26 west of OR 126

2.1.3 Traffic Volumes

The highest AADT occurs along OR 126 north of O'Neil Highway/OR 370. On average, the 2022 peak-hour intersection volumes are 40% higher than the peak-hour intersection volumes shown in the City of Prineville TSP (2013).

2.1.4 Intersection Operations Analysis

The study intersections were evaluated against mobility targets established by the City, Crook County, and ODOT, depending on the jurisdiction. For the unsignalized intersections, volume-to-capacity (V/C) ratios[1] and delay were reported for the worst movement, and for signalized intersections, the reported V/C ratios and delays represent the overall intersection operations. Five of the 24 intersections exceed the mobility target for either the V/C ratio or level of service (LOS):[2]

1. NW Harwood Avenue/NW 3rd Street (U.S. 26)
2. N Main Street/3rd Street (U.S. 26)
3. Eastbound OR 126/eastbound U.S. 26 (West Y)
4. OR 126/O'Neil Highway (OR 370)
5. SW Tom McCall Road/OR 126

Queue lengths in the 95th percentile exceed the storage length or the space between intersections at 4 of the 24 intersections analyzed:

1. N Main Street/NE 10th Street
2. NW Harwood Avenue/NW 3rd Street (U.S. 26)
3. N Main Street/3rd Street (U.S. 26)
4. Westbound OR 126/westbound U.S. 26.

All of these queue lengths exceed the storage length or the space between intersections by less than 200 feet, or about eight vehicles.

[1] The volume to capacity ratio is a measure of traffic congestion. The higher the V/C ratio, the greater the vehicle congestion and associated delay.

[2] Level of service is a measure of vehicle delay. Levels include A through F, with A being free-flow conditions and F being gridlock.

The project team examined future "no build" traffic conditions as well and found that planned/programmed projects largely improved mobility at intersections performing poorly today. The intersections with mobility issues under the future 2045 no build conditions include:

- West Y
- OR 126/O'Neil Highway (OR 370)
- NW Harwood Avenue/NW 3rd Street (U.S. 26)
- SW Tom McCall Road/OR 126

2.1.5 Two-Lane Highway Capacity Analysis

Tube counts were collected at several locations along major arterials. The counts were analyzed using Highway Capacity Software. All five of the roadway segments that were analyzed operate at LOS A or better.

2.1.6 Bicycle and Pedestrian System

- The sidewalk network is not complete. Multiple local and collector streets are missing sidewalks, which are a typical element required of all new local streets in Prineville. Adding sidewalks to legacy streets can be prohibitively expensive, and alternative approaches, such as expanded shoulders, should be considered during solutions identification. Sidewalk network gaps make it difficult to walk from one neighborhood to another or to reach key destinations such as schools and businesses throughout the city.
- Enhanced mid-block or signalized crossings are located along the length of U.S. 26/3rd Street, which is a barrier to north-south pedestrian and bicycle traffic. Enhanced or signalized crossings are on average 1,200 feet apart. Pedestrian crossings are on average 330 feet apart, which meets the ODOT *Blueprint for Urban Design* (2020) standards for crossing frequencies in the "Traditional Downtown/CBD" context, but this spacing still presents hazards for pedestrians.
- The intersection of U.S. 26 and OR 126 is a major barrier for pedestrians and cyclists; very few facilities are present. The facilities that do exist provide a narrow shoulder for cyclists and pedestrians; this can result in high stress due to proximal fast-moving traffic. New bicycle and pedestrian facilities would likely spur greater active transportation demand through this intersection.
- There are neighborhoods along Rimrock Road west of the Crooked River and south of OR 126 that lack a safe pedestrian and bike connection to downtown, though there are routes through the Meadow Lakes Golf Course that provide access across the Crooked River. Additionally, the Tom McCall area and neighborhoods north of U.S. 26/3rd Street are not connected to the rest of Prineville with pedestrian and bike facilities due to the significant grade differential and geographic limitations.
- Marked or enhanced crossing infrastructure on OR 126, OR 370, and U.S. 26 west of the intersection of U.S. 26 and OR 126 is nearly nonexistent. One crossing exists at the roundabout at SW Tom McCall Road and OR 126.
- Combs Flat Road/OR 380 possesses only one crossing south of U.S. 26/NE 3rd Street to the Prineville city limits.
- A rectangular rapid flashing beacon is present on U.S. 26/NE 3rd Street near NE Mason Drive.

2.1.7 Transit

Transit needs in and around Prineville were recently identified in the Cascades East Transit *2040 Transit Development Plan* (CET 2020). Notable improvements from this plan that will affect Prineville are listed below. These planned improvements should be considered in developing pedestrian and bicycle solutions that provide first/last mile access to transit and solve identified transit needs.

- Community Connector Route 26
  - Re-route to serve the Redmond Airport and Central Oregon Community College.
  - Combine Route 26 with Route 24 to create a one-seat ride (ride that does not require a transfer) to Bend.
  - Increase peak period trip frequency and add an evening trip.
  - Add midday service as a shopping or medical shuttle trip.
  - Increase local circulation in Prineville via local Dial-A-Ride and/or Community Connector vehicles.
  - Add weekend service.
- Add new, midday shopping or medical shuttle service from Prineville to Redmond.
- Add a small-scale transit center or mobility hub near the Thriftway or Ray's.
- Expand maintenance facilities to include storage for two vehicles.
- Amend the development code to include the following:
  - Require coordination between Prineville and Cascades East Transit development during application review for sites adjacent to transit stops.
  - Enhance development standards to promote connections between buildings and transit stops.
  - Add parking-related requirements to enhance pedestrian and bicycle connections, increase rideshare access, and reduce car parking spaces related to transit access.

3. Introduction to the Solutions

The following sections review solutions for identified transportation needs and issues. In some cases, there are alternatives for addressing a given need; alternatives represent different approaches to solving a transportation issue. Where there are alternatives, the project team includes a preliminary recommendation for which alternative to advance based on the evaluation (see Table 14 in Section 8.1).

This analysis supports updating the 2013 TSP. In each section below, the 2013 TSP projects are carried forward as part of this TSP update. Some 2013 TSP projects have been constructed, some may no longer be needed based on updated analysis, some may still address a need but have suggested modifications, or some may be carried forward as-is for inclusion in the updated TSP. The sections below include analysis of the prior TSP projects as appropriate. Finally, new projects or programs that address needs are included as well.

Project costs for projects derived from the 2013 TSP have been inflated to 2023 dollars based on construction inflation figures derived from the Federal Reserve (inflation between January 2013 and January 2023).[3] New costs have been developed for some new projects based on recent project costs for similar projects in Oregon.

3.1 Evaluation Framework

Table 1 shows the criteria that informed development of projects and programs and that were used in the evaluation; these are based on the updated goals and objectives developed previously. Each project was evaluated and the results are indicated using the following symbols:

● Project meets or fully addresses the criterion

◖ Project partially meets or addresses the criterion

○ Project does not meet or has negative impacts with respect to the criterion

N/A Not applicable

Table 1. Project and Program Evaluation Criteria

Goal	Criterion	How is it measured?
Goal #1: Ensure a safe, efficient, and accessible transportation system for all users.	Project enhances transportation options, access, or mobility for vulnerable populations.	▪ Qualitative assessment of effects on multimodal access or improved mobility options for low-income residents, elderly populations, youth, or people living with disabilities
	Project addresses a known safety issue identified during TSP development.	▪ Qualitative assessment
Goal #2: Build a complete system of walking and cycling routes that connect neighborhoods to schools, parks, jobs, and other key places.	Project provides new or enhanced connection for people walking, cycling, or using a mobility device and/or provides connection to a previously unserved destination such as a grocery store, neighborhood, school, or recreation site.	▪ Improvement in pedestrian or bicycle level of traffic stress ▪ Qualitative assessment
Goal #3: Build and maintain the transportation system to support economic development in the region.	Project cost-effectively addresses a transportation need or issue.	▪ Qualitative assessment of the degree to which an alternative or project addresses desired outcomes relative to cost ▪ Cost information for projects will be provided without a rating
Goal #4: Improve system performance by balancing mobility and access along main travel routes, including on state highways.	Project addresses transportation system performance on key state or local highways in town and/or improves the local network so as to reduce pressure on state highways.	▪ Assessment based on traffic analysis and the travel model to determine performance (LOS or V/C ratio) of different alternatives

[3] https://fred.stlouisfed.org/tags/series?t=construction%3Binflation

Goal	Criterion	How is it measured?
Goal 5. Minimize the impacts of the transportation system on the natural and built environment.	Project minimizes significant right-of-way and/or residential, commercial, or industrial displacements, and/or impacts to known environmental resources.	▪ Compare proposed alternatives or cross sections to available right of way and street width, as well as available natural resource information ▪ Qualitative assessment of impacts to existing structures or known environmental resources.

LOS = level of service; V/C = volume to capacity

4. Roadway/Highway Solutions

4.1 Intersection Operations

The project team conducted traffic analysis to understand roadway system performance in Prineville both today and in the future (2045). Table 2 lists roadway operational deficiencies that were identified (see the *Prineville TSP Update Future Conditions* memos) and includes potential solutions, as well as the timeframe in which the issue may need to be addressed. See Appendix A for detailed traffic analysis results.

4.1.1.1 West Y and O'Neil Highway/OR 370 Alternatives

Table 3 includes descriptions of four alternatives for improving mobility at the west end of Prineville at the OR 126 and U.S. 26 "West Y" interchange and at the O'Neil Highway/OR 370 intersection with OR 126.

Table 2. Roadway Operational Deficiencies

Study Intersection	Existing Conditions V/C	Future No-Build Conditions V/C	Discussion and Potential Solutions	Cost Opinion	Improvement Timeframe
NW Harwood Avenue & NW 3rd Street/U.S. 26	1.60	1.49	Future No-Build conditions improve slightly at this intersection compared to today due to the assumed completion of the Combs Flat Road extension, which redistributes traffic within Prineville. However, the intersection is forecast to still exceed mobility standards. Potential solutions include the following: ▪ Revise intersection approaches. Modify northbound and southbound approaches from existing through-left and right turn to through-right and left turn. Modeled future-year V/C for this solution is 0.70, meeting ODOT mobility targets.	<$100,000 (signal modifications and striping)	Near
N Main Street & 3rd Street/U.S. 26	1.15	0.82	Street north of 3rd Street is forecast to experience a significant decrease in traffic due to the planned Combs Flat Road extension. No further improvements are suggested at this intersection.	N/A	No solution proposed assuming Combs Flat Road extension north of 3rd Street moves forward
SW Tom McCall Road & OR 126	1.02	1.22	This intersection was improved recently with a roundabout, as well other access management changes on OR 126 in the vicinity. Both current and future operations are expected to exceed mobility standards. Potential solutions include the following: ▪ Add slip lanes to increase capacity at the roundabout: slip lanes would increase capacity at the roundabout. With slip lanes added to all legs of the roundabout, modeled future-year V/C for this solution is 0.91, which does not meet ODOT mobility standards. o Consider adopting alternate mobility standards. ▪ Two-lane Roundabout: Expand the existing roundabout to two lanes. This would be a substantial capital investment and reconstruction of the existing facility that was improved in 2015. Modeled future-year V/C for this solution is 0.71, meeting ODOT mobility targets (see Appendix A for traffic analysis details).	Slip lanes: $1M to $3M Two-lane Roundabout: $5M to $7M	Medium. Slip Lanes are recommended as the lower-cost, more feasible alternative.

Study Intersection	Existing Conditions V/C	Future No-Build Conditions V/C	Discussion and Potential Solutions	Cost Opinion	Improvement Timeframe
EB OR 126 & EB U.S. 26	0.92	1.09	Alternatives for these intersections are discussed as part of the West Y and O'Neil Highway/OR 370 Alternatives section below.		
OR 126 & O'Neil Highway/OR 370	1.59	2.07			

M = million; ODOT = Oregon Department of Transportation; V/C = volume to capacity ratio;

Table 3. West Y/O’Neil Highway Intersection Improvement Alternatives

				TSP Evaluation Criteria						
Alternative	Benefit	Impact and Feasibility	Pedestrian/Bicycle Accommodation	Enhanced options for vulnerable populations	Addresses known safety issue	Ped/Bike Connection	Benefit/ Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Recommendation
1: O’Neil Intersection Near-Term Improvements Restripe westbound OR 126 across the Crooked River bridge to a single lane at the approach to the O’Neil Highway intersection.	▪ Partially addresses safety issues at this intersection. With the current two-westbound-lane configuration, vehicles turning right from OR 126 to O’Neil Highway can block view of vehicles turning left from O’Neil Highway onto eastbound OR 126. ▪ Would marginally decrease delay for vehicles turning from the O’Neil Highway onto OR 126.	▪ Minimal construction, could be achieved with striping and vertical delineators. ▪ Would have negligible impacts on intersection mobility based on traffic analysis.	N/A	◐	◐	◐	●	●	●	Recommended.
2: Signalization Realign West Y to a signalized intersection, signalized intersection at O’Neil Highway and OR 126.	▪ Simplifies the traffic scheme at these locations to reduce driver confusion. ▪ Increases safety by reducing conflict points as compared to current design. ▪ Improves traffic mobility at the O’Neil Highway intersection for the existing worst movement.	▪ This alternative is unlikely to meet traffic mobility standards. Based on current and forecast volumes and prior evaluations of similar options, this alternative is anticipated to perform worse than No-Build with respect to vehicle delay. ▪ A signal at O’Neil Highway/OR 126 would be problematic for freight because of grades at this location. Westbound OR 126 vehicles would start from a dead stop, increasing intersection delay. Similarly, the downhill grade eastbound at this location presents issues for safe stopping of freight vehicles. ▪ Approach grades, speeds, and rural nature of the O’Neil Highway intersection would likely contribute to poor safety performance of a signal at this location.	Pedestrians and cyclists could be routed along the realigned roadways either with on-road facilities (e.g., sidewalks and buffered bike lanes) or a separated path on the south side of the road to the existing separated crossings at the Crooked River Bridge.	◐	●	◐	○	○	●	Not recommended. Not likely to provide much benefit.
3: Realignment and Rechannelization Realign West Y and O’Neil Highway intersections to include separated, protected left turns and merging.	▪ Simplifies the traffic scheme at these locations to reduce driver confusion. ▪ Greatly improves traffic mobility at the O’Neil Highway intersection. ▪ Works within existing ROW.	▪ This alternative is likely to provide marginal benefits to traffic mobility. ▪ Lower-cost alternative. ▪ Can likely be accomplished without major impacts to private property or structures.	Pedestrians and cyclists could be routed along the realigned roadways either with on-road facilities (e.g., sidewalks and buffered bike lanes) or a separated path on the south side of the road to the existing separated crossings at the Crooked River Bridge.	◐	◐	◐	◐	◐	●	Not recommended. While it provides some benefits, they are not substantial.

				TSP Evaluation Criteria						
Alternative	Benefit	Impact and Feasibility	Pedestrian/Bicycle Accommodation	Enhanced options for vulnerable populations	Addresses known safety issue	Ped/Bike Connection	Benefit/ Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Recommendation
4: Grade Separation Develop a grade-separated interchange at the West Y; grade-separate the O'Neil Highway/OR 126 intersection.	▪ Preserves much of the existing West Y roadway arrangement. ▪ Grade separation would increase interchange and O'Neil Highway intersection mobility relative to No-Build. ▪ Increases safety, especially at the O'Neil Highway intersection.	▪ Very costly alternative. ▪ While this alternative would improve traffic mobility and safety, it would be prohibitively expensive and has unknown environmental impacts to consider.	Pedestrians and cyclists could be routed along the realigned roadways either with on-road facilities (e.g., sidewalks and buffered bike lanes) or a separated path on the south side of the road to the existing separated crossings at the Crooked River Bridge. The undercrossing at the O'Neil Highway intersection would provide the added benefit of facilitating ped/bike crossings at this location.	◐	●	●	○	◐	○	Not recommended. Very costly and impactful relative to the mobility and safety benefits. Not likely feasible from a design perspective.
5: Roundabout Develop a single lane or multi-lane roundabout at the West Y; implement intersections improvements at the O'Neil Highway and OR 126 intersection.	▪ Simplifies the traffic scheme at these locations to reduce driver confusion. ▪ Greatly improves traffic mobility at the O'Neil Highway intersection. ▪ Increases safety, especially at the O'Neil Highway intersection. ▪ Potentially frees up ROW for repurposing to other uses.	▪ Moderate-cost alternative. ▪ Can likely be accomplished without major impacts to private property or structures. ▪ Estimated costs are highly dependent on whether modifications to the Crooked River Bridge are required. Estimate ranges from \$10M to \$25M+. ▪ Potential for scaled/incremental improvement, e.g., establishment of a single lane roundabout that could be expanded in the future if needed. ▪ Modeled V/C ratio: 0.65, meets ODOT mobility standards.	Pedestrians and cyclists could be routed with a separated path on both sides of the road to the across the Crooked River Bridge. Later refinements to determine potential crossings of OR 126 at or near the O'Neil Highway intersection would be required.	◐	●	◐	◐	●	◐	Recommended. Provides substantial mobility and safety benefits relative to other options.

N/A = not applicable; M = million; ODOT = Oregon Department of Transportation; ROW = right-of-way; V/C = volume to capacity ratio

Figure 1. Alternative 2: Signalization

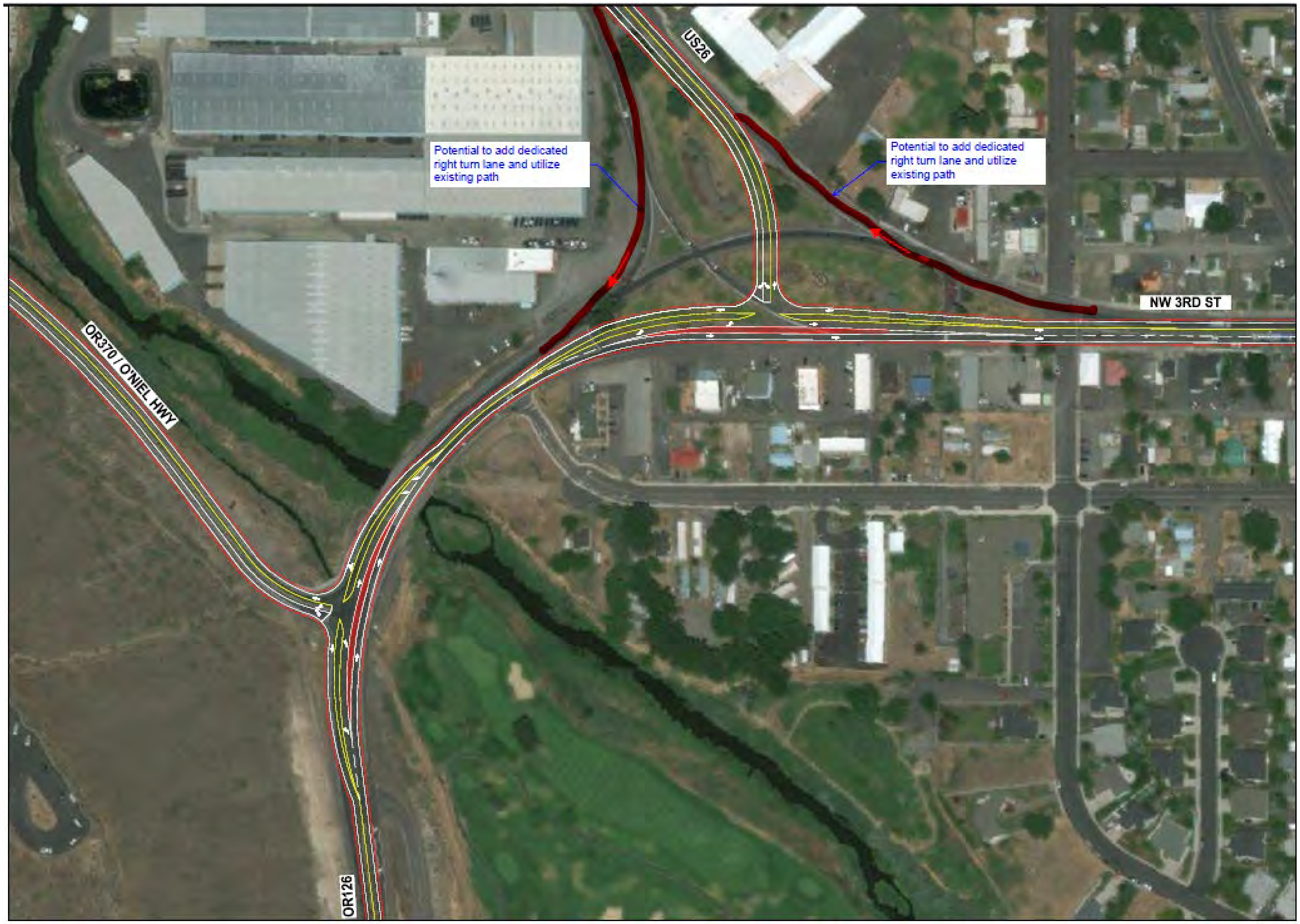

Figure 2. Alternative 3: Realignment and Rechannelization

Figure 3. Alternative 4: Grade Separation

Figure 4. Alternative 5: Roundabout

4.1.1.2 Alternative 5 Traffic Analysis

Based on initial discussions with ODOT and the City, the project team evaluated Alternative 5: Roundabout further to understand its effects on congestion and traffic mobility using Synchro and Sidra analysis software (see Appendix A for detailed traffic analysis results). The team looked at several iterations of the roundabout, including a single lane and double-lane version, to understand traffic effects and possibilities with regard to the size and scope of the potential future project.

- Alternative 5 (as shown in Figure 4) – v/c of 0.65 (meets ODOT mobility standards)
- Alternative 5A: 3-legged roundabout, 2 circulating lanes – v/c of 0.72 (meets ODOT mobility standards)
- Alternative 5B: 4-legged roundabout, 2 circulating lanes – v/c of 0.73 (meets ODOT mobility standards)
- Alternative 5C: 3-legged roundabout, 1 circulating lane – v/c of 1.50 (does not meet mobility standards)
- Alternative 5D: 4-legged roundabout, 1 circulating lane – v/c of 1.53 (does not meet mobility standards)

4.2 U.S. 26/3rd Street

This section reviews proposed improvements to the U.S. 26/3rd Street corridor, which is a special focus of the TSP update. This corridor is the main east-west route through Prineville. While traffic analysis indicates that the roadway has sufficient capacity now and in the future—except at key intersections described above—the community frequently experiences congestion in the corridor. Solutions for 3rd Street focus on the following:

- Approaches to meeting the *Highway Design Manual* (HDM; ODOT 2024) guidance.
- Alternatives that would increase east-west automobile throughput on and off 3rd Street.

There are three planned projects (see Figure 5) that are assumed as part of the no-build future transportation system (that is, these projects, while not yet implemented, are assumed to reasonably be constructed within the planning horizon). When completed, the following projects will improve traffic operations on 3rd Street through Prineville:

- **Combs Flat Extension.** This project would extend Combs Flat Road to connect with the east end of Peters Road. This project would have a significant effect on citywide traffic circulation, reducing traffic on Main Street north of 3rd Street and lessening east-west traffic pressure on 3rd Street in downtown east of Main Street.
- **Peters Road/U.S. 26 Connector.** This project would develop a new connection between the existing Peters Road and Main Street, and U.S. 26. Travel modeling shows that this connection would divert some traffic from U.S. 26 that would otherwise use 3rd Street on to the Peters Road Connections and Combs Flat Extension. The overall magnitude of this traffic diversion is relatively small (approximately 100 vehicles in the peak hour).
- **Signal Upgrades (not shown on map).** This ODOT project would upgrade signal hardware in the corridor and allow for better signal synchronization, which would improve congestion in the corridor, especially during peak hours.

In addition to these projects, ODOT has developed an *Access Management Strategy* (November 2020) for improving, modifying, and closing some accesses to U.S. 26/3rd Street between Meadow Lakes Drive and Combs Flat Road (see Appendix B). While the strategy has not yet been formally adopted and signed by relevant parties, the project team assumes that the strategy will move forward during the TSP planning horizon.

Figure 5. Planned Combs Flat Road (Green) and NE Peters Road (Red) Extensions

Additional alternatives described in Table 4 consider other approaches to further increasing east-west mobility and multimodal mobility and safety in the 3rd Street corridor. However, based on the evaluation with respect to TSP criteria, none of these additional measures are recommended by the project team.

Table 4. Additional Possible Approaches to Reducing Congestion on 3rd Street

Concept/Approach	Benefits/Impacts	Feasibility	Evaluation Criteria: Enhanced options for vulnerable populations	Evaluation Criteria: Addresses known safety issue	Evaluation Criteria: Ped/Bike Connection	Evaluation Criteria: Benefit/ Cost	Evaluation Criteria: Roadway System Performance	Evaluation Criteria: Minimizes Impacts (ROW, Environmental, etc.)	Recommendation
Add travel lanes to 3rd Street. Add one in each direction for a total of two in each direction.	▪ Would increase vehicle capacity on 3rd Street, though the West Y constriction at the west end of town would limit cross-town mobility improvements unless the West Y improvements are constructed. ▪ This alternative would likely decrease safety for drivers by introducing new conflict points and increasing risk exposure for people cycling or walking. ▪ Would eliminate all on-street parking in the corridor. ▪ May require roadway widening in places and ROW acquisition. ▪ Speeding likely to increase in the absence of other speed management techniques.	▪ The existing 3rd Street corridor is constrained by buildings, especially between 2nd Street and Juniper. The available curb-to-curb street width varies between approximately 46 and 50 feet wide. This is sufficient width to develop two 11-foot or 12-foot travel lanes in each direction on 3rd Street. ▪ Significant signal modifications would be required at each signalized intersection. ▪ This approach is not in alignment with ODOT HDM guidance for urban highways.	○	○	○	◐	◐	◐	Not recommended. Would provide marginal mobility improvement, does not meet ODOT HDM guidance, would decrease all user safety, eliminates on-street parking, does not align with TSP evaluation criteria.
3rd Street couplet. Develop a couplet, using 2nd or 4th Streets. This would provide two vehicle travel lanes in each direction.	▪ Would increase vehicle capacity in the 3rd Street corridor, though the West Y constriction at the west end of town would limit cross-town mobility improvements unless the West Y improvements are constructed. ▪ Would retain on-street parking. ▪ Speeding likely to increase in the absence of other speed management techniques. ▪ Can increase out-of-direction travel for people seeking destinations along the couplet. ▪ Would allow for more room for cycling facilities in the corridor. ▪ Cost estimate: $20M or higher.	▪ Major investment required to convert 3rd and 2nd/4th Streets into a couplet with two travel lanes in each direction. ▪ Would require property acquisitions at both east and west endpoints to facilitate transition back to two-way facility. ▪ Many driveways and accessed on 2nd Street exceed ODOT standards for that type of facility. ▪ Continuity of 2nd Street is interrupted by two schools in the corridor, meaning portions of these properties would need to be acquired. Given the nature of these uses, a partial property acquisition may functionally result in a full property acquisition which would be costly and displace these schools. ▪ 4th Street is discontinuous east of Elm Street and would require significant property acquisition and displacement of community resources. The existing land uses on 4th Street and street character are not compatible with arterial traffic, especially west of Deer Street. ▪ This approach is not in alignment with ODOT HDM guidance for urban highways. ▪ Significant capital investment would be required on 2nd Street in particular, including new signalized intersections.	○	○	◐	○	◐	○	Not recommended. The package of assumed improvements and other proposed improvements in Section 4.2 will substantially improve traffic congestion on 3rd Street. The couplet would be costly, result in major property impacts, and result in safety and multimodal conditions contrary to ODOT HDM recommendations.
Southern bypass. Add a bypass route south of 3rd Street, potentially from Rimrock/Crestview Drive east to approximately Carey Foster Road, connecting to OR 380.	▪ Would provide an alternate route for through traffic and potentially reduce congestion on 3rd Street. However, the benefits to 3rd Street congestion are likely very limited given a southern bypass route would likely be circuitous and attract relatively little traffic.	▪ Would increase connections to the neighborhood off Rimrock Drive. ▪ There is no straightforward connection possible south of 3rd Street. A connection would require crossing the Crooked River and other sensitive environmental features. ▪ A southern bypass route is not likely feasible within the TSP horizon.	◐	○	◐	○	○	○	Not recommended. Substantial impacts and costs, relatively few benefits.

HDM = ODOT Highway Design Manual; M = million; ODOT = Oregon Department of Transportation; ROW = right-of-way; TSP = transportation system plan

4.2.1 3rd Street Multimodal Improvements

The 3rd Street corridor does not meet the design guidelines established in the ODOT HDM (2024) based on the assumed urban contexts for the corridor (Table 5). The HDM was revised recently to include new design guidance and standards for accommodating all transportation modes on state highways within cities. This relatively new guidance emphasizes safety and mobility for people walking, cycling, and using transit, and it seeks to implement context-sensitive improvements that reflect the surrounding land use. The assigned urban context establishes how the corridor should function for all users. Table 5 provides design guidance from the HDM about the desired features for 3rd Street.

Table 5. ODOT HDM 3rd Street Urban Contexts and Design Recommendations

3rd Street Segment	HDM Urban Context [a]	Target Speed	HDM Recommended Bicycle Facilities	Recommended Sidewalk	Recommended Pedestrian Crossing Spacing	On-Street Parking
2nd Street to Juniper Street	Traditional Downtown	20–25 mph	▪ Separated facility. ▪ No bicycle facilities exist in this segment today.	▪ Ample sidewalk for activities. ▪ Sidewalks are present.	▪ 250–550 feet ▪ Corridor generally meets this standard.	▪ Include if possible. ▪ Parking is present on both sides of road.
Juniper Street to East City Limits	Commercial Corridor	30–35 mph	▪ Separated facility, consider roadway characteristics. ▪ Striped shoulders exist today.	▪ Continuous and buffered sidewalks. ▪ Sidewalks are present in parts of this segment.	▪ 500–1,000 feet ▪ Corridor section does not meet this standard.	▪ No guidance. ▪ Parking is present in sections.

A See the Existing Conditions Memo for details and justification on the selection of these urban contexts.
HDM = ODOT Highway Design Manual; mph = miles per hour

The following alternatives consider approaches to repurposing the existing curb-to-curb space on 3rd Street to meet HDM guidance for supporting all transportation modes. Given that the guidance for cycling facilities is similar between the two segments and urban contexts noted above, the following concepts consider a single, consistent cross section for the entire corridor between 2nd Street and the east city limits just east of Laughlin Road.

4.2.1.1 Focus on Parallel Routes for People Cycling

This alternative would leave 3rd Street/U.S. 26 as-is in terms of the current lane configuration and on-street parking. The Transportation Planning Rule (Oregon Administrative Rule 660-012-0000) and ODOT HDM guidance emphasize that cycling must be accommodated as part of network planning. This alternative would focus on improving cycling on routes parallel to 3rd Street, including 2nd and/or 4th Street. 2nd Street today has bike lanes from the intersection at the West Y east to Deer Street, with no marked facilities east of Deer Street. 4th Street does not have marked cycling facilities. Either or both of these roads could be improved as cycling routes parallel to 3rd Street/U.S. 26. These roads have lower traffic volumes and ample existing street width to develop cycling facilities at relatively low cost. The most significant drawback of focusing on parallel routes is that it is more difficult for cyclists to access destinations on 3rd Street.

City and stakeholder feedback indicates this alternative is strongly preferred due to concerns about removing on-street parking and the feasibility of implementing bike lane alternatives (see subsequent sections).

4.2.1.2 Standard Bike Lanes

This alternative would reconfigure 3rd Street/U.S. 26 to add standard bike lanes from the West Y to Mason Drive. The HDM guidance recommends separated bike lanes, which this alternative does not achieve. This alternative assumes there is sufficient curb-to-curb roadway space today to implement this lane configuration, but more detailed design would be required to confirm this design. This alternative would remove on-street parking from one side of the street and may require narrowing lanes to 11 feet; this approach may require a design exception and coordination with the state's Mobility Advisory Committee to confirm its viability.

As of the writing of this report, ODOT is constructing curb ramp upgrades in the 3rd Street corridor, as well as curb bulb-outs. These bulbouts may make this alternative difficult to implement due to resulting curb-to-curb restrictions at intersections.

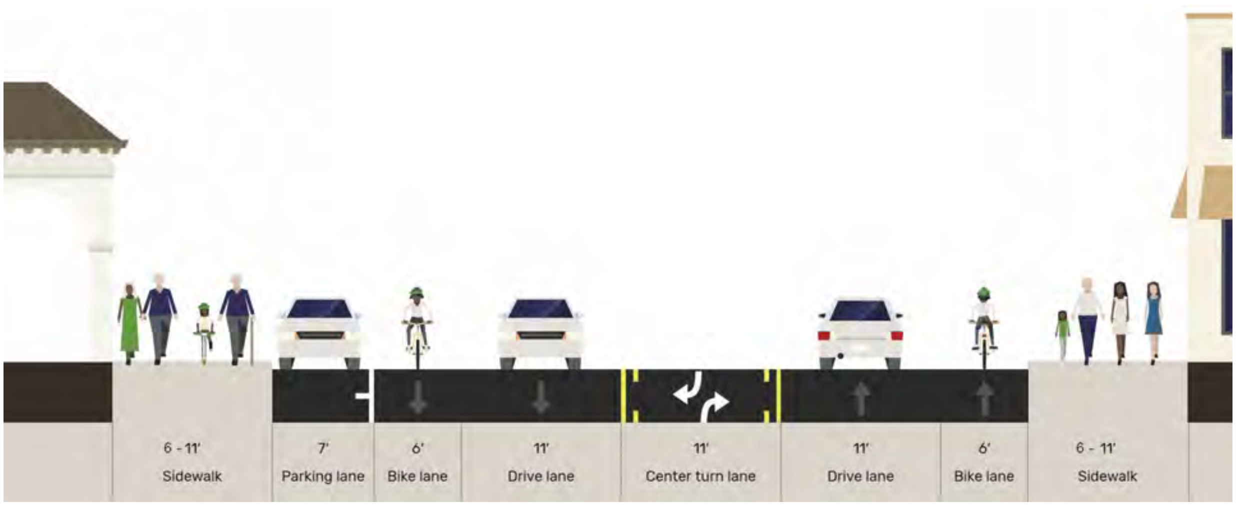

Figure 6. NE 3rd Street: Standard Bike Lanes and Sidewalk Infill Concept

4.2.1.3 Buffered Bike Lanes

This alternative would reconfigure 3rd Street/U.S. 26 to add bike lanes, with a striped or hardscape buffer in places, from the West Y to Mason Drive in accordance with ODOT HDM guidance. This alternative would remove on-street parking from both sides of the street in the 3rd Street corridor.

As of the writing of this report, ODOT is constructing curb ramp upgrades in the 3rd Street corridor, as well as curb bulb-outs. These bulbouts may make this alternative difficult to implement due to resulting curb-to-curb restrictions at intersections.

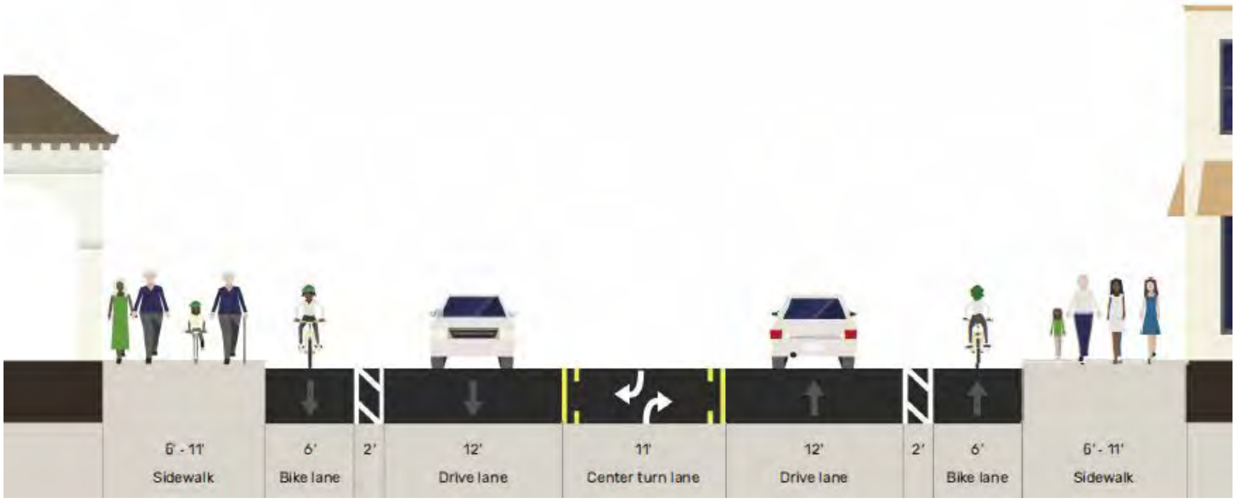

Figure 7. NE 3rd Street: Buffered Bike Lanes and Sidewalk Infill Concept

4.2.1.4 Sidewalk Infill

Sidewalks are missing or intermittently present on 3rd Street east of St. Charles Way to the east city limits. To meet both City and ODOT design standards, sidewalk infill is recommended on 3rd Street along both sides of the street.

4.2.1.5 Additional Pedestrian Crossings

The corridor meets HDM pedestrian crossing spacing guidance between 2nd Street and Juniper Street. Between Juniper Street and the east city limits, the corridor has relatively few marked or improved pedestrian crossings compared to HDM guidance. The following approximate locations should be considered for enhanced crossings that include features such as crosswalk pavement markings, flashing beacons, signage, median refuge islands, street lighting, or other features determined during the design process:

- New enhanced crossing in the vicinity of the 3rd Street and Hickey Farms Road intersection
- New enhanced crossing in the vicinity of the 3rd Street and Williamson Drive intersection
- New enhanced crossing in the vicinity of the 3rd Street and Locust Drive intersection

Table 6 provides an evaluation of the 3rd Street multimodal improvements and a preliminary recommendation.

Table 6. 3rd Street Multimodal Alternatives

Multimodal Solution	Evaluation Criteria: Enhanced Options for Vulnerable Populations	Addresses Known Safety Issue	Ped/Bike Connection	Benefit/ Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Cost	Recommendation
Linear Multimodal Improvement Alternatives								
Focus on parallel routes for people cycling (no action on 3rd Street/U.S. 26)	◐	◐	◐	◐	●	●	$150,000 Assumes that improvements on parallel routes involves only grinding out existing striping in some locations and adding new striping (no repaving)	This option may not fully satisfy the Transportation Planning Rule and ODOT requirements for accommodating cyclists within the corridor. Additional discussion is needed prior to advancing this as a recommendation as it related to 3rd Street; there is benefit to implementing improvements to 2nd and 4th irrespective of the discussion around 3rd Street.
Standard bike lanes	◐	●	●	◐	●	◐	$300,000 Cost assumes no repaving; curbs remain where they are (mainly grind out and restripe)	Recommended. Meets evaluation criteria with reduced impacts to on-street parking in the corridor. However, this alternative does not provide the same level of separation for cyclists from traffic as the alternative below.
Buffered bike lanes	●	●	●	●	●	◐	$350,000 Cost assumes no repaving; curbs remain where they are (mainly grind out and restripe)	Not recommended. While this option largely meets evaluation criteria, it introduces significant impacts to on-street parking in the corridor; this may not be acceptable to the community.
Sidewalk infill	●	●	●	●	◐	◐	$5.5M Sidewalk infill on 3rd Street from St. Charles to east city limits	Recommended. Supports ODOT Highway Design Manual recommendations for how the corridor should support people walking and cycling. Brings the street up to Prineville arterial standards as well.
Enhanced Crossings								
P25. Vicinity of 3rd Street and Hickey Farms Road	●	◐	●	●	◐	●	$1M Assumes inclusion of median and RRFB.	Recommended.
P23 . Vicinity of 3rd Street and Williamson Drive	●	◐	●	●	◐	●	$1M Assumes inclusion of median and RRFB.	Recommended.
P29. Vicinity of 3rd Street and Locust Drive	●	◐	●	●	◐	●	$50,000 to $500,000 Enhanced crossing – exact improvements subject to design process	Recommended.

M = million; ODOT = Oregon Department of Transportation; ROW = right-of-way; RRFB = rectangular rapid flashing beacon

4.2.2 Summary of U.S. 26/3rd Street Preliminary Recommendations

As discussed in the beginning of Section 4.2, there are several projects that are in progress or are assumed to occur within the planning horizon of the TSP. These projects will provide substantial benefit in reducing congestion on 3rd Street and in meeting state mobility standards for intersections along 3rd Street. In addition to these assumed future projects, additional measures reviewed above will improve mobility for vehicles, as well as people walking, cycling, and using transit.

Based on the evaluation in the preceding section, the project team makes the following preliminary recommendations for a package of improvements for further consideration by City staff, ODOT, the City Council, Planning Commission, and community (Figure 8). These improvements address east-west vehicle mobility and congestion, as well as multimodal mobility and safety in the 3rd Street corridor. Preferred investments will be determined post-engagement in the forthcoming *Technical Memorandum #7: Preferred Plan.*

Assumed investments (already programmed or assumed to be programmed within the TSP horizon) include the following:

- **Combs Flat Extension.** This project would extend Combs Flat Road to connect with the east end of Peters Road. This project would have a significant effect on citywide traffic circulation, reducing traffic on Main Street north of 3rd Street and lessening east-west traffic pressure on 3rd Street in downtown, especially east of Main Street.
- **Peters Road/U.S. 26 Connector.** This project would develop a new connection between the existing Peters Road and Main Street, and U.S. 26. Travel modeling shows that this connection would divert some traffic from U.S. 26 that would otherwise use 3rd Street on to the Peters Road Connections and Combs Flat Extension. The overall magnitude of this traffic diversion is relatively small (approximately 100 vehicles in the peak hour).
- **Signal Upgrades (not shown on map).** This ODOT project would upgrade signal hardware in the corridor and allow for better signal synchronization, which would improve congestion in the corridor, especially during peak hours. Additional access management in the corridor would improve performance further.
- **Access Management Strategy implementation.** The strategy includes recommendations for closing, modifying, and improving accesses to 3rd Street/U.S. 26. Implementation of this strategy would improve corridor safety and traffic mobility, as well as improve the pedestrian environment on 3rd Street through improved curb ramps and driveways.

New investments (additional investments that support multimodal mobility, safety, access, and comfort) include the following:

- **West Y interchange/O'Neil Highway intersection improvements** (see Section 4.1.1.1) would improve mobility through the interchange area, reduce congestion, and enhance multimodal safety.
- **3rd Street intersection traffic mobility improvements** would improve traffic mobility to within standards at the following location:
  - → NW Harwood Avenue and NW 3rd Street/U.S. 26 – revise intersection approaches

- **Additional enhanced pedestrian crossings** at the following locations:
  - → Vicinity of 3rd Street and Hickey Farms Road
  - → Vicinity of 3rd Street and Williamson Drive
  - → Vicinity of 3rd Street and Locust Drive
- **Focus on parallel routes to accommodate bicycling.** Based on feedback received, the project team recommends focusing on improving parallel streets to better accommodate cycling traffic. Exact street configuration or other recommendations will be documented in *Technical Memorandum #5: Preferred Plan* after receiving City, ODOT, interested party, and public feedback.

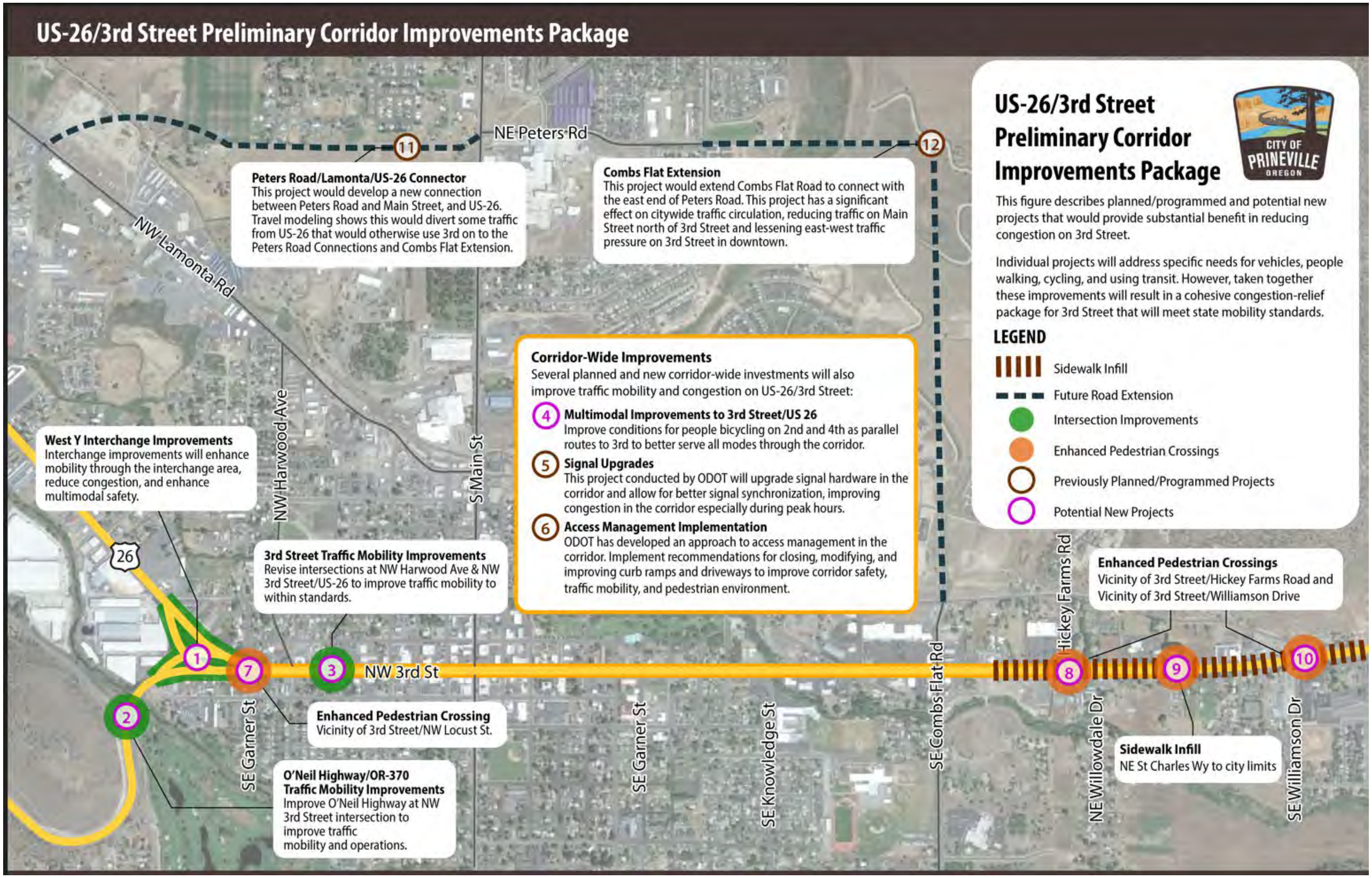

Figure 8. Summary of Preliminary Recommendations on or Related to the 3rd Street Corridor

4.3 Functional Classification and New Connections

As a growing city, Prineville has roadway extension needs in new areas of town to increase the ease of getting from one place to another. Fast-developing areas in Prineville are prime candidates for implementing roadway projects to support additional transportation needs and minimally impact private properties.

Figure 9 shows the functional classification system and new roadway connections proposed as part of the 2013 TSP. Table 7, Figure 11, and Figure 11 present an updated look at recommended roadway projects.

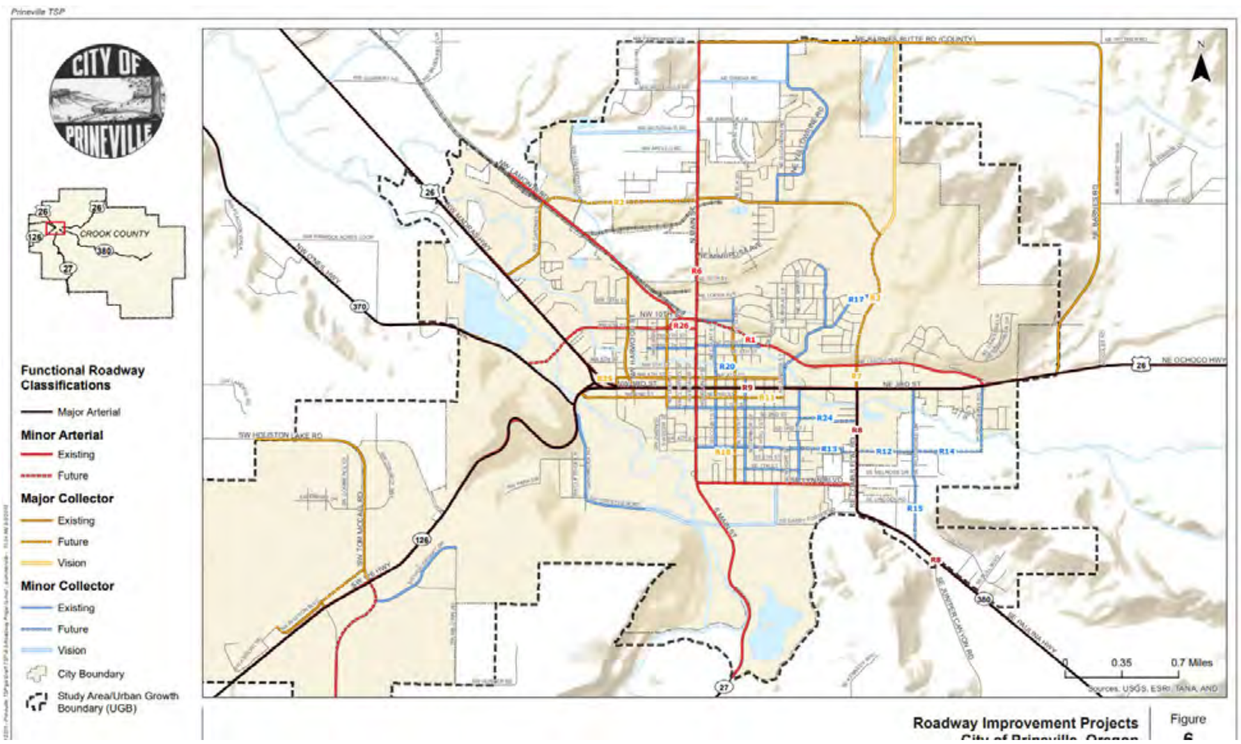

Figure 9. Previously Recommended Roadway Improvement Projects

Table 7. Recommended Roadway Projects

Map ID	Project Name/Description	Need Addressed	Cost Opinion (2013 $)	Timeline
R1	9th Street Extension	Connectivity	$4.15M	Long
R2	Peters Road Connection to Lamonta	Project has been advanced by City and is not evaluated further for the TSP.		
R3	Combs Flat Road Extension/Connection with Peters Road	Project has been advanced by City and is not evaluated further for the TSP.		
R6	Main Street Improvements – upgrade to arterial standards from 10th to north urban growth boundary	Connectivity	$18.4M	Long
R7	Combs Flat Road between U.S. 26 and Laughlin – upgrade to arterial standards	Operations	$690,000	Medium
R8	Combs Flat Road between U.S. 26 and Lynn Boulevard – widen to arterial standard, including multiuse path	Operations	$4,370,000	Near
R10	Elm Street Extension between SE 5th and 6th	Connectivity	$430,000	Long
R13	Complete S 5th Street extension between Main Street and Combs Flat Road	Connectivity	$2.5M	Long
R14	Ochoco Logging Road Extension – complete connection between city limits and Stearns	Connectivity	$2.6M	Medium
2023 TSP Update – Functional Class updates				
FC-1	NE 7th St (N Main Street – NE Laughlin Road): Change functional classification to Major Collector	Connectivity	N/A	Near
FC-2	SE 2nd St (SE Knowledge Street – SE Combs Flat Road): Designate functional classification as Local Street	Connectivity	N/A	Near
FC-3	Elm Street from NE 10th to Loper Avenue: Designate functional class as Major Collector	Connectivity	N/A	Near

M = million; TSP = transportation system plan

Figure 10. Roadway Functional Classification and Roadway Projects (West)

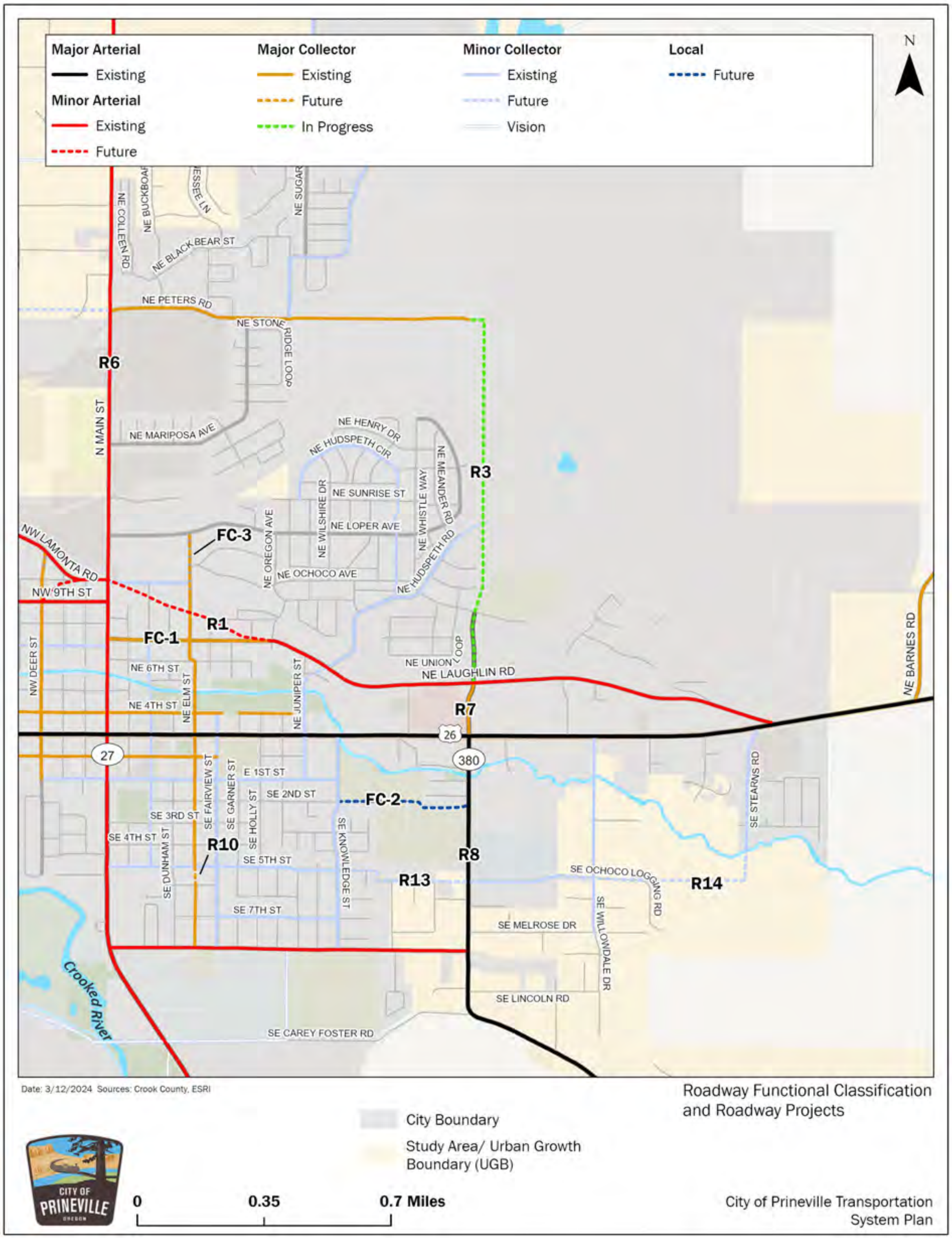

Figure 11. Roadway Functional Classification and Roadway Projects (East)

4.4 Safety

As a part of the safety analysis, 23 different intersections were analyzed to determine their crash rates and whether the incidence of collisions is greater than would be expected for a intersection of that type in a typical community. Table 8 reviews those locations that were noteworthy based on safety analysis and includes proposed interventions to improve safety.

Table 8. Safety Improvements

Intersection	Possible Solutions
Angle Crashes	
NW Deer St & NW 2nd St	Flashers were recently added to the stop signs at this intersection which, anecdotally, have reduced collision issues at this location. Provide “Stop Ahead” pavement markings on NW 2nd Street to inform drivers of an approaching unsignalized intersection. The crash reduction factor is 31% in all crashes at all severities.
OR 126 & U.S. 26	Addressed as part of solutions discussed in prior sections.
NE Combs Flat Rd/OR 380 & NE 3rd St/U.S. 26	Install “Signal Ahead” advance warning sign to inform drivers of an approaching signal. This intersection is the first intersection at the east side of Prineville; it connects two rural highways. Therefore, an advanced warning sign would reduce the speed of the approaching vehicles, which would result a decrease in angle crashes. The crash reduction factor is 35% in angle crashes at all severities.
NE Combs Flat Rd/OR 380 & SE Lynn Blvd	This intersection has a sight distance problem due to large trees located at the southwest corner of the intersection; the trees block the view of the traffic from the intersecting street during left turns from both OR 380 and SE Lynn Boulevard. Also, there are no streetlights near the intersection, so providing lighting would reduce the nighttime crashes and improve nighttime visibility of pedestrians. Provide “Stop Ahead” pavement markings to warn drivers of an approaching unsignalized intersection. Consider all-way stop at this intersection to slow traffic, improve turning safety, and improve safety and visibility of pedestrians.
Fixed Object Crashes	
OR 126 & S Rimrock Rd	This intersection is at the end of a sharp curve, which results in a higher number of fixed-object crashes. Flattening the horizontal curve (increase curve radius) of S Rimrock Road would be helpful in crash reduction. The crash reduction factor is 15% to 78% in all crashes at all severities.
N Main St & NW 9th St	There are several utility poles in the vicinity of the intersections; the poles are within 3 feet of the travelled roadway. Relocating the poles to a farther distance would be helpful to reduce the fixed-object crashes.
Turning Crashes	
OR 126 & O'Neil Highway/OR 370	*Addressed as part of solutions discussed in prior sections.*
Rear-End Crashes	
SW Tom McCall Rd & OR 126	Crash data supporting the analysis at this intersection extends back to 2016, prior to the installation of the roundabout. The roundabout has reduced crash incidences at what was previously a two-way stop-controlled intersection. Additional safety measures could be implemented that reduce approach speeds to the roundabout, such as speed warning or speed feedback signage, rumble strips, or other traffic calming.
OR 126 & U.S. 26	*Addressed as part of solutions discussed in prior sections.*

Intersection	Possible Solutions
SW George Millican Rd & OR 126	Crash data supporting the analysis at this intersection extends back to 2016. The intersection of SW George Millican and OR 126 was revised to right-in/right-out in approximately 2018. This intervention likely has substantially reduced the safety issues at this intersection; no further interventions are proposed.

4.4.1 OR 27/S Main Street

In addition to the intersections noted above, the crash rates on U.S. 26/3rd Street and OR 27/S Main Street in Prineville were found to be excessive. Safety issues on U.S. 26/3rd Street would be addressed by the corridorwide solutions discussed in Section 4.1.1.2. OR 27 safety issues could be addressed through the following:

- OR 27 is a rural highway with some sharp horizontal curves at the southern part of Prineville. Flattening the horizontal curves would be beneficial to reduce the crashes by 15% to 78% at all severities.
- Install recommended chevron signs to warn drivers about upcoming curves. The crash reduction factor for this intervention is 16% in roadway departure crashes at all severities.
- Some parts of OR 27 have a very loose shoulder; this may be the reason for the high number of roadway departure crashes. Paving the shoulder would reduce the crashes by 6% to 18% depending on the width of the shoulder.

4.4.2 OR 380/SE Combs Flat Road

While OR 380 south of Main Street did not emerge as a safety hotspot based on crash analysis, community feedback indicates ongoing safety concerns specifically where OR 380 crosses the flood control canal and heads southeast out of the Prineville city limits/urban growth boundary (UGB) (Figure 12). Anecdotally, speeding is a concern and many unreported incidents have occurred at this curve. The project team recommends that the City and ODOT coordinate on near- and long-term solutions which could include the following:

- Near-term vegetation management to improve sight lines around the corner.
- Horizontal alignment warning signage – no warning signage is present.
- Street lighting at the corner.

Figure 12. OR 380 Curve Exiting the Prineville UGB

4.5 Access Management

Section 153.195 of the City of Prineville Land Use Code provides guidelines for access management. The standards are presented as guidelines that the reviewing authority “shall consider” in the review and approval of new development. Local access management standards were updated as part of the 2013 TSP. There has been no need identified to revisit the currently adopted access management standards; the project team reviewed the standards and did not identify any issues.

The ODOT *Access Management Strategy* (November 2020) applies to U.S. 26 within the city, from Meadow Lakes Avenue to Combs Flat Road. This document provides an approach to amending, closing, and improving accesses along U.S. 26/3rd Street, including related urban upgrades in locations in tandem with proposed access management solutions.

4.6 Transportation Systems Management and Operations

The 2013 TSP does not include TSMO projects or programs. TSMO is a set of strategies that focus on operational improvements that can maintain and even restore the performance of the existing transportation system before extra capacity is needed. TSMO strategies also encompass strategies typically considered transportation demand management. The goal is to get the most performance out of the transportation facilities that are already in place. The project team reviewed potential TSMO strategies as described in Chapter 18 of the ODOT *Analysis Procedures Manual* (ODOT 2023). Table 9 reviews potential TSMO projects or policies that the City can consider to manage traffic and mitigate the need for roadway capacity increases. Note that no costs are provided for these possible investments given substantial unknowns about the scale and scope of these projects. However, in general, TSMO projects provide substantial benefit relative to cost.

Table 9. Possible TSMO Investments

TSMO Strategy	Need Addressed	Recommendation	Cost	Supporting Information Required
Weather Warning Systems	There is no weather information signage in Prineville. Weather information signage could provide travelers with information about weather conditions on regional highways.	Coordinate with Crook County and ODOT to determine potential beneficial locations for weather information signage (whether in Prineville or outside of the city). Coordinate with ODOT as intelligent transportation system plans are updated.	Not applicable	Air and road weather conditions
Transit/Freight Signal Priority	Transit signal priority could improve transit travel time reliability on 3rd Street/U.S. 26, especially during peak hours.	There is relatively limited transit service in Prineville today. The need for transit signal priority is minimal under current conditions, but it may increase as transit service increases in Prineville.	Not applicable	Transit vehicle location, transit schedule adherence

TSMO Strategy	Need Addressed	Recommendation	Cost	Supporting Information Required
Marketing/Traveler Information	Traveler information programs can help people understand different ways of getting around town. In Prineville, a marketing and information program that provided information about walking and cycling routes, as well as transit, could help people make more trips by an alternate mode.	Consider a local program for disseminating information about how and where to walk, bike, and take the bus in Prineville. These programs can take many forms, including information provided on the City's website, by mailers, or other means.	Not applicable	Staff resources for supporting travel options programs

4.7 Freight

To serve industrial properties and support future economic development efforts, the City of Prineville designated several roadways as truck routes in the 2013 TSP. The designation of these facilities as truck routes (see Figure 13) does not prohibit local delivery trucks from using other roadways, but is intended to encourage the use of these routes for regional freight needs through design and signage.

The state has designated U.S. 26 and OR 126 as freight routes west of the West Y, but where the highways join the freight route, the designation is removed (east of the Y). 3rd Street/U.S. 26 through Prineville, in addition to U.S. 26 and OR 126 through all of Prineville, are Reduction Review Routes subject to ORS 366.215. This designation must be considered when looking at changes to highway that might narrow or reduce the "hole in the air:" the space available for freight vehicles to use. For example, actions that would reduce the curb-to-curb roadway space must be considered in light of this law.

The 2013 TSP recommended several local routes be added to the local freight network. It does not appear these routes were formally adopted by the City. For the TSP update, the City should consider updating the City Code to reflect these additional routes and also add signage to encourage trucks to use the following routes (as opposed to other local streets):

- Main Street between Peters Road and the southern city limit.
- Lamonta Road from the west UGB to Main Street.
- 9th Street from U.S. 26 to Deer Street, Deer Street from 9th Street to Lamonta Road.
- Future extension east of Main Street from 10th Street to 7th Street/Laughlin Road.
- Peters Road extension between U.S. 26 and Main Street.

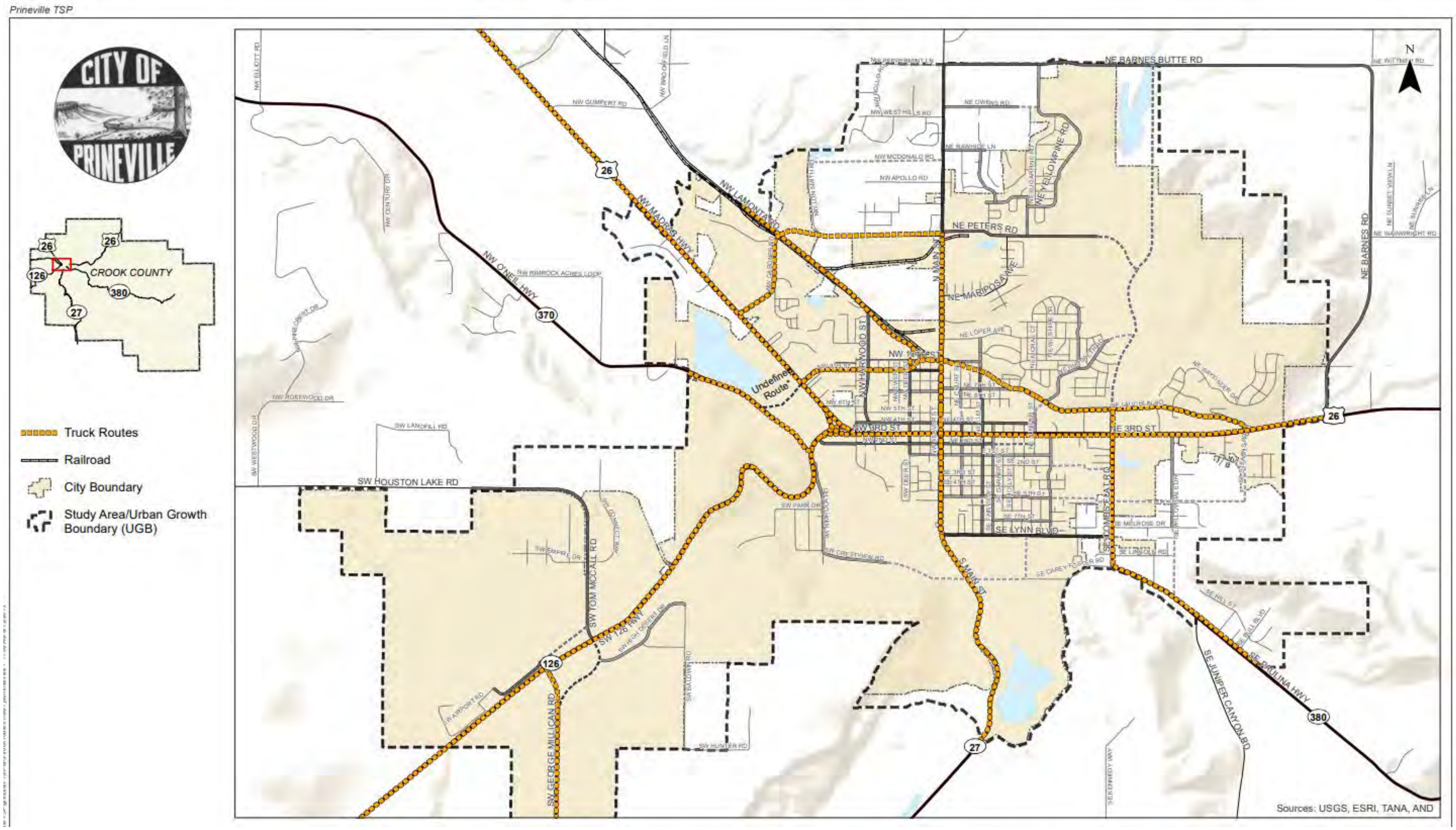

Figure 13. Designated Truck Routes

5. Bicycle and Pedestrian System

5.1 Multiuse Paths and Trails

The 2013 TSP included multiuse paths. However, the recently adopted *Unified Parks and Recreation System Plan* (City of Prineville et al. 2021) includes the most recent multiuse path considerations. These proposed projects are described below.

This plan, adopted in 2021, proposes for several miles of new multiuse trail within or immediately adjacent to Prineville. Table 10 captures these projects. The total projects cost of the planned 14 miles of trails is $4.4 million according to the plan. As these projects were adopted previously by the City, they are carried forward here for inclusion in the updated TSP. The pedestrians and bicycle system solutions sections consider these trails as connections.

Table 10. Proposed Shared-Use Trails

Map ID	Project Name/Description
M1	Barnes Butte Main Loop shared use path: Based on the Barnes Butte Recreation Area Concept Plan, this future trail would provide a shared-use loop that serves as a spine for other trails within the park. The western portion of this trail would partially coincide with the alignment of the Combs Flat Rd. extension.
M2	Crooked River Shared-Use Trail: This future trail is key to the Crooked River Recreation Corridor, providing continuous connectivity and recreation along the Crooked River, with linkages to several parks and recreational destinations. The City’s TSP indicates this trail is a visionary project and would be completed by volunteers.
M3	Iron Horse Shared-Use Trail: this future trail would provide a connection from Combs Flat Rd. to the future Barnes Butte Recreation Area
M4	Look-out Shared Use Trail: Adjacent to the golf course, this trail segment would provide a critical linkage from the Crooked River Recreation Corridor and Shared-Use Trail to the 66 Trail System. The project team proposes a connection to the north end of SW Baldwin Road to provide a cycling and pedestrian link to the industrial are in the southwest of Prineville.
M5	Ochoco Creek Shared-Use Trail: This future trail is another important part of the park and recreation system connecting many different parks and destinations in Prineville. Similar to the Crooked River Shared-Use Trail, the City’s TSP indicates this trail is a visionary project and is not a transportation priority. Note that for the TSP update, the project team propose extending of modifying this connection to extend to the Tom McCall industrial area to provide a new cycling and walking connection to the west part of town.
M6	O’Neil Highway. Shared-Use Trail: This future trail would provide an important connection from Downtown Prineville and the Crooked River Recreation Corridor, to Ochoco Wayside State Park and the 66 Trail System.
M7	North Prineville Loop: This visionary trail would provide a non-motorized connection along the northern edge of Prineville linking Barnes Butte with Hwy. 26 and eventually the Crooked River Wetlands. When completed, this missing link would connect with other proposed trails to create a continuous route around the perimeter of Prineville for pedestrians and cyclists, while increasing connections with parks and city destinations. Due to uncertainty around trail alignment and potential land acquisition, the length is unknown.

2023 TSP Update – New/Updated Solutions				
Map ID	Project Name/Description	Need Addressed	Cost Opinion	Timeline
M8	SE Combs Flat Road Shared-Use Trail: Addition of multiuse path from SE 2nd Street to south City UGB	Connectivity	Included in project R8	Long
M9	Multiuse path from NW 2nd Street to SW High Desert Drive	Connectivity	Cost dependent on routing, facility type	Long
M10	Main Street Improvements: Add shared-use paths on both sides of the road from 10th Avenue north to the north UGB limits.	Connectivity	Cost included in project R6	Long
M11	Tom McCall Road shared-use path on one side of the road, from the Tom McCall roundabout at OR 126 north to the intersection with Social Loop	Connectivity	$1.5M	Long

M = million; TSP = transportation system plan; UGB = urban growth boundary

5.2 Pedestrian System

Note: Improvements proposed for the O'Neil Highway intersection, the West Y, and 3rd Street within city limits are discussed in prior sections.

The 2013 TSP contains recommended pedestrian improvement projects. Table 11 reviews these prior projects. If they have not yet been constructed, the project team reviewed whether they still meet an identified need. Those projects that have been completed or are no longer relevant are noted appropriately; projects that are still relevant are recommended for consideration as part of the updated TSP.

Table 11. Pedestrian System Improvements

Map ID	Project Name/Description	Need Addressed	Cost Opinion	Timeline
2013 TSP Projects				
P7	NE Oregon Street: Addition of sidewalks and curb from Laughlin to Allen.	Sidewalk connectivity	$100,000	Near
P8	NE Laughlin Road: Addition of sidewalks and curb from Garner to intersection with U.S. 26. Sidewalks exist on the north side of Laughlin between Hudspeth and Wayfinder Drive.	Sidewalk connectivity	$1.3M	Near
P14	5th Street: Addition of sidewalks and curb on existing sections of 5th Street.	Sidewalk connectivity	$420,000	Near
P15	Lynn Boulevard: Addition of sidewalks and curb.	Sidewalk connectivity	$600,000	Near
P4	NE Peters Road: Addition of sidewalks and curb to existing NE Peters Road.	Sidewalk connectivity	$430,000	Medium
P5	NE Loper Avenue: Addition of sidewalks and curb between Elm and Main Street.	Sidewalk connectivity	$200,000	Medium
P10	Deer Street: Sidewalks between 1st Street and Ochoco Creek.	Sidewalk connectivity	$70,000	Medium
P11	Fairview Street: Addition of sidewalks and curb between Lynn Boulevard and 4th Street.	Sidewalk connectivity	$330,000	Medium

Map ID	Project Name/Description	Need Addressed	Cost Opinion	Timeline
P6	New Combs Flat Road Extensions: Sidewalks.	Sidewalk connectivity	Included as part of new roadways (see later section)	
P21	New 9th/10th Street Extension: Sidewalks.	Sidewalk connectivity	Included as part of new roadways (see later section)	
P2	New Peters Road Connection to Lamonta Road: Sidewalks.	Sidewalk connectivity	Included as part of new roadways (see later section)	
P22	Elm Street: Sidewalks.	Sidewalk connectivity	$500,000	Long
P1	Gardner Road: Addition of sidewalks and curb.	Sidewalk connectivity	$500,000	Long
P9	NW Harwood Avenue: Addition of sidewalks from 2nd to 10th.	Sidewalk connectivity	$270,000	Long
P12	2nd Street Extension: Sidewalks.	Sidewalk connectivity	Included in new roadway construction	Long
P16	Crossing at Combs Flat Road/5th Street Extension: Crosswalk.		$8,000	Medium
2023 TSP Update – New/Updated Solutions				
N/A – citywide project	Citywide curb ramp upgrades (Americans with Disabilities Act compliance).	Curb ramps provide the ability for people who use a mobility device to use the sidewalk system.	Not applicable	As roads are redeveloped throughout the city.
P25	Vicinity of 3rd Street and Hickey Farms Road: Enhanced pedestrian crossing.	Sidewalk connectivity, safety	$1M	Medium
P23	Vicinity of 3rd Street and Williamson Drive: Enhanced pedestrian crossing.	Safety and Connectivity	$1M	Medium
P24	Combs Flat Road/Lynn Boulevard: intersection and crossing improvements, including lighting.	Crossing improvements	$500,000	Near
P26	Enhanced crossing in vicinity of U.S. 26/Madras Highway and NW Studebaker Drive.	Crossing improvements	$500,000	Long
P27	Enhanced crossing in vicinity of U.S. 26/Madras Highway and NW 9th Street.	Crossing improvements	$500,000	Long
P28	U.S. 26/Madras Highway (west side of highway) sidewalks and curbs, from NW Richland Lane (existing crossing) to approximately Riverland Loop.	Sidewalk connectivity, safety	$2M	Long
P29	Enhanced crossing in vicinity of 3rd Street/Locust Drive.	Crossing improvements	$1M	Long
P30	Sidewalk infill on 3rd Street, generally east of St. Charles Way to east city limits.	Sidewalk connectivity	$5.5M	Medium

M = million

Figure 14 and Figure 15 shows proposed pedestrian projects in Table 11.

Figure 14. Proposed Pedestrian Improvements (West)

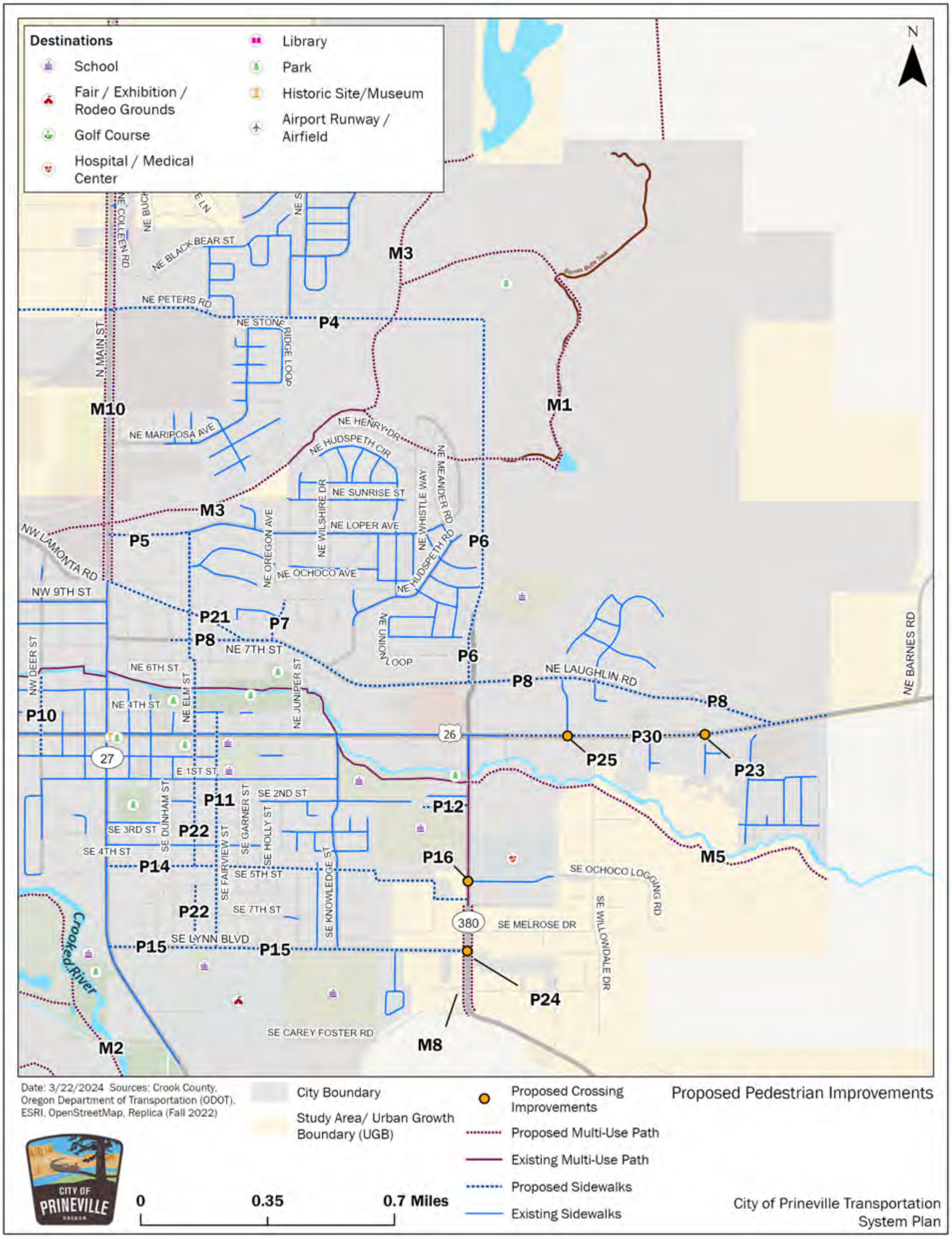

Figure 15. Proposed Pedestrian Improvements (East)

5.3 Bicycle System

Note: Improvements proposed for the O'Neil Highway intersection, the West Y, and 3rd Street within city limits are discussed in prior sections.

The 2013 TSP recommended bicycling improvement projects to increase comfort, safety, and connectivity for people riding bikes.

Table 12 reviews these prior recommended bicycling improvement projects that together would result in a connected network linking essential destinations in Prineville. Table 12 also includes projects modified for current recommendation. If projects had not yet been constructed, the project team reviewed whether they still meet an identified need. In some cases, the team recommends a bike lane project from the 2013 TSP be designated as a Neighborhood Greenway to speed implementation and visibility of bicycle infrastructure. Figure 16 and Figure 17 shows existing and proposed bicycle facilities that would complete a bike network within Prineville. Note that multiuse paths described in Table 11 are available for bicycle use as well.

Table 12. Bicycling Improvements

Map ID	Project Name/Description	Need Addressed	Cost Opinion (2013 $)	Timeline
B2	N Gardner Road (U.S. 26 – NW Lamonta Road): Add bike lanes	Connectivity	$4,000	Long
B3	New Peters Road Connection (NW Lamonta Road – N Main Street): Add bike lanes	Connectivity	Included as part of Project R2	Medium
B4	Peters Road (N Main Street – NE Combs Flat Road extension): Add bike lanes, including widening (partially completed)	Connectivity	$130,000	Medium
B5	New Combs Flat Road Connection (NE 3rd Street – NE Peters Road): Add bike lanes (partially completed)	Connectivity	Included as part Project R1	Medium
B6	Lamonta Road (approx.. N Lon Smith Road – N Main Street): Add bike lanes, including widening	Connectivity	$240,000	Medium
B7	New 9th Street Connection (N Main Street – NE Elm Street): Add bike lanes	Connectivity	Included as part of new roadways (see later section)	Medium
B8	Laughlin Road (N Main Street – NE 3rd Street): Add bike lanes, including widening	School	$810,000	Near
B9	NW Harwood Avenue (NW 2nd Street – NW Lamonta Road): Add bike lanes	Connectivity	<$20,000	Long
B10	Deer Street (SW 5th Place – NW Lamonta Road): Add bike lanes	Connectivity	<$20,000	Medium
B12	Main Street (10th – 3rd): Add bike lanes	Connectivity / Safety	<$20,000	Near
B13	NW 4th Street (NW Locust Avenue – NE Juniper Street): Neighborhood Bikeway	Connectivity	$50,000	Near
B14	Juniper Street (E 1st Street – NE Laughlin Road): Add bike lanes	School	<$20,000	Near

Map ID	Project Name/Description	Need Addressed	Cost Opinion (2013 $)	Timeline
B15	NW 2nd Street (NW Deer Street – SE Fairview Street): Add bike lanes	Connectivity	<$20,000	Near
B16	1st Street (SW Deer Street – NE Knowledge Street): Add bike lanes	Connectivity	<$20,000	Medium
B17	Court Street (SE 5th Street – NE 4th Street): Neighborhood Bikeway and bike lanes	Connectivity	$50,000	Long
B18	Fairview Street (SE Lynn Blvd – NE 4th Street): Neighborhood Bikeway	Connectivity	$50,000	Medium
B19	Knowledge Street (SE Lynn Boulevard – NE 3rd Street): Add bike lanes	School	<$20,000	Near
B20	SE 5th Street (S Main Street – SE Combs Flat Road): Neighborhood Bikeway and bike lanes	School	$50,000	Near
B21	Main Street (end of existing bike lanes – south urban growth boundary): Add bike lanes	Connectivity	$550,000	Medium
2023 TSP Update – New/Additional Solutions				
B22	Ochoco Logging Road Extension – complete bike lanes connection between city limits and Stearns	Connectivity	Cost included in Project R14	Medium
B23	NE Sugar Pine Road/NE Yellowpine Road (NE Peters Road – NE Yellowpine Road): New neighborhood bikeway	Connectivity	<$50,000	Medium
B24	3rd Street/U.S. 26 Bicycling Improvements	See 3rd Street Section earlier in memo		

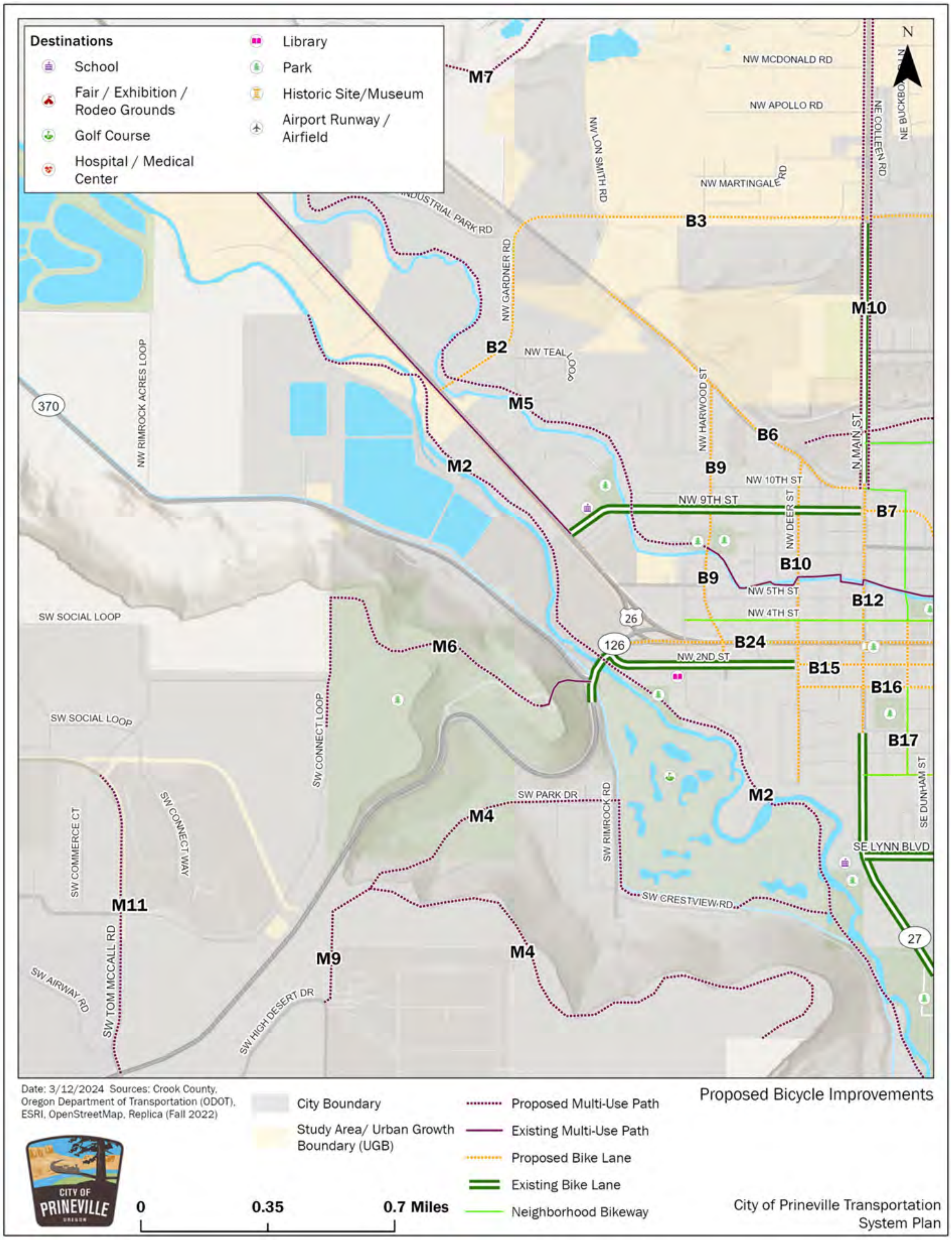

Figure 16. Proposed Bicycling Improvements (West)

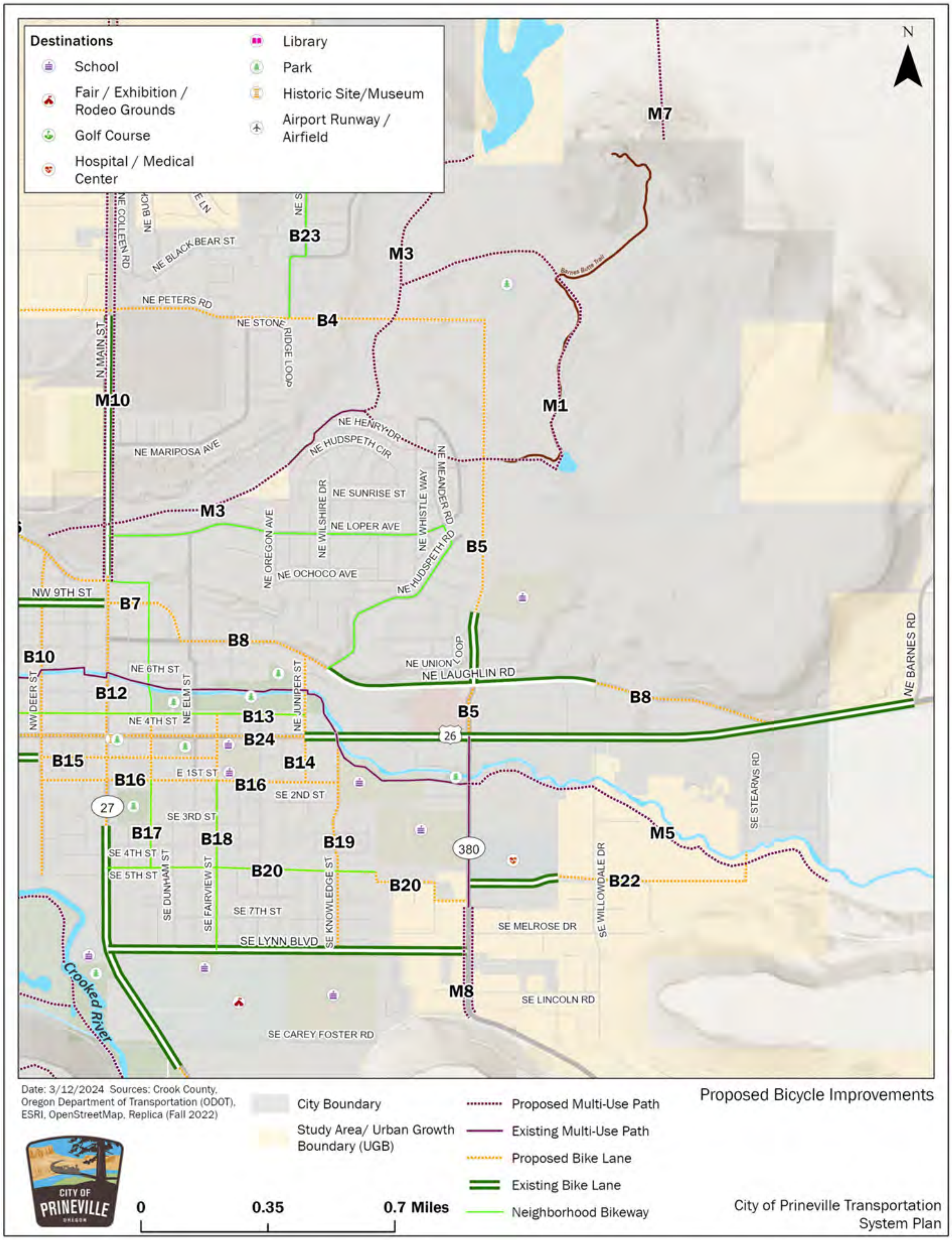

Figure 17. Proposed Bicycling Improvements (East)

5.3.1 Neighborhood Bikeways

Neighborhood bikeways provide safe and comfortable travel for people of all ages and abilities. They are instrumental in creating a cost-effective bicycling network on low-traffic streets. Bikeways are shared-lane facilities where bike traffic and motorized traffic use the same lane without separation. *Improvements primarily consist of signage and "sharrow" pavement markings to make navigation easy and to encourage people to walk and bike (see Figure 18).* These routes would join with other pedestrian and biking facilities to form a network that is continuous and connected.

Figure 18. Neighborhood Bikeway

6. Neighborhood Traffic Calming

Traffic calming refers to strategies for reducing speeding and improving safety for all roadway users. Public feedback during Outreach Milestone #1 indicated speeding in neighborhoods was a concern for the community. Some specific streets where speeding was noted include the following:

- NE Whistle Way
- SE Knowledge Street
- SE Combs Flat Road
- N Main Street/NE Peters Road
- N Main Street/NW 10th Street

Traffic calming includes a wide variety of interventions. Detailed information on dozens of traffic calming interventions, including costs and design considerations, can be found in FHWA's Traffic Calming e-Primer (FHWA 2024).

7. Public Transportation

Transit projects/enhancements identified in CET's Transit Master Plan are shown in Table 13. An additional need identified during outreach for the TSP is for coordination on bus stop improvements citywide.

Table 13. Community Connector Route Service Enhancement Plan

Service	Existing/Near-Term (1–2 years)	Short-Term (3–5 years)	Mid-Term (6–10 years)	Long-Term (11–20 years)
Route 26: Prineville to Redmond	▪ Add one peak weekday trip, interline service with Route 24, serving Redmond Airport and COCC (six total) ▪ Add midday shopper/medical shuttle trip (5 days) ▪ Add three Saturday trips	▪ Add one peak weekday trip (seven weekday, 3 Saturday trips) ▪ Midday shopper/ medical shuttle (5 days)	▪ Add one evening trip (eight weekday, three Saturday trips) ▪ Midday shopper/ medical shuttle (5 days)	▪ Eight weekday, three Saturday trips ▪ Midday shopper/ medical shuttle (5 days) ▪ Add Sunday service (3 trips)
Dial-a-Ride	▪ Dial-A-Ride: 7:30 a.m. to 5:30 p.m.	▪ Dial-A-Ride/Flex Route: 7:30 a.m. to 5:30 p.m., evening and Saturday limited circulation as part of Route 26 flex route.		

COCC = Central Oregon Community College

Additional public transportation services that could provide benefit in Prineville based on identified needs include:

- **One-seat fixed-route service to Bend.** Currently, riders to Bend need to travel to Redmond and transfer before continuing on to Bend. A direct and one-seat ride would provide significant transit travel time savings to those headed to Bend. This need was identified during development of CET's Transit Master Plan and also heard during stakeholder conversations.
- **Prineville Circulator.** A significant portion of trips in Prineville or short driving trips. These trips could potentially be served by circulator shuttle service within Prineville. A circulator route could connect multiple destinations along U.S. 26/3rd Street, as well as schools, parks, social services, and other destinations. This service could be provided by CET or the City and could be implemented seasonally to coincide with periods of highest travel demand in the City.

8. Solutions Evaluation

Table 14 evaluates the proposed solutions based on the evaluation criteria developed earlier in the process. In some cases, there are alternative approaches to addressing a given need. The recommendations made in this memorandum will be reviewed by the City, ODOT, stakeholders, and the public prior to selecting the preferred alternatives for inclusion in the updated TSP.

Note that those projects that are carried forward from other adopted plan are not evaluated further and assumed to be included as part of the updated TSP. For example, proposed transit improvements are carried forward from CET's master plan and are not evaluated further here.

Additionally, projects are assigned a preliminary timeframe for implementation: near-term (0 to 5 years), medium-term (5 to 10 years), and long-term (10+ years) based on an assessment of the relative difficulty of implementation and scale and timing of the underlying transportation needs being addressed.

8.1 Evaluation Criteria

Each project was evaluated and the results are indicated using the following symbols in Table 14:

- ● Project meets or fully addresses the criterion.
- ◖ Project partially meets or addresses the criterion.
- ○ Project does not meet or has negative impacts with respect to the criterion.
- N/A Not applicable.

In some cases, there are multiple alternatives for addressing a given transportation issue. The evaluation criteria help to determine which alternatives have the most merit for further consideration in the updated TSP.

Improvements are identified as near-term (0 to 5 years), medium-term (5 to 10 years), and long-term (10+ years) based on their perceived level of implementation difficulty, as well as on the timing and scale of the need a given project addresses.

Table 14. Solutions Evaluation

			Evaluation Criteria							
Improvement Concept	Planning-level Cost	Jurisdiction Responsible	Enhanced options for vulnerable populations	Addresses known safety issue	Ped/Bike Connection	Benefit / Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Recommendation	Improvement Time frame (near-, medium-, long-term)
West Y/O'Neil Intersection										
Alternative 1: Near-term restriping of westbound OR 126 to a single lane westbound at the O'Neil Highway intersection	$50,000	ODOT	◖	◖	◖	●	●	●	Recommended.	Near
Alternative 2: Signalization	N/A	ODOT	◖	●	◖	○	■	●	Not recommended. Not likely to provide much benefit.	N/A
Alternative 3: Realignment and Rechannelization	N/A	ODOT	◖	◖	◖	◖	◖	●	Not recommended. While it provides some benefits, they are not substantial.	N/A
Alternative 4: Grade Separation	N/A	ODOT	◖	●	●	○	◖	○	Not recommended. Very costly and impactful relative to the mobility and safety benefits.	N/A
Alternative 5: Roundabout and O'Neil Highway intersection improvements	$10-25 million	ODOT	◖	●	◖	◖	●	◖	Recommended. Provides substantial mobility and safety benefits relative to other options.	Long
3rd Street/U.S. 26										
NW Harwood Avenue & NW 3rd Street/U.S. 26: intersection modifications	<$100,00	City of Prineville / ODOT	◖	◖	◖	●	●	●	Recommended. Relatively low-cost improvement to traffic mobility.	Near
Add travel lanes	N/A	City of Prineville / ODOT	○	○	○	◖	◖	◖	Not recommended. Would provide marginal mobility improvement, does not meet ODOT HDM guidance, would decrease all user safety, eliminates on-street parking, does not align with TSP evaluation criteria.	N/A
Couplet	N/A	City of Prineville / ODOT	○	○	◖	○	◖	○	Not recommended. The package of assumed improvements and other proposed improvements in prior sections will substantially improve traffic congestion on 3rd Street. The couplet would be costly, result in major property impacts, and result in safety and multimodal conditions contrary to ODOT HDM recommendations.	N/A
Southern bypass	N/A	City of Prineville / ODOT	◖	○	◖	○	○	○	Not recommended. Substantial impacts and costs, relatively few benefits.	N/A
3rd Street multimodal: focus on parallel streets	$150,000	City of Prineville / ODOT	◖	◖	◖	●	●	●	Recommended based on feedback. This option may not fully satisfy Transportation Planning Rules and ODOT requirements for accommodating cyclists within the corridor. Additional discussion is needed prior to advancing this as a recommendation as it related to 3rd Street; there is benefit to implementing improvements to 2nd and 4th irrespective of the discussion around 3rd Street.	Near
3rd Street multimodal: standard bike lanes	$300,000 Assumes that curbs remain where they are; no repaving	City of Prineville / ODOT	◖	●	●	◖	●	◖	Not recommended based on feedback. Meets evaluation criteria with reduced impacts to on-street parking in the corridor. However, this alternative does not provide the same level of separation for cyclists from traffic as the alternative below.	

Improvement Concept	Planning-level Cost	Jurisdiction Responsible	Evaluation Criteria						Recommendation	Improvement Time frame (near-, medium-, long-term)
			Enhanced options for vulnerable populations	Addresses known safety issue	Ped/Bike Connection	Benefit / Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)		
3rd Street multimodal: Buffered bike lanes	$350,000 Assumes that curbs remain where they are; no repaving	City of Prineville / ODOT	●	●	●	●	●	○	Not recommended based on feedback. While this option largely meets evaluation criteria, it introduces significant impacts to on-street parking in the corridor; this is unlikely to be acceptable to the community.	
3rd Street Sidewalk infill: Complete sidewalks on 3rd Street east of St. Charles Way to city limits (Project P30)	$5.5M	City of Prineville / ODOT	●	●	●	●	◐	◐	Recommended.	Medium
Enhanced pedestrian crossing: vicinity of 3rd Street/Hickey Farms Road	$1M Assumes inclusion of median and RRFB	City of Prineville / ODOT	●	◐	●	●	◐	●	Recommended.	Medium
Enhanced pedestrian crossing: vicinity of 3rd Street/Williamson Drive	$1M Assumes inclusion of median and RRFB	City of Prineville / ODOT	●	◐	●	●	◐	●	Recommended.	Medium
Enhanced pedestrian crossing vicinity of 3rd Street/Locust Drive	$1M Improvements to be determined	City of Prineville / ODOT	●	◐	●	●	◐	●	Recommended.	Long
Other Intersections										
SW Tom McCall Road/OR 126: add slip lanes to existing roundabout (future modeled V/C of 0.91). Alternate mobility standards may be considered.	$1M to $3M	City of Prineville/ODOT	○	◐	○	◐	●	●	Recommended.	
SW Tom McCall Road/OR 126: Expand existing roundabout to two lanes (future modeled V/C of 0.71)	$5M to $7M	City of Prineville / ODOT	○	●	○	◐	●	◐	Not Recommended.	Long
Functional Classification and New Connections										
R1: 9th Street Extension	$4.15 million	City of Prineville	◐	◐	●	◐	●	◐	Recommended.	Long
R2: Peters Road Connection to Lamonta	Project has been advanced by City and is not evaluated further for the TSP.									
R3: Combs Flat Road Extension/Connection with Peters Road	Project has been advanced by City and is not evaluated further for the TSP.									
R7: Combs Flat Road between U.S. 26 and Laughlin – upgrade to arterial standards	$690,000	City of Prineville	◐	◐	◐	◐	◐	●	Recommended.	Medium
R8: Combs Flat Road between U.S. 26 and Lynn Boulevard – widen to arterial standard, including off street path	$4.4 million	City of Prineville	●	◐	●	◐	●	◐	Recommended.	Near
R10: Elm Street Extension between SE 5th and 6th	$430,000	City of Prineville	◐	◐	◐	◐	●	◐	Recommended.	Long
R13: Complete S 5th Street extension between Main Street and Combs Flat Road	$2.5M	City of Prineville	◐	◐	◐	◐	●	◐	Recommended	Long
R14: Ochoco Logging Road Extension: Complete connection between City Limits and Stearns	$2.6 million	City of Prineville	◐	◐	◐	●	●	○	Recommended.	Medium
R6: Main Street (NW 10th Street to Rolla Road): Upgrade to arterial standards	$18.4 million	City of Prineville	◐	◐	◐	◐	◐	●	Recommended.	Long

Improvement Concept	Planning-level Cost	Jurisdiction Responsible	Evaluation Criteria: Enhanced options for vulnerable populations	Addresses known safety issue	Ped/Bike Connection	Benefit / Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Recommendation	Improvement Time frame (near-, medium-, long-term)
FC-1: NE 7th St (N Main Street – NE Laughlin Road): Change functional classification to Major Collector	Unknown	City of Prineville	N/A	N/A	N/A	N/A	N/A	N/A	Recommended.	Near
FC-2: SE 2nd St (SE Knowledge Street – SE Combs Flat Road): Designate functional classification as Local Street	Unknown	City of Prineville	N/A	N/A	N/A	N/A	N/A	N/A	Recommended.	Near
Safety										
NW Deer Street & NW 2nd Street: ▪ Provide “Stop Ahead” pavement markings on NW 2nd Street	$10,000	City of Prineville	◐	●	◐	●	●	●	Recommended.	Near
NE Combs Flat Road/OR 380 & NE 3rd Street/U.S. 26 ▪ Install “Signal Ahead” Advance Warning Sign	$2,000	City of Prineville / ODOT	◐	●	◐	●	●	●	Recommended.	Near
NE Combs Flat Rd/OR 380 & SE Lynn Boulevard ▪ Install lighting and “Stop Ahead” pavement markings ▪ Consider changing to all-way stop ▪ Trim trees to improve sight distance	$200,000	City of Prineville / ODOT	◐	●	◐	●	●	●	Recommended.	Medium
OR 126 & S Rimrock Road ▪ Increase the curve radius of S Rimrock Road	$100,000	City of Prineville / ODOT	◐	●	◐	◐	●	◐	Recommended.	Long
N Main Street & NW 9th Street ▪ Relocate utility poles	$100,000	City of Prineville	◐	●	◐	◐	◐	◐	Recommended.	Medium
SW Tom McCall Road & OR 126 ▪ Add safety measures to reduce approach speeds to the roundabout such as speed feedback signage	$50,000	City of Prineville / ODOT	◐	●	◐	●	◐	●	Recommended.	Medium
OR 27/S Main Street ▪ Flattening the horizontal curve, installing signage, providing paved shoulder	$150,000	City of Prineville / ODOT	◐	●	◐	◐	●	◐	Recommended.	Long
OR 380/SE Combs Flat Road ▪ Managing vegetation, installing signage and street lighting	$100,000	City of Prineville / ODOT	◐	●	◐	●	◐	●	Recommended.	Near
TSMO										
Install weather information signage	N/A	City of Prineville	◐	◐	◐	◐	●	●	Recommended	Medium
Install transit / freight signal priority on 3rd Street	N/A	City of Prineville	◐	●	◐	○	●	●	Not recommended.	N/A
Implement marketing / information program on walking, cycling, and transit routes	N/A	City of Prineville	◐	◐	●	●	◐	●	Recommended	Near
Pedestrian										
P7: NE Oregon Street: Addition of sidewalks and curb from Laughlin to Allen	$100,000	City of Prineville	●	●	●	◐	◐	◐	Recommended.	Near
P8: NE Laughlin Road: Addition of sidewalks and curb from Garner to intersection with U.S. 26. Sidewalks exist on the north side of Laughlin between Hudspeth and Wayfinder Drive	$1.3M	City of Prineville	●	●	●	◐	◐	◐	Recommended.	Near
P14: 5th Street: Addition of sidewalks and curb on existing sections of 5th Street	$420,000	City of Prineville	●	●	●	◐	◐	◐	Recommended.	Near

			Evaluation Criteria							
Improvement Concept	Planning-level Cost	Jurisdiction Responsible	Enhanced options for vulnerable populations	Addresses known safety issue	Ped/Bike Connection	Benefit / Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Recommendation	Improvement Time frame (near-, medium-, long-term)
P15: Lynn Boulevard: Addition of sidewalks and curb	$600,000	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Near
P4: NE Peters Road: Addition of sidewalks and curb to existing NE Peters Road	$430,000	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Medium
P5: NE Loper Avenue: Addition of sidewalks and curb between Elm and Main Street	$200,000	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Medium
P10: Deer Street: Sidewalks between 1st Street and Ochoco Creek	$70,000	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Medium
P11: Fairview Street: Addition of sidewalks and curb between Lynn Boulevard and 4th Street	$330,000	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Medium
P6: New Combs Flat Road Extensions: Sidewalks	Included as part of new roadways	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Medium
P21: New 9th/10th Street Extension: Sidewalks	Included as part of new roadways	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Medium
P2: New Peters Road Connection to Lamonta Road: Sidewalks	Included as part of new roadways	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Medium
P22: Elm Street: Sidewalks	$500,000	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Long
P1: Gardner Road: Addition of sidewalks and curb	$500,000	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Long
P9: NE Harwood Avenue: Addition of sidewalks from 2nd to 10th	$270,000	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Long
P12: 2nd Street Extension: Sidewalks	Included in new roadway construction	City of Prineville	●	●	●	◖	◖	◖	Recommended.	Long
P16: Crossing at Combs Flat Rd/5th Street Extension: Crosswalk	$8,000	City of Prineville / ODOT	●	●	●	◖	◖	◖	Recommended.	Medium
Citywide curb ramp upgrades (Americans with Disabilities Act compliance)	TBD	City of Prineville / ODOT	●	●	●	●	◖	◖	Recommended.	As roads are re-developed throughout the city
P25: Vicinity of 3rd Street and Hickey Farms Road: Enhanced pedestrian crossing.	$400,000	ODOT	●	●	●	●	◖	●	Recommended.	Medium
P23: Vicinity of 3rd Street and Williamson Drive: Enhanced pedestrian crossing.	$400,000	ODOT	●	●	●	●	◖	●	Recommended.	Medium
P20 Main Street (NW 10th Street to Rolla Road) Install sidewalks and curbs	Included as part of new roadways	City of Prineville	●	◖	●	●	◖	◖	Recommended.	Long
P24 SE Combs Flat Road & SE Lynn Boulevard Construct intersection and crossing improvements, including lighting	$500,000	City of Prineville / ODOT	●	◖	●	●	◖	◖	Recommended.	Near
P26 Vicinity of U.S. 26/Madras Highway and NW Studebaker Drive	$500,000	ODOT	●	◖	●	●	◖	◖	Recommended.	Long

Improvement Concept	Planning-level Cost	Jurisdiction Responsible	Evaluation Criteria: Enhanced options for vulnerable populations	Addresses known safety issue	Ped/Bike Connection	Benefit / Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Recommendation	Improvement Time frame (near-, medium-, long-term)
P27 Vicinity of U.S. 26/Madras Highway and NW 9th Street	$500,000	ODOT	●	◖	●	●	◖	◖	Recommended.	Long
P28 U.S. 26/Madras Highway (west side of highway) sidewalks and curbs, from NW Richland Lane (existing crossing) to approximately Riverland Loop	$2M	ODOT/City of Prineville	●	◖	●	◖	◖	◖	Recommended. Need for this project is very long-term and dependent on development.	Long
P29 Enhanced crossing in vicinity of 3rd Street/Locust Drive	$1M	ODOT/City of Prineville	●	◖	●	●	◖	◖	Recommended.	
Bicycling										
B1: Main Street (NW 10th Street to Rolla Road)): Add bike lanes, including widening	Included as part of new roadways	City of Prineville	●	●	●	●	◖	●	Recommended.	Long
B2: N Gardner Road (U.S. 26 – NW Lamonta Road): Add bike lanes	$4,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Long
B3: New Peters Road Connection (NW Lamonta Road – N Main St): Add bike lanes	Included as part of new roadways	City of Prineville	●	●	●	●	◖	●	Recommended.	Medium
B4: Peters Road (N Main St – NE Combs Flat Road extension): Add bike lanes, including widening	$130,000	City of Prineville	●	●	●	◖	◖	●	Recommended.	Medium
B5: New Combs Flat Rd Connection (NE 3rd Street – NE Peters Road): Add bike lanes	$4,150,000	City of Prineville / ODOT	●	●	●	●	◖	●	Recommended.	Medium
B6: Lamonta Road (approx. N Lon Smith Road – N Main Street): Add bike lanes, including widening	$240,000	City of Prineville	●	●	●	◖	◖	●	Recommended.	Medium
B7: New 9th Street Connection (N Main Street – NE Elm Street): Add bike lanes	Included as part of new roadways	City of Prineville	●	●	●	●	◖	●	Recommended.	Medium
B8: Laughlin Road (N Main Street – NE 3rd Street): Add bike lanes, including widening	$810,000	City of Prineville	●	●	●	◖	◖	●	Recommended.	Near
B9: NW Harwood Avenue (NW 2nd Street – NW Lamonta Road): Add bike lanes	<$20,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Long
B10: Deer Street (SW 5th Place – NW Lamonta Road): Add bike lanes	<$20,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Medium
B12: Main Street (10th – 3rd): Add bike lanes	<$20,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Near
B13: NW 4th Street (NW Locust Avenue – NE Juniper Street): Neighborhood Bikeway	$50,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Near
B14: Juniper Street (E 1st Street – NE Laughlin Road): Add bike lanes	<$20,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Near
B15: NW 2nd Street (NW Deer Street – SE Fairview Street): Add bike lanes	<$20,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Near
B16: 1st Street (SW Deer Street – NE Knowledge Street): Add bike lanes	<$20,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Medium
B17: Court Street (SE 5th Street – NE 4th Street): Neighborhood Bikeway and bike lanes	$50,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Long
B18 Fairview Street (SE Lynn Boulevard – NE 4th Street: Neighborhood Bikeway	$50,000	City of Prineville	●	●	●	●	◖	●	Recommended.	Medium

			Evaluation Criteria							
Improvement Concept	Planning-level Cost	Jurisdiction Responsible	Enhanced options for vulnerable populations	Addresses known safety issue	Ped/Bike Connection	Benefit / Cost	Roadway System Performance	Minimizes Impacts (ROW, Environmental, etc.)	Recommendation	Improvement Time frame (near-, medium-, long-term)
B19: Knowledge Street (SE Lynn Blvd – NE 3rd Street): Add bike lanes	<$20,000	City of Prineville	●	●	●	●	◐	●	Recommended.	Near
B20: SE 5th Street (S Main Street – SE Combs Flat Road): Neighborhood Bikeway and bike lanes	$50,000	City of Prineville	●	●	●	●	◐	●	Recommended.	Near
B21: Main Street (end of existing bike lanes – south UGB): Add bike lanes	$550,000	City of Prineville	●	●	●	●	◐	●	Recommended.	Medium
B22: Ochoco Logging Road Extension – complete bike lanes connection between City Limits and Stearns	Included as part of new roadways	City of Prineville	●	●	●	◐	◐	●	Recommended.	Medium
B23: NE Sugar Pine Road/NE Yellowpine Road (NE Peters Road – NE Yellowpine Road): New neighborhood bikeway	<$50,000	City of Prineville	●	●	●	●	◐	●	Recommended.	Medium
B24: 3rd Street/U.S. 26 Bicycling Improvements	N/A	City of Prineville / ODOT	See 3rd Street Improvement Concepts							
Multiuse Paths										
M1. Barnes Butte Main Loop shared-use path	N/A	City of Prineville	Already adopted as part of other plans							
M2: Crooked River Shared-Use Trail	N/A	City of Prineville	Already adopted as part of other plans							
M3: Iron Horse Shared-Use Trail	N/A	City of Prineville	Already adopted as part of other plans							
M4: Look-out Shared-Use Trail	N/A	City of Prineville	Already adopted as part of other plans							
M5: Ochoco Creek Shared-Use Trail	N/A	City of Prineville	Already adopted as part of other plans							
M6: O'Neil Highway	N/A	City of Prineville / ODOT	Already adopted as part of other plans							
M7: North Prineville Loop	N/A	City of Prineville	Already adopted as part of other plans							
M8: SE Combs Flat Road Shared-Use Path: ▪ Construct multiuse path ▪ Addition of shared-use trail from SE 2nd Street to south City UGB	$2M	City of Prineville / ODOT	●	●	●	◐	◐	◐	Recommended.	Long
M9: Pedestrian and bicycling connection from NW 2nd Street to SW High Desert Drive ▪ Construct multiuse path	TBD based on routing	City of Prineville / ODOT	●	●	●	◐	◐	○	Recommended.	Long
M10: Main Street Improvements: add shared-use paths on both sides of the road from 10th Avenue north to the north UGB limits	Cost included in project R6	City of Prineville / ODOT	●	◐	●	◐	◐	◐	Recommended.	Long
M11: Tom McCall Road shared-use path on one side of the road, from the Tom McCall roundabout at OR 126 north on to intersection with Social Loop	$1.5M	City of Prineville	●	◐	●	◐	◐	◐	Recommended.	Long

Improvement Concept	Planning-level Cost	Jurisdiction Responsible	Evaluation Criteria: Enhanced options for vulnerable populations	Evaluation Criteria: Addresses known safety issue	Evaluation Criteria: Ped/Bike Connection	Evaluation Criteria: Benefit / Cost	Evaluation Criteria: Roadway System Performance	Evaluation Criteria: Minimizes Impacts (ROW, Environmental, etc.)	Recommendation	Improvement Time frame (near-, medium-, long-term)
Public Transportation										
Route 26: Prineville to Redmond service improvements	N/A	CET	Already adopted as part of other plans							
Dial-a-Ride service expansion	N/A	CET	Already adopted as part of other plans							
One-seat fixed-route service to Bend	N/A	CET	●	◐	◐	◐	●	●	Recommended.	Near
Prineville Circulator	N/A	CET / City of Prineville	●	◐	◐	●	●	●	Recommended.	Medium

CET = Cascades East Transit; HDM = highway design manual; M = million; N/A = not applicable; ODOT = Oregon Department of Transportation; RRFB = rectangular rapid flashing beacon; TDB = to be determined; TSP = transportation system plan; UGB = urban growth boundary; V/C = volume to capacity

9. Underserved Populations

Based on analysis from Technical Memorandum #3, notable demographic findings that influence transportation planning include the following:

- Prineville has a lower median household income compared to Crook County ($16,702 deficit) and the State of Oregon ($23,369 deficit). Prineville has a significantly higher percentage of people meeting the federal poverty threshold (45%) compared to Crook County (32%). These households are most concentrated in the central tract of the city.
- Prineville has a higher Hispanic/Latino population compared to Crook County and Oregon overall. The tract with the highest percentage of communities of color is to the west of Barnes Butte, in the northeast section of the city.
- Prineville has a higher percentage of people with disabilities compared to both Crook County and Oregon.
- Prineville has a lower percentage of workers who work from home compared to Crook County and Oregon overall.
- Prineville has a lower percentage of adults over 65 years old (20%) compared to Crook County (25%).
- Prineville has a higher percentage of households with zero vehicles available compared to Crook County.

Table 15 provides an assessment of how TSP solutions can address the needs of underserved populations in Prineville.

Table 15. Underserved Population Considerations

Underserved Population Need	Potential Solutions to Enhance Transportation Service
Low-income households	▪ Expanded Dial-A-Ride system in Prineville (service span and include weekends). ▪ Expanded fixed-route transit options, including a more direct route to Bend that would provide a more direct route to services. ▪ Bicycle and pedestrian enhancement projects proposed in previous sections would enhance the ability to make safe and comfortable cycling and walking trips to and from destinations within the City.
Hispanic/Latino population	▪ For those with limited English proficiency, providing traveler information in Spanish can facilitate use of transit services and other alternative modes.
People who have physical disabilities	▪ Curb ramp upgrades on local, county, and state-owned roadways would greatly enhance the sidewalk system for people who use mobility devices. Sidewalk infill projects would similarly enhance access. ▪ Transit service enhancements described in this memorandum would provide a direct benefit to people with disabilities.
Households without access to a personal vehicle	▪ Transit and multimodal solutions described in this table and memorandum would provide enhanced options for people who do not have access to a personal vehicle.

10. Funding

Prineville's transportation funding comes from Special Revenue funds and Capital Project funds. Special Revenue funds support the Transportation Fund, estimated to have approximately $1.77 million for fiscal year (FY) 2023. Capital Project funds support the Transportation System Development Charge (SDC) Fund, estimated to have approximately $10.9 million for FY23. The Transportation Fund is unrestricted in funding purposes. The Transportation SDC Fund is earmarked for projects and cannot be used for other purposes; typical distributions support substantial improvements such as traffic signals or new roadways. Table 16 and Table 17 illustrate historical funding sources for transportation in Prineville.

Table 16. Historical Transportation Funding

Fiscal Year	Franchise Fee Revenue – Water	Franchise Fee Revenue – Wastewater	Excavation Permits	State Revenue Sharing	Gas Tax	Transfer from General Fund	Total Primary Funding Sources
FY23 (Estimate)	$ 148,000	$ 205,000	$ 10,701	$ 144,458	$ 866,000	$ 400,000	$ 1,774,159
FY22	$ 144,000	$ 196,000	$ 10,270	$ 135,993	$ 853,469	$ 400,000	$ 1,739,731
FY21	$ 147,000	$ 191,000	$ 18,380	$ 136,539	$ 758,319	$ 400,000	$ 1,651,239
FY20	$ 142,000	$ 185,000	$ 16,474	$ 121,983	$ 686,113	$ 300,000	$ 1,451,570
FY19	$ 253,000	$ 177,000	$ 9,841	$ 112,853	$ 721,924	$ 300,000	$ 1,574,617
FY18	-	$ 173,000	$ 11,745	$ 107,529	$ 624,833	$ 400,000	$ 1,317,107
FY17	$ 113,000	$ 164,000	$ 12,075	$ 100,135	$ 566,538	$ 100,000	$ 1,055,748
FY16	$ 100,000	$ 159,000	$ 8,805	$ 92,247	$ 551,850	$ 100,000	$ 1,011,902
FY15	$ 94,000	$ 151,000	$ 24,406	$ 91,241	$ 533,823	$ 146,000	$ 1,040,470

Source: City of Prineville, 2023

Table 17. Historical Transportation SDC Funding

Fiscal Year	Project-Specific Intergovernmental Grant Revenue	SDC Collection	Miscellaneous	Interest	Total Primary Funding Sources
FY23 - Estimate	$ 9,900,000	$ 804,988	-	$ 235,221	$ 10,940,208
FY22	$ 900,000	$ 592,747	$ 50,000	$ 3,869	$ 1,546,616
FY21	$ 1,797	$ 783,401	-	$ 7,894	$ 793,091
FY20	$ 1,547,600	$ 633,346	-	$ 24,536	$ 2,205,482
FY19	$ 277,615	$ 593,125	$ 9,000	$ 31,425	$ 911,164
FY18	-	$ 525,075	-	$ 11,120	$ 536,195
FY17	-	$ 334,548	-	$ 4,236	$ 338,784
FY16	-	$ 486,025	$ 44	$ 1,728	$ 487,798
FY15	-	$ 120,884	-	$ 2,950	$ 123,834

Source: City of Prineville, 2023
SDC = system development charge

Based on recent revenue history, the City is likely to have approximately $1.5 million to $2.0 million per year available for transportation maintenance, operations, and capital projects. The share of these funds available for capital construction varies.

SDC revenues represent a dedicated source of funding for transportation system capital investments, with consistent revenues in recent years from continued growth in the City. The City's current SDC fee structure assesses $5,702.81 per residential unit and $5,702.81 per peak hour trip generated (based on ITE Trip Generation manual); the fees should be recalibrated based on the updated TSP when complete. Table 18 discusses and updates other funding and financing mechanisms identified as part of the 2013 TSP with updated applicability recommendations.

Table 18. Possible Local Funding and Financing Mechanisms

Local Funding/Financing Option	Description	Applicability to Prineville
User Fee	Fees added to a monthly utility bill or tied to the annual registration of a vehicle to pay for improvements, expansion, and maintenance on the street system.	Preliminary street improvements
Street Utility Fees/Road Maintenance Fee	The fee is based on the number of trips a particular land use generates and is usually collected through a regular utility bill.	These fees are typically restricted to maintenance of the transportation system. However, the additional maintenance revenue can free up other resources to apply to capital project investments.
Stormwater SDCs, Grants, and Loans	Systems Development Charges, Grants, and Loans obtained for the purposes of making improvements to stormwater management facilities.	Stormwater SDC revenues can contribute toward the cost of transportation projects where there is nexus with stormwater improvements.
Local Gas Tax	A local tax assessed on the purchase of gas within the City. This tax is added to the cost of gasoline at the pump, along with the state and federal gas taxes. Many communities in Oregon assess local gas taxes, typically ranging from $0.01 to $0.10 per gallon.	System-wide transportation facilities including streets, sidewalks, bike lanes, and trails. Local gas taxes also bring revenue from people driving through town or from out of town, helping to providing funding for the transportation system beyond just local drivers.
Public/Private Partnerships	Public/private partnerships have been used in several places around the country to provide public transportation amenities within the public right-of-way in exchange for operational revenue from the facilities. These partnerships could be used to provide services such as charging stations, public parking lots, bicycle lockers, or carshare facilities	This source is not likely applicable to Prineville.

Local Funding/Financing Option	Description	Applicability to Prineville
Tax Increment Financing (TIF)	A tool cities use to create special districts (tax increment areas) where public improvements are made in order to generate private-sector development. During a defined period, the tax base is frozen at the pre-development level. Property taxes for that period can be waived or paid, but taxes derived from increases in assessed values (the tax increment) resulting from new development can go into a special fund created to retire bonds issued to originate the development or leverage future improvements. A number of small-to-medium sized communities in Oregon have implemented, or are considering implementing, urban renewal districts that will result in a TIF revenue stream	The City's comprehensive plan includes a policy goal of exploring the establishment of urban renewal areas; there are currently none in the City. TIF revenues derived from an urban renewal area must be applied in the same area. Nearly any transportation investment would be eligible for funding.
Local Improvement Districts (LID)	A local improvement district is a geographic area where local property owners are assessed a fee to cover the cost of a public improvement in that area.	Improvements to the transportation system in a local area where local property owners will benefit from the improvement. These are typically used for very specific improvements and are not often applied to generate large-scale revenues for major capital projects.

Local revenue sources provide an important source of matching funds for a wide variety of transportation grants and programs the City could pursue. Table 19 reviews the grant programs identified during the prior TSP process and updates the discussion and their applicability as appropriate.

Table 19. Possible Grant Funding Programs

Funding source	Description	Applicability
Statewide Transportation Improvement Program (STIP) and attendant state/federal funding	STIP is the State of Oregon's four-year transportation capital improvement program. Local agencies apply in advance for projects to be funded in each four-year cycle. Capital projects are prioritized based on benefit categories, including benefits to state-owned facilities, mobility, accessibility, economic vitality, environmental stewardship, land use and growth management, livability, safety and security, equity, and funding and finance. The STIP program is an umbrella for allocating funding from multiple federal and state grant sources.	Projects of regional or statewide significance are generally those that are most likely to garner inclusion in the STIP. Investments on or in relation to 3rd Street/U.S. 26 as well as the West Y are those that are most likely to be attractive for STIP funding. Additionally, clear community and elected official support, matching funds, and partnerships are also key to STIP funding success.
Transportation and Growth Management Grants (TGM)	TGM Grants are administered by ODOT and awarded on an annual basis. The TGM grants are generally awarded to projects that will lead to more livable, economically vital, transportation efficient, sustainable, pedestrian-friendly communities. The grants are awarded in two categories: transportation system planning and integrated land use & transportation planning	TGM grants can support planning and refinement of TSP projects, such as corridors, paths, or active transportation projects.

Funding source	Description	Applicability
Oregon Community Paths Program	This program funds trails and paths projects that serve a transportation purpose and that connect places or destinations. There is approximately $35 million available for project refinement and construction grants every other year	This program is promising for path projects identified in the TSP. The path projects need to have a clear transportation purpose and not only recreation.
Carbon Reduction Funding Program	For smaller communities, there is about $12M available annually through approximately 2026 (unless the federal funding is authorized for further years). Eligible projects types include transportation system management, active transportation, transit, and a variety of transportation investments that have a connection to reducing greenhouse gas emissions.	Most projects in the TSP are likely eligible for this funding source.
FEMA Building Resilient Infrastructure and Communities (BRIC)	The BRIC program provides funding for projects and programs that increase community resiliency from various threats, such as wildfire or flooding. Annual funding varies, but there is approximately $100M available for Oregon in the most recent grant solicitation.	This program could be looked to for transportation projects that have a connection to evacuation needs – for example, projects that increase system redundancy and mitigate life/safety risks in the event of an emergency and evacuation.
Safe Routes to School	Projects within a one-mile radius of a school, within a local roadway, and in a jurisdictional plan. SRTS guidance is being updated as of this writing and indications are that the eligible radius will be expanded to 2 miles and the maximum grant increased to $3M with future grant solicitations.	TSP is likely to include multiple projects that would have a direct impact on cycling and walking to school.
Statewide Transportation Improvement Fund (STIF) discretionary funds	Transit projects that improve transit service, stops, and connections to other communities. Generally requires 20% match. Only “qualified entities” are eligible to apply for funding; Prineville would need to likely partner with the County or CET to access this funding.	Would require considerable support from partners and elected officials.

11. References

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Appendix A

Traffic Analysis Results

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	785	15	25	610	55	70	40	25	55	45	80
Future Volume (vph)	95	785	15	25	610	55	70	40	25	55	45	80
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.94		1.00	0.90	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1471	1575		1385	1652		1662	1649		1662	1234	
Flt Permitted	0.33	1.00		0.29	1.00		0.52	1.00		0.71	1.00	
Satd. Flow (perm)	507	1575		424	1652		907	1649		1251	1234	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	95	785	15	25	610	55	70	40	25	55	45	80
RTOR Reduction (vph)	0	1	0	0	2	0	0	21	0	0	58	0
Lane Group Flow (vph)	95	799	0	25	663	0	70	44	0	55	67	0
Heavy Vehicles (%)	13%	11%	0%	20%	5%	0%	0%	0%	0%	0%	0%	44%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	95.2	88.6		89.2	85.6		12.8	12.8		12.8	12.8	
Effective Green, g (s)	95.2	88.6		89.2	85.6		12.8	12.8		12.8	12.8	
Actuated g/C Ratio	0.79	0.74		0.74	0.71		0.11	0.11		0.11	0.11	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	4.0		2.0	4.0		2.5	2.5		2.5	2.5	
Lane Grp Cap (vph)	455	1162		344	1178		96	175		133	131	
v/s Ratio Prot	c0.01	c0.51		0.00	0.40			0.03			0.05	
v/s Ratio Perm	0.15			0.05			c0.08			0.04		
v/c Ratio	0.21	0.69		0.07	0.56		0.73	0.25		0.41	0.51	
Uniform Delay, d1	4.4	8.3		5.3	8.2		51.9	49.2		50.1	50.6	
Progression Factor	1.00	1.00		0.62	0.73		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	3.3		0.0	1.7		22.6	0.6		1.5	2.5	
Delay (s)	4.4	11.7		3.3	7.7		74.6	49.8		51.6	53.1	
Level of Service	A	B		A	A		E	D		D	D	
Approach Delay (s)		10.9			7.6			62.6			52.7	
Approach LOS		B			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

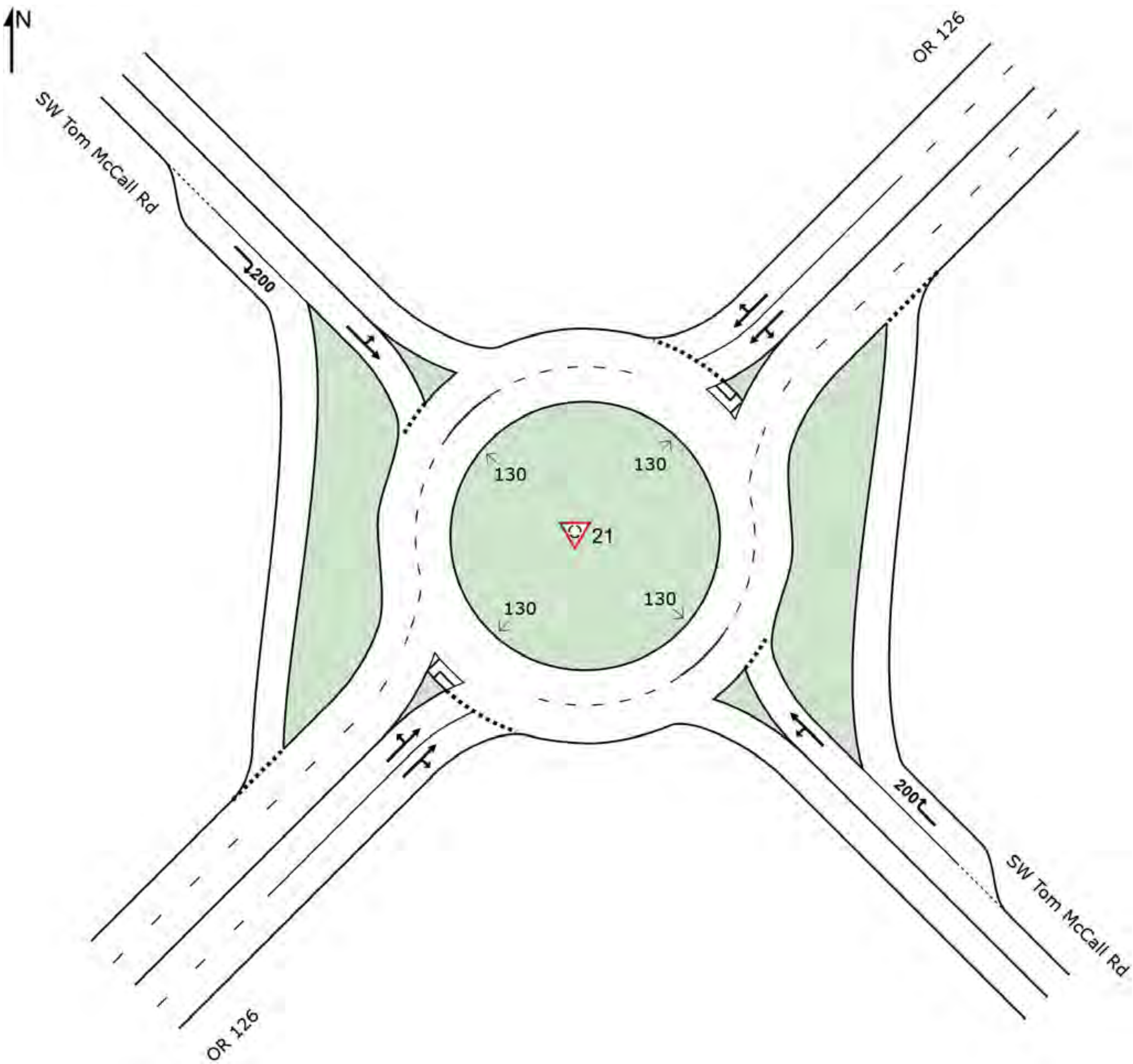
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	785	15	25	610	55	70	40	25	55	45	80
Future Volume (veh/h)	95	785	15	25	610	55	70	40	25	55	45	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1573	1600	1750	1477	1682	1750	1750	1750	1750	1750	1750	1149
Adj Flow Rate, veh/h	95	785	15	25	610	55	70	40	25	55	45	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	13	11	0	20	5	0	0	0	0	0	0	44
Cap, veh/h	611	1097	21	333	1036	93	152	146	92	209	82	146
Arrive On Green	0.05	0.70	0.70	0.06	1.00	1.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1498	1565	30	1407	1520	137	1286	1007	629	1358	565	1004
Grp Volume(v), veh/h	95	0	800	25	0	665	70	0	65	55	0	125
Grp Sat Flow(s),veh/h/ln	1498	0	1594	1407	0	1657	1286	0	1637	1358	0	1569
Q Serve(g_s), s	2.2	0.0	36.1	0.6	0.0	0.0	6.4	0.0	4.2	4.5	0.0	8.9
Cycle Q Clear(g_c), s	2.2	0.0	36.1	0.6	0.0	0.0	15.3	0.0	4.2	8.7	0.0	8.9
Prop In Lane	1.00		0.02	1.00		0.08	1.00		0.38	1.00		0.64
Lane Grp Cap(c), veh/h	611	0	1118	333	0	1130	152	0	238	209	0	228
V/C Ratio(X)	0.16	0.00	0.72	0.08	0.00	0.59	0.46	0.00	0.27	0.26	0.00	0.55
Avail Cap(c_a), veh/h	627	0	1118	364	0	1130	201	0	300	261	0	288
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.81	0.00	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	10.7	9.8	0.0	0.0	54.7	0.0	45.6	49.5	0.0	47.6
Incr Delay (d2), s/veh	0.0	0.0	3.9	0.0	0.0	1.8	1.6	0.0	0.5	0.5	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	12.6	0.2	0.0	0.6	2.2	0.0	1.8	1.6	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	0.0	14.7	9.8	0.0	1.8	56.3	0.0	46.1	50.0	0.0	49.1
LnGrp LOS	A	A	B	A	A	A	E	A	D	D	A	D
Approach Vol, veh/h		895			690			135			180	
Approach Delay, s/veh		13.6			2.1			51.4			49.4	
Approach LOS		B			A			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	89.2		22.4	10.7	86.8		22.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	6.0	77.0		22.0	7.0	76.0		22.0				
Max Q Clear Time (g_c+I1), s	2.6	38.1		10.9	4.2	2.0		17.3				
Green Ext Time (p_c), s	0.0	10.9		0.5	0.0	8.7		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			15.5									
HCM 6th LOS			B									

SITE LAYOUT

Site: 21 [SW Tom McCall Rd & OR 126 - 2 Lane (Site Folder: Future Build-PM Peak)]

Site Category: Future Build - PM Peak
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: PARAMETRIX | Licence: NETWORK / 1PC | Created: Friday, February 2, 2024 11:34:24 AM
Project: U:\Port\Projects\Clients\2395-ODOT\274-2395-121 PrinevilleTSPUpdate'22\02WBS\Task 5 System Inventory and Needs Analysis\Traffic Analysis\05Analysis\Sidra\2045 Alternative\SW Tom McCall Rd - OR 126.sip9

MOVEMENT SUMMARY

Site: 21 [SW Tom McCall Rd & OR 126 - 2 Lane (Site Folder: Future Build-PM Peak)]

Site Category: Future Build - PM Peak
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
SouthEast: SW Tom McCall Rd														
3x	L2	255	5.0	255	5.0	0.533	19.0	LOS C	2.4	62.0	0.78	1.02	1.10	31.5
8x	T1	5	0.0	5	0.0	0.533	12.2	LOS B	2.4	62.0	0.78	1.02	1.10	31.3
18x	R2	270	4.0	270	4.0	0.546	12.5	LOS B	2.5	64.8	0.79	0.97	1.12	32.6
Approach		530	4.4	530	4.4	0.546	15.6	LOS C	2.5	64.8	0.79	0.99	1.11	32.0
NorthEast: OR 126														
1x	L2	85	24.0	85	24.0	0.314	11.6	LOS B	1.4	37.0	0.45	0.53	0.45	36.1
6x	T1	520	5.0	520	5.0	0.314	4.7	LOS A	1.5	37.9	0.45	0.50	0.45	36.9
16x	R2	40	3.0	40	3.0	0.314	5.1	LOS A	1.5	37.9	0.45	0.47	0.45	35.7
Approach		645	7.4	645	7.4	0.314	5.6	LOS A	1.5	37.9	0.45	0.50	0.45	36.7
NorthWest: SW Tom McCall Rd														
7x	L2	420	2.0	420	2.0	0.714	19.4	LOS C	4.6	120.2	0.82	1.10	1.33	31.4
4x	T1	25	42.0	25	42.0	0.714	12.8	LOS B	4.6	120.2	0.82	1.10	1.33	30.8
14x	R2	280	2.0	280	2.0	0.402	8.0	LOS A	1.8	45.4	0.67	0.84	0.78	34.9
Approach		725	3.4	725	3.4	0.714	14.8	LOS B	4.6	120.2	0.76	1.00	1.12	32.6
SouthWest: OR 126														
5x	L2	5	13.0	5	13.0	0.460	13.9	LOS B	2.4	61.8	0.66	0.72	0.76	36.3
2x	T1	730	5.0	730	5.0	0.460	7.0	LOS A	2.4	61.8	0.66	0.72	0.76	36.3
12x	R2	5	25.0	5	25.0	0.460	7.6	LOS A	2.4	61.7	0.66	0.72	0.76	34.4
Approach		740	5.2	740	5.2	0.460	7.1	LOS A	2.4	61.8	0.66	0.72	0.76	36.3
All Vehicles		2640	5.1	2640	5.1	0.714	10.6	LOS B	4.6	120.2	0.66	0.80	0.85	34.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	80	15	35	0	645	175
Future Vol, veh/h	80	15	35	0	645	175
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	3	20	12	4	9	5
Mvmt Flow	80	15	35	0	645	175

Major/Minor	Minor2				Major2	
Conflicting Flow All	645	645			-	0
Stage 1	645	-			-	-
Stage 2	0	-			-	-
Critical Hdwy	6.43	6.4			-	-
Critical Hdwy Stg 1	5.43	-			-	-
Critical Hdwy Stg 2	-	-			-	-
Follow-up Hdwy	3.527	3.48			-	-
Pot Cap-1 Maneuver	435	442			-	-
Stage 1	520	-			-	-
Stage 2	-	-			-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	435	442			-	-
Mov Cap-2 Maneuver	435	-			-	-
Stage 1	520	-			-	-
Stage 2	-	-			-	-

Approach	EB	SB
HCM Control Delay, s	14.8	0
HCM LOS	B	

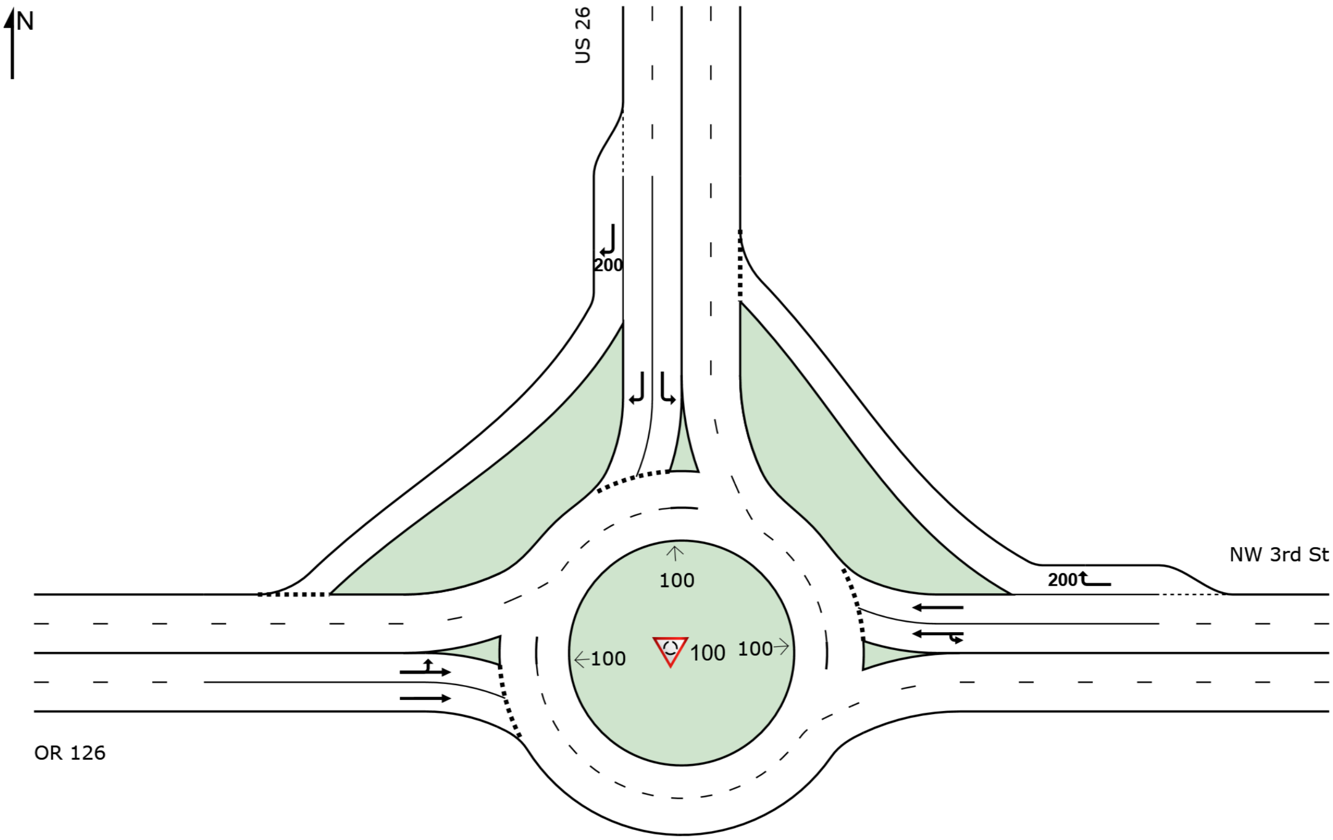
Minor Lane/Major Mvmt	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	435	442	-	-
HCM Lane V/C Ratio	0.184	0.034	-	-
HCM Control Delay (s)	15.1	13.4	-	-
HCM Lane LOS	C	B	-	-
HCM 95th %tile Q(veh)	0.7	0.1	-	-

SITE LAYOUT

Site: 100 [West Y Interchange (Site Folder: Concept A)]

Alternative 4 Concept A
Site Category: -
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 100 [West Y Interchange (Site Folder: Concept A)]

Alternative 4 Concept A
Site Category: -
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
East: NW 3rd St														
1u	U	90	4.0	90	4.0	0.329	13.6	LOS B	1.5	39.4	0.44	0.58	0.44	36.5
6	T1	610	4.0	610	4.0	0.329	5.2	LOS A	1.5	39.4	0.43	0.52	0.43	36.1
16	R2	225	5.0	225	5.0	0.207	5.0	LOS A	0.8	21.4	0.37	0.56	0.37	35.8
Approach		925	4.2	925	4.2	0.329	6.0	LOS A	1.5	39.4	0.41	0.54	0.41	36.1
North: US 26														
7	L2	165	9.0	165	9.0	0.235	13.0	LOS B	0.8	22.1	0.58	0.86	0.58	33.4
14	R2	210	9.0	210	9.0	0.159	7.3	LOS A	0.5	14.4	0.57	0.77	0.57	34.9
Approach		375	9.0	375	9.0	0.235	9.8	LOS A	0.8	22.1	0.58	0.81	0.58	34.2
West: OR 126														
5	L2	245	4.0	245	4.0	0.720	13.7	LOS B	6.9	178.5	0.74	0.82	0.88	34.6
2	T1	1260	4.0	1260	4.0	0.720	7.6	LOS A	6.9	178.5	0.73	0.77	0.85	35.1
Approach		1505	4.0	1505	4.0	0.720	8.6	LOS A	6.9	178.5	0.73	0.78	0.86	35.0
All Vehicles		2805	4.7	2805	4.7	0.720	7.9	LOS A	6.9	178.5	0.60	0.70	0.67	35.2

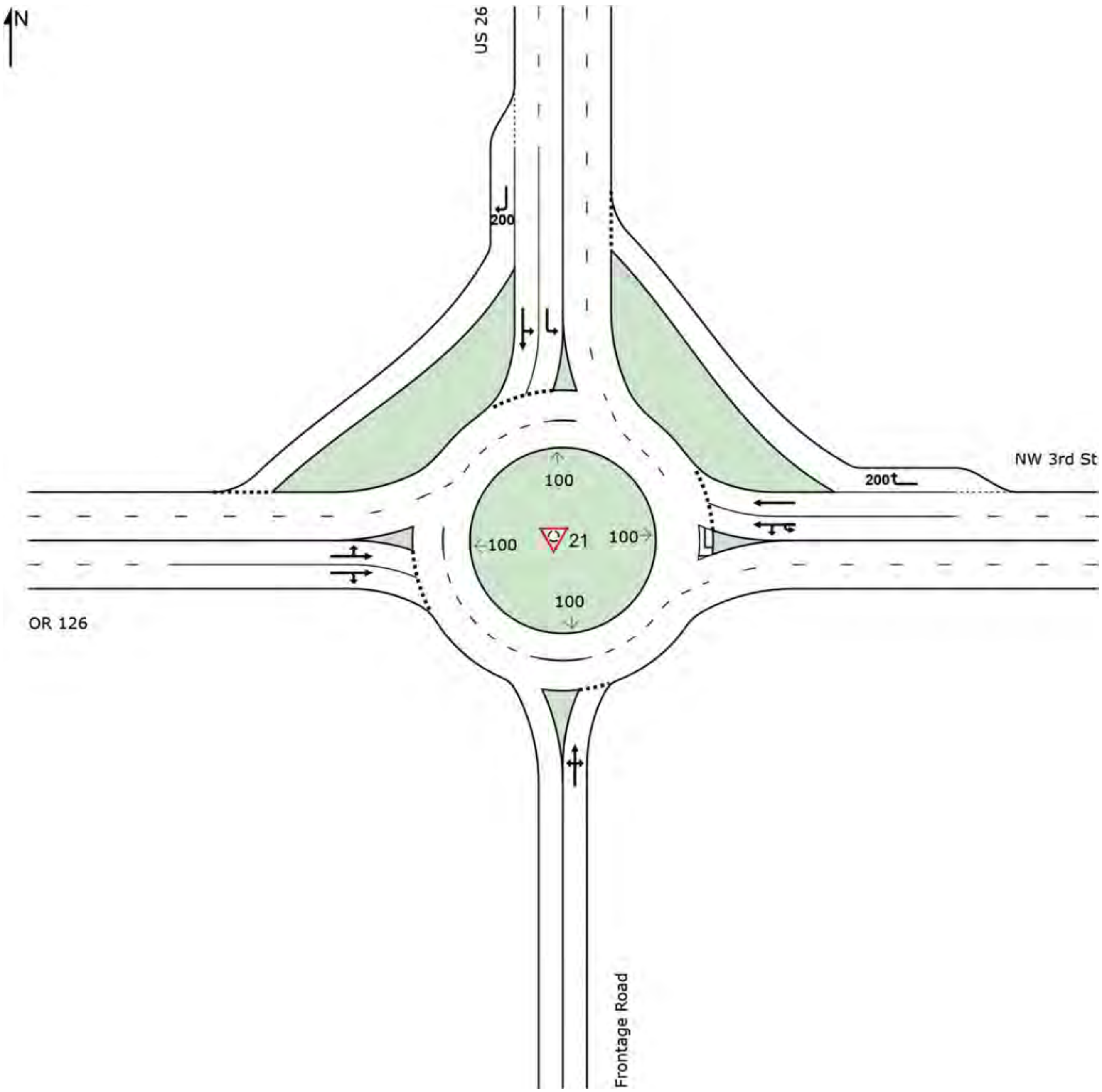
Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 21 [West Y Interchange (Site Folder: Concept B)]

Alternative 4 Concept B
Site Category: -
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 21 [West Y Interchange (Site Folder: Concept B)]

Alternative 4 Concept B
Site Category: -
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Frontage Road														
3	L2	45	1.0	45	1.0	0.176	16.8	LOS C	0.6	14.2	0.77	0.92	0.77	28.8
8	T1	10	1.0	10	1.0	0.176	11.2	LOS B	0.6	14.2	0.77	0.92	0.77	28.6
18	R2	10	1.0	10	1.0	0.176	11.0	LOS B	0.6	14.2	0.77	0.92	0.77	27.5
Approach		65	1.0	65	1.0	0.176	15.0	LOS C	0.6	14.2	0.77	0.92	0.77	28.6
East: NW 3rd St														
1u	U	90	4.0	90	4.0	0.323	13.8	LOS B	1.5	39.0	0.48	0.61	0.48	36.3
1	L2	10	4.0	10	4.0	0.323	11.3	LOS B	1.5	39.0	0.48	0.61	0.48	30.1
6	T1	565	4.0	565	4.0	0.323	5.3	LOS A	1.5	39.0	0.48	0.55	0.48	36.0
16	R2	215	5.0	215	5.0	0.202	5.0	LOS A	0.9	22.1	0.40	0.56	0.40	35.8
Approach		880	4.2	880	4.2	0.323	6.2	LOS A	1.5	39.0	0.46	0.56	0.46	35.9
North: US 26														
7	L2	165	9.0	165	9.0	0.132	13.0	LOS B	0.4	11.8	0.56	0.84	0.56	33.4
4	T1	10	3.0	10	3.0	0.132	7.0	LOS A	0.4	11.7	0.55	0.83	0.55	28.9
14	R2	210	9.0	210	9.0	0.276	6.8	LOS A	1.0	27.1	0.57	0.77	0.57	35.1
Approach		385	8.8	385	8.8	0.276	9.5	LOS A	1.0	27.1	0.57	0.80	0.57	34.2
West: OR 126														
5	L2	245	4.0	245	4.0	0.733	14.1	LOS B	7.2	187.0	0.77	0.86	0.94	34.4
2	T1	1005	4.0	1005	4.0	0.733	8.2	LOS A	7.2	187.0	0.76	0.84	0.91	34.8
12	R2	255	4.0	255	4.0	0.733	8.0	LOS A	7.1	184.4	0.75	0.81	0.90	30.4
Approach		1505	4.0	1505	4.0	0.733	9.1	LOS A	7.2	187.0	0.76	0.84	0.92	34.2
All Vehicles		2835	4.7	2835	4.7	0.733	8.4	LOS A	7.2	187.0	0.64	0.75	0.72	34.7

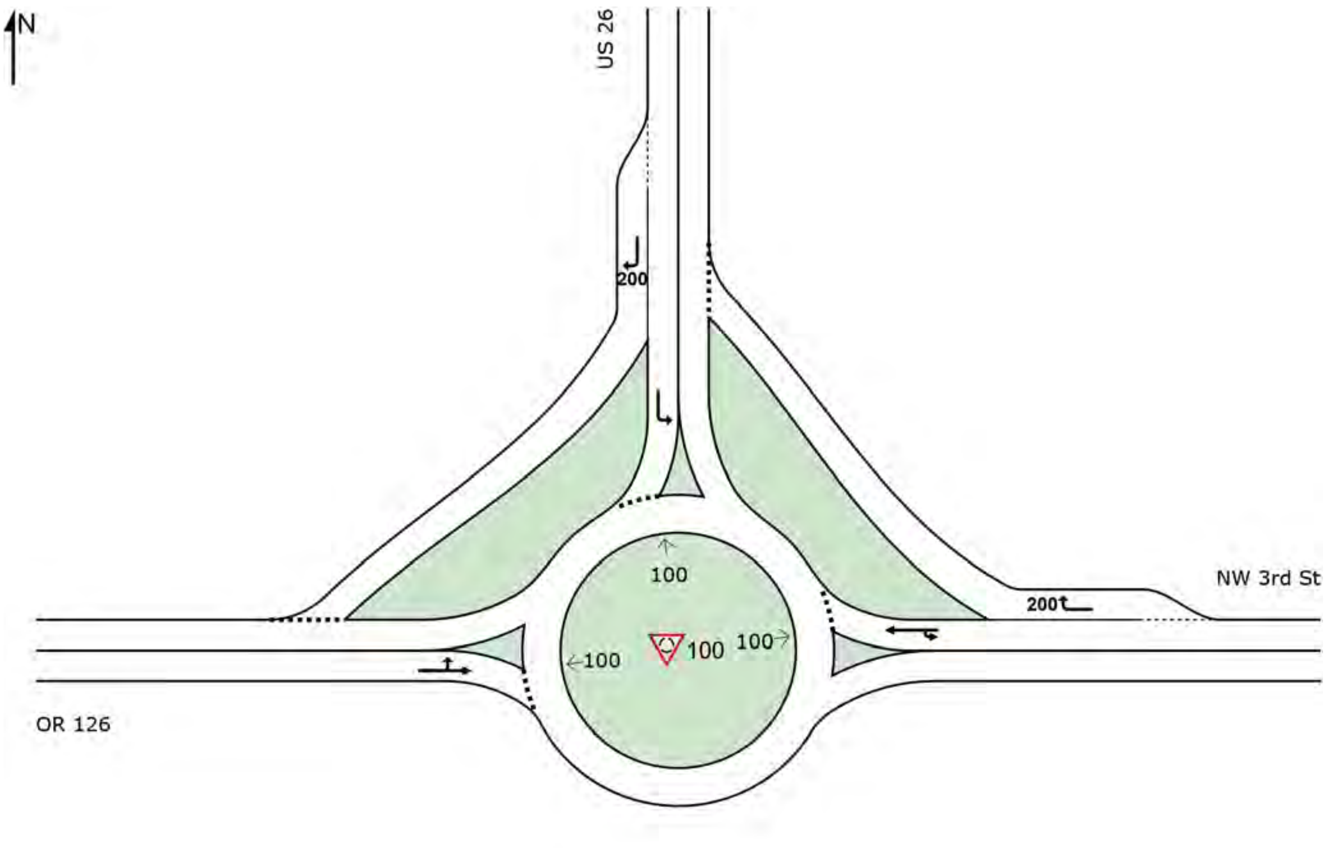
Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 100 [West Y Interchange (Site Folder: Concept C)]

Alternative 4 Concept C
Site Category: -
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: 100 [West Y Interchange (Site Folder: Concept C)]

Alternative 4 Concept C
Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
East: NW 3rd St														
1u	U	90	4.0	90	4.0	0.604	13.4	LOS B	4.3	110.8	0.53	0.53	0.53	36.7
6	T1	610	4.0	610	4.0	0.604	5.0	LOS A	4.3	110.8	0.53	0.53	0.53	35.8
16	R2	225	5.0	225	5.0	0.196	4.5	LOS A	0.8	21.6	0.32	0.51	0.32	36.1
Approach		925	4.2	925	4.2	0.604	5.7	LOS A	4.3	110.8	0.48	0.53	0.48	35.9
North: US 26														
7	L2	165	9.0	165	9.0	0.246	13.3	LOS B	0.9	24.2	0.61	0.87	0.61	33.0
14	R2	210	9.0	210	9.0	0.287	6.9	LOS A	1.1	29.7	0.60	0.78	0.60	35.0
Approach		375	9.0	375	9.0	0.287	9.7	LOS A	1.1	29.7	0.61	0.82	0.61	34.1
West: OR 126														
5	L2	245	4.0	245	4.0	1.499	241.3	LOS F	185.5	4785.2	1.00	4.69	9.03	7.8
2	T1	1260	4.0	1260	4.0	1.499	235.3	LOS F	185.5	4785.2	1.00	4.69	9.03	7.8
Approach		1505	4.0	1505	4.0	1.499	236.3	LOS F	185.5	4785.2	1.00	4.69	9.03	7.8
All Vehicles		2805	4.7	2805	4.7	1.499	130.0	LOS F	185.5	4785.2	0.77	2.80	5.08	12.2

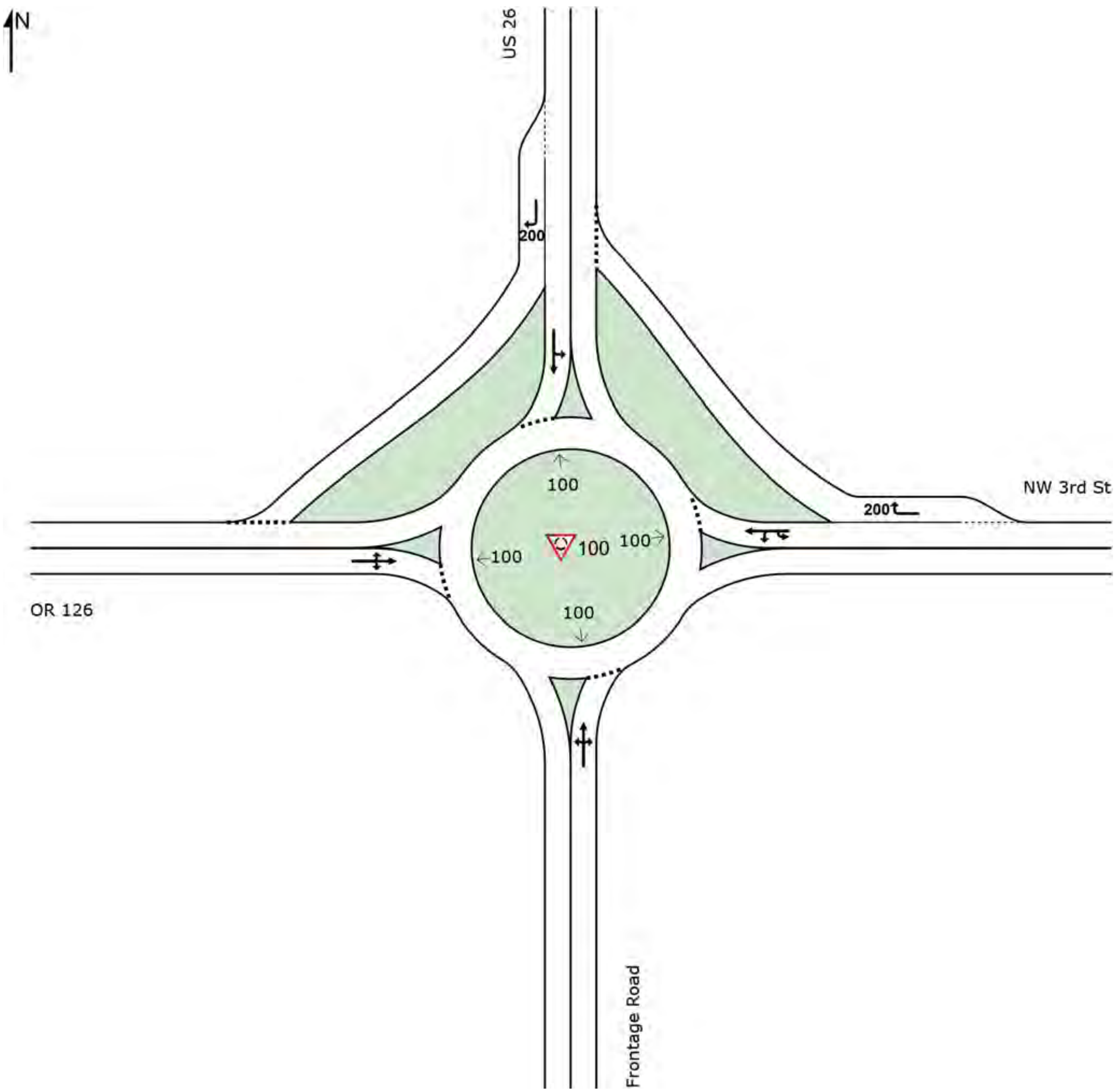
Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 100 [US26 & NW 3rd St (Site Folder: Concept D)]

Alterantive 4 Concept D
Site Category: -
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 100 [US26 & NW 3rd St (Site Folder: Concept D)]

Alterantive 4 Concept D
Site Category: -
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Frontage Road														
3	L2	45	1.0	45	1.0	0.150	15.5	LOS C	0.5	13.8	0.72	0.90	0.72	29.3
8	T1	10	1.0	10	1.0	0.150	10.0	LOS B	0.5	13.8	0.72	0.90	0.72	29.1
18	R2	10	1.0	10	1.0	0.150	9.8	LOS A	0.5	13.8	0.72	0.90	0.72	28.0
Approach		65	1.0	65	1.0	0.150	13.8	LOS B	0.5	13.8	0.72	0.90	0.72	29.0
East: NW 3rd St														
1u	U	90	4.0	90	4.0	0.597	13.8	LOS B	4.2	107.9	0.58	0.59	0.59	36.4
1	L2	10	4.0	10	4.0	0.597	11.4	LOS B	4.2	107.9	0.58	0.59	0.59	30.3
6	T1	565	4.0	565	4.0	0.597	5.5	LOS A	4.2	107.9	0.58	0.59	0.59	35.5
16	R2	215	5.0	215	5.0	0.187	4.5	LOS A	0.8	20.6	0.32	0.51	0.32	36.1
Approach		880	4.2	880	4.2	0.597	6.2	LOS A	4.2	107.9	0.52	0.57	0.53	35.7
North: US 26														
7	L2	165	9.0	165	9.0	0.262	13.4	LOS B	1.0	26.0	0.62	0.87	0.62	33.1
4	T1	10	3.0	10	3.0	0.262	7.4	LOS A	1.0	26.0	0.62	0.87	0.62	28.5
14	R2	210	9.0	210	9.0	0.287	6.9	LOS A	1.1	29.6	0.60	0.78	0.60	35.0
Approach		385	8.8	385	8.8	0.287	9.7	LOS A	1.1	29.6	0.61	0.82	0.61	34.0
West: OR 126														
5	L2	245	4.0	245	4.0	1.531	255.6	LOS F	190.7	4920.1	1.00	4.94	9.73	7.4
2	T1	1005	4.0	1005	4.0	1.531	249.6	LOS F	190.7	4920.1	1.00	4.94	9.73	7.4
12	R2	255	4.0	255	4.0	1.531	249.7	LOS F	190.7	4920.1	1.00	4.94	9.73	4.6
Approach		1505	4.0	1505	4.0	1.531	250.6	LOS F	190.7	4920.1	1.00	4.94	9.73	6.9
All Vehicles		2835	4.7	2835	4.7	1.531	136.6	LOS F	190.7	4920.1	0.79	2.93	5.43	11.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Appendix B

Access Management Strategy

Oregon
Kate Brown, Governor

Department of Transportation
Region 4 Project Delivery
63055 N Hwy 97, Bldg M
Bend, OR 97701
Phone: (541) 388-6225
Fax: (541) 385-0476

Access Management Strategy
US 26: Meadow Lakes Avenue - Combs Flat Road (Prineville) Project

Access Management Project Limits:

US 26/3rd Street: NW 2nd Street to SE Combs Flat Road
(Ochoco Hwy 041 MP 18.057 to 19.750)

OR380/Combs Flat Rd: SE Hylton Lane to SE Lincoln Road
(Paulina Hwy 380 MP 0.48 to 0.70)

This Access Management Strategy for the US 26: Meadow Lakes Avenue – Combs Flat Road (3rd Street, Prineville) Project, which has been developed in collaboration among ODOT, the City of Prineville, and property owners along US 26 within the Project area, provides direction for managing access within the project limits, including the location and type of public and private approaches and other necessary improvements that are planned to occur, along with the background, context, and process used for all related decision-making.

Project Description/Background

Highway 26 is classified as a Statewide Highway in the 1999 Oregon Highway Plan and a critical part of the state's transportation system as an important east-west corridor between Oregon and Idaho. Within the city of Prineville, the highway – also referred to as 3rd Street - is a Principal Arterial and serves as the main corridor through the city's core business district.

Highway OR380 (Paulina Hwy) is classified as a District Highway in the 1999 Oregon Highway Plan. Highway OR380 serves as a connection between Prineville and the community of Paulina. The highway continues east of Paulina as a county road. The portion of the highway within the City of Prineville is also known as Combs Flat Road. Combs Flat Rd/Hwy OR380 provides the main connection from Prineville to SE Juniper Canyon Rd, which is the primary access to the Juniper Canyon community and Prineville Reservoir. The Combs Flat Rd segment of Hwy OR380 is classified in the City of Prineville's Transportation System Plan (TSP) as a Principal Arterial.

The Oregon Department of Transportation (ODOT) and the City of Prineville are partnering on improvements in the US26/3rd St corridor and on OR380/Combs Flat Rd to replace an aging infrastructure, improve safety, and mobility. These improvements include updated urban roadway design, upgraded traffic management, improved infrastructure and facilities for people walking and biking, and functional and aesthetic streetscape improvements. The current project limits are on Hwy US26 from Meadow Lakes Ave at the west to Combs Flat Rd intersection at the east, and on Hwy OR380 from Hylton Lane south to Lincoln Rd.

Specifically, the project has several key objectives, including:

- Replace aging span wire supported traffic control signals with new traffic signals including mast arms, poles, lights, controllers, and detection devices.
- Upgrade all ADA curb ramps and pedestrian activated signals to current ODOT requirements.
- Remove barriers to make the corridor easier and safer to use for bicyclists, pedestrians, and people with disabilities.
- Improve safety at the signalized intersections and upgrading signs and other systemic safety improvements along the corridor.
- Improve stormwater management.
- Reinforce an accessible and friendly downtown business district by identifying and implementing streetscape improvements in City's downtown business core and Old Town District, as described in the City's "Third Street Redevelopment Plan" dated December 2017.
- Implement short-term safety improvements for motorists and pedestrians at the intersection of Hwy380/Combs Flat Rd with Lynn Blvd, and identify longer-term safety construction improvements.

This project has three (3) distinct corridors. Although the Access Management Methodology and criteria the project team has used to develop the methodology are the same for all the corridors, each corridor has its own project priorities and construction timing and phasing. These corridors are:

1) The "Y" Interchange Corridor, beginning at NW 3rd St/NW 2nd St intersection (west edge of the "Y" interchange) to SW Meadow Lakes Ave. This portion of the US26/3rd St corridor, is outside of the current project's current construction limits but is included in the overall Access Management Strategy for the project through a Preliminary Engineering (PE) phase. The "Y" Interchange Corridor is part of a larger transportation evaluation of possible alternatives to the existing interchange of OR126, US26, and 3rd Street. Much of the "Y" Interchange Corridor is open frontage. ODOT and City staff will work together on identifying and defining approaches to the highway, for potential future phases of construction. Any decisions to construct, modify, or close an access will be recorded only.

2) The Urban Downtown Corridor, beginning at SW Meadow Lakes Ave to Combs Flat Rd. In this urban corridor, which includes the City's Downtown Core Area and Prineville's Old Town District, the evaluation will include a consideration of how to address any potential or proposed changes to a property's existing access to the State highway. The project will provide upgrades to urban infrastructure including upgrading and replacing traffic signals, upgrading signs, constructing sidewalks, building ADA curb ramps, stormwater management, and installing ITS improvements.

3) The Combs Flat Road/Lynn Blvd Intersection Corridor, beginning at the intersection of Hwy 380/Combs Flat Rd with Hylton Lane, extending south to the intersection of Lincoln Road. The evaluation will consider improvements to this corridor that enhance the safety of pedestrians crossing at the intersection by reducing conflicts.

The following access management methodology applies to the project limits as defined above and follows ODOT's Access Management in Project Delivery Rules (OAR 734-051-5120).

Access Management

The Oregon Department of Transportation (ODOT) has the responsibility of providing the traveling public with a safe and efficient transportation facility, and therefore is expected to manage highways in the best interest of the public for the protection of the highway and the traveling public. Access management is balancing access to developed land while ensuring movement of traffic in a safe and efficient manner.

Access Management Decision Context and Criteria

The Access Management Methodology is comprised of the criteria used for evaluating highway approaches (private driveways and public streets) for no changes, potential modification, relocation or closure.

The specific access management methodology for the Project area will be developed as follows:

Overall Corridor Access Management Context - Goals and Objectives

- Replace aging signal infrastructure with modern traffic control devices that can operate more efficiently and are designed with integrated intermodal operability.
- Improve safety throughout the corridor for the traveling public, including motor vehicles, pedestrians and bicyclists, by reducing the frequency and severity of crashes.
- Balance the economic development objectives of properties abutting the highway with the transportation safety, access management objectives, and mobility of the State highway, in a manner consistent with state and local transportation system plans and the applicable land uses permitted in the local comprehensive plan.

Specific Access Management Criteria for the Project

To fulfill the access management goals and objectives of the project, the Project Team (made up of City and ODOT staff) has developed the following decision criteria to determine whether changes are needed to highway approaches (private driveways and public streets) in collaboration with adjacent property owners and other stakeholders.

Sidewalk

- Provide continuous sidewalks along the corridor complete with upgraded, ADA accessible pedestrian ramps and improve bicycle/pedestrian safe access on US 26 and OR380 (e.g., modify driveways to address conflict points, and construct new driveway approaches within the new sidewalk sections where there is currently open frontage, etc.).
- Modify the location of and/or consolidate driveways as necessary to allow the installation of ADA compliant pedestrian curb ramps and any curb extensions or bulb-outs.

<u>Safety</u>

- Evaluate the frequency, severity and location of all crashes, with an emphasis on pedestrian and bicycle crashes.
- Evaluate driveways for adequate sight distance, as well as safe entrance, exit, and circulation.
- Define the width of undefined driveways (approaches) within open frontage using guidance from the Oregon Highway Design Manual to a width that will serve the planned use of the property.
- In general, evaluate the safety impacts and benefits of any proposed changes in access/connections for all users relative to the function of US26 or OR380.

<u>Economic Objectives of the Property Owners</u>

- Consider the type of existing business: e.g., destination-oriented business vs. businesses that rely on pass-by traffic.
- Consider the number of trips generated by the business, including the number of vehicles turning left in to or out of the property.
- Consider the location of the access reservations and permits and design the approaches to adequately serve the volume and type of traffic reasonably anticipated to enter and exit the property, based on the uses for the property. Place priority on preserving access as it exists today if it serves the remainder property use.
- Ensure the safety of the driveway(s) [approach (es)] to the property entering and exiting the highway.
- Consider existing driveways and the reasonable ability to take advantage of alternate access.
- Consider site circulation and parking affected by potential driveway consolidation opportunities, only in response to other access management goals, objectives, and methodology points, as associated with specific driveways, and/or based on documented agreements with affected property owners.

<u>Access Management Rights/Existing Conditions</u>

- Determine locations where ODOT has acquired the access rights of properties abutting the highway.
- Determine status and ensure that existing driveways are consistent with the properties' access rights.
- Consider the width of driveways shown in deeded access rights as part of the decision-making for driveway approach designs.

<u>Corridor Context and Mobility/Safety</u>

- Evaluate the Access Management goals and objectives and the other above Methodology points against the function of US 26 as a Statewide Highway and Reduction Review Route, which emphasizes the important service it provides for freight mobility, regional tourism, regional commuting, and safety. Note: A Reduction Review Route is any designated State highway that requires review and approval from the freight industry if there is any proposed change in width or height capacity of the highway (e.g. the “hole in the air”).

- Evaluate the Access Management goals and objectives and other above Methodology points against the function of OR380 as a District Highway, with emphasis on the local connections and multi-modal facilities. Specifically, pedestrian safety related to existing and planned crossings, and the completion of the multi-use path on the east side of the roadway and from SE Hylton Ln. to SE Lynn Blvd.
- Evaluate the Access Management goals and objectives and the other above Methodology points with respect to travel safety in general, and to the congested conditions such as during peak hours.
- Evaluate the Access Management goals and objectives and the other above Methodology points with respect to local land use plans (e.g., commercial and residential zoning).

Access Management Decision Making Process

In collaboration with affected property owners (and their lessees, according to expectations of the applicable property owner), City and ODOT staff will apply and analyze information they gather against all of the above criteria points (e.g., traffic, economics, benefit-cost, identified "fatal flaws," decision matrices, etc.) to make recommendations on the locations and design of private approaches to the highway.

In this decision-making process, City and ODOT will focus on balancing the economic development objectives of the affected properties owners with the safety and operational expectations for US26 and OR380 as state highways, consistent with the City's transportation system plan and the land uses permitted in the City's comprehensive plan. Safety concerns and issues will be documented by a Professional Traffic Engineer.

Access Management decisions will be made by the ODOT Region 4 Manager with support by the City of Prineville and its community.

City and ODOT staff will also provide a Public Involvement process for highway users, real property owners, property lessees, and business operators affected by the project, which will assist with establishing and finalizing this Methodology (by which private connections will be considered for modification, relocation, or closure) and ultimately for Access Management recommendations to be made. For more on-line information about this project please go to:

https://www. oregon.gov/odot/projects/pages/project-details.aspx?project=20268

Access Management Sub-Team - The Access Management Sub-Team includes:
ODOT Region 4 Staff
Abbey Driscoll, Senior Transportation Project Manager
Caleb Stephens, Sr. Right-of-Way Agent
David Knitowski, Region Access Management Engineer,
James Scholtes, District 10 Assistant Manager
Aaron Smith, District 10, Permit Specialist
Tyler Swanson, District 10, Permit Specialist

City of Prineville Staff
Scott Smith – City of Prineville
Casey Kaiser – City of Prineville

Consultant Support Staff
Ben Austin – HHPR Inc.
Ryan McFadden – Kittelson & Associates

This sub-team has multiple assignments which include:

- Develop this Access Management Strategy, as the project is developed and refined, documenting the summary of proposed access closures, relocations, modifications, combined, unchanged, or reconstructed accesses; and mapping of proposed access locations, and treatments such as medians, channelization, parking modifications, pedestrian safety features, etc. This includes communication and collaboration with property and business owners, City Officials, other stakeholders, and the general public on the planned scope of the project and the anticipated effects of access management within the project area.
- Complete all related and necessary analysis and documentation work products for access management (e.g., a detailed and comprehensive analysis of all accesses within the project limits for use in completing the final Official Project Access List for required approvals).
- Review of each existing access within the project limits on the state highway, public and private, and review of documents to ensure the legal status of each access, in accordance with ODOT policies.
- Make recommendations on whether ODOT should acquire access rights within the project limits.

Guidance on Location and Type of US 26 Access/Approaches within the Project Limits

The following table provides narrative guidance for how the project addresses each access/approach to US 26 within the project limits. These statements were developed pursuant to the above involvement process and Methodology. If, as the project is developed, existing circumstances change (relative to the time this Access Management Strategy was prepared), this document will be updated and amended accordingly.

The information in the table below refers to properties and accesses/approaches on US 26 and corresponds with the numbers on the attached Figure 1. The statement for each property lists the current property owner, the tax lot number, the present occupant, and a proposed action for each access/approach (labeled 1, 2, 3, etc. for each individual access to a property), identified by mile point, engineering station ("Eng. Station") and side of the highway. An appendix is included at the end of the document containing definitions and illustrations for terms used in this section.

Any stated modification, relocation or closure of permitted approaches will occur during project construction, preceded by ODOT staff delivering a "modification" or "closure" letter to the affected property owner explaining that the modification or closure will be handled through ODOT's access management and/or right of- way acquisition process.

The Proposed Action for some of the access/approach locations states: "Put on Access Deficiency List." The Deficiency List will be part of the Official Project Access List (OPAL), and access/approach locations on this list may be subject to future corrective decision-making and actions beyond the Project, associated with future Projects, right-of-way transactions or access changes for highway safety/operational purposes, property redevelopments, or permitting. Decisions and actions could include modification, relocation, reconstruction, closure, and/or processes for Grant of Access or Indenture of Access and/or permitting.

When matching the access information in this Access Management Strategy, always reference the cited Right of- Way map and centerline. The Right-of-Way centerline will rarely be the same as the construction centerline used in construction and design plans. Also be aware that multiple Right-of-Way maps and centerlines may be cited as the old Right-of-Way maps and centerlines may remain valid unless superseded by newer acquisitions. The newer Right-of-Way map(s) only modify or add property rights as of the date of any new acquisitions, leaving past access and right-of-way acquisitions intact, unless modified or superseded by acquisitions shown on the new map.

Approvals:

X

Steve Forrester
City Manager, City of Prineville Recommend...

X

Robert Townsend
ODOT Central Oregon Area Manager Recom...

X

Gary Farnsworth
ODOT Region 4 Manager Approval

X

Joel McCarroll
District 10 Manager Recommendation

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
1	City of Prineville	15S16E06BA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	NO ACCESS CONTROL Public Roads 18.057 763+40, Right 10B-21-3 Existing Permit 20 24	No Action	outside of work limits Include on Access Deficiency List
2	Schwab Properties PO Box 5350 Bend, OR 97708	15S16E06BB-200 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.12 766+10, Left 5B-25-18 Existing Permit 24 340	No Action	outside of work limits Include on Access Deficiency List
3	Chen Jiayi 987 NW Second St Prineville, OR 97754	15S16E06BA-4501, 4400 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	NO ACCESS CONTROL Commercial 18.095 765+50, Right 10B-21-3 PTBP Open Frontage 720	No Action	outside of work limits Include on Access Deficiency List
4	Carmen A. Capell 760 NW Roanoke Ave Bend, OR 97701	15S16E06BA-2800 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	NO ACCESS CONTROL Commercial 18.112 767+00, Right 10B-21-3 PTBP Open Frontage 720	No Action	outside of work limits Include on Access Deficiency List
5	Wilkins Holdings LLC 976 NW 3rd St Prineville, OR 97754	15S16E06BA-2500, 2600, 2700 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	NO ACCESS CONTROL Commercial 18.124 767+75, Right 10B-21-3 PTBP Open Frontage 720	No Action	outside of work limits Include on Access Deficiency List

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
6	Gordon A. O'Connor 960 NW Third St. Prineville, OR 97754	15S16E06BA-2300, 2400		Reservation of access:	NO ACCESS CONTROL	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.139		
				Existing Eng Station:	768+90, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	Open Frontage		
				Existing width (ft):	720		
7	Gordon A. O'Connor 960 NW Third St. Prineville, OR 97754	15S16E06BA-2300, 2200		Reservation of access:	NO ACCESS CONTROL	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.155		
				Existing Eng Station:	769+80, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	Open Frontage		
				Existing width (ft):	720		
7B	Gordon O'Connor/Lorenzo Torres 964/898 NE 3rd St Prineville, OR 97754	15S16E06BA-2100, 2200		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.17		
				Existing Eng Station:	770+52, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	Open Frontage		
				Existing width (ft):	720		
7C	Lorenzo Torres 898 NE 3rd St Prineville, OR 97754	15S16E06BA-2100		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.18		
				Existing Eng Station:	771+30, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	Open Frontage		
				Existing width (ft):	720		
7D	KOMLOFSKE ROBERT, PO BOX 1547 PRINEVILLE, OR 97754	15S16E06BA-1600, 1700		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.2		
				Existing Eng Station:	772+20, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	22		
				Existing width (ft):	22		
7E	KOMLOFSKE ROBERT, PO BOX 1547 PRINEVILLE, OR 97754	15S16E06BA-1600, 1700		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.22		
				Existing Eng Station:	773+20, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	30		
				Existing width (ft):	30		

ACCESS MANAGEMENT STRATEGY

Limits: 2nd Street to Combs Flat

OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
7F	City of Prineville	15S16E06BA-ROAD		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Public Roads		
				Existing Mile Point:	18.24		
				Existing Eng Station:	774+40, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	40		
				Existing width (ft):	40		
8	Leathers Limited Partnership 255A Depot St Fairview, OR 97024	15S-16E-06BA-900		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.242		
				Existing Eng Station:	1528+50, Left		
		0		R/W Map:	5B-24-21		
				Legal Status	Existing Permit		
				Permitted Width (ft):	35		
				Existing width (ft):	35		
9	STET LLC PO Box 737 Prineville, OR 97754	15S-16E-06BA-8600		Reservation of access:	No Access Control	No action	No identification as deficiency - access is outside of work limits. Include on Access Deficiency List (ADL)
				Property Use:	Commercial		
				Existing Mile Point:	18.254		
				Existing Eng Station:	775+10, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	8		
10	Anthony S. Jones PO Box 464 Prineville, OR 97754	15S-16E-06AB-10300		Reservation of access:	No Access Control	Approach to be closed, via development application	Outside of work limits. Suitable access available from Locust. Current land use decision from local agency and agreement from property owner to close access.
				Property Use:	Vacant		
				Existing Mile Point:	18.255		
				Existing Eng Station:	774+90, Left		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	12		
11	City of Prineville	15S-16E-06AB-ROAD		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Public Roads		
				Existing Mile Point:	18.256		
				Existing Eng Station:	774+30, Left		
		0		R/W Map:	10B-21-3		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	55		
12	HAMMACK GILBERT M & JUDY, 850 NW 13TH ST REDMOND, OR 97756-1682	15S-16E-06AB-8800		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Residential		
				Existing Mile Point:	18.268		
				Existing Eng Station:	775+80, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	12		

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
12B	HAMMACK GILBERT M & JUDY, 850 NW 13TH ST REDMOND, OR 97756-1682	15S-16E-06AB-8800		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Residential		
				Existing Mile Point:	18.28		
				Existing Eng Station:	776+22, Right		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	10		
13	Twiss Evert & Sussie Trustees PO Box 737 Prineville, OR 97754	15S-16E-06AB-9801, 9800		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.277		
				Existing Eng Station:	776+50, Left		
		0		R/W Map:	10B-21-3		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	12		
14	Tax Lot 8900 Gilbert M & Judy F Hammack 850 NW 13th St Redmond, OR 97756 Tax Lot 9000 John Morgan	15S-16E-06AB-8900, 9000		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.28		
				Existing Eng Station:	776+12, Right		
		0		R/W Map:	1A-8-27		
				Legal Status	Existing Permit		
				Permitted Width (ft):	24		
				Existing width (ft):	20		
15	Marty Howard Jr. Outwest Insurance Services 603 NW 3rd St Prineville, OR 97754	15S-16E-06AB-9800		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.284		
				Existing Eng Station:	776+92, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	Existing Permit		
				Permitted Width (ft):	11		
				Existing width (ft):	8		
16	Peer, Roger G & Elizabeth J 1100 NE Hudspeth Ln Prineville, OR 97754	15S-16E-06AB-9700		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Residential		
				Existing Mile Point:	18.3		
				Existing Eng Station:	777+50, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	8		
17	City of Prineville	15S-16E-06AB-ROAD		Reservation of access:	No Access Control	Rebuild curbs and ADA ramps. Maintain access per plans	Ramps don't meet current ADA requirements
				Property Use:	Public Roads		
				Existing Mile Point:	18.35		
				Existing Eng Station:	779+80, Left		
		0		R/W Map:	10B-21-3		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	73		

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
18	City of Prineville	15S-16E-06AB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.35 779+80, Right 10B-21-3 Other (describe) 0 55	Rebuild curbs and ADA ramps. Maintain access per plans	Ramps don't meet current ADA requirements
19	Gary W. & Janet K. Hibbard 20369 Big Bear Ct Bend, OR 97702	15S-16E-06AB-6800 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.387 781+13, Right 1B-14-1 Existing Permit 27 23	No Action	outside of work limits Include on Access Deficiency List
20	Burger Jerry Insurance Agency LLC 687 NW 3rd St Prineville, OR 97754	15S-16E-06AB-11900 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.381 781+50, Left 1A-8-27 PTBP 0 64	No Action	outside of work limits Include on Access Deficiency List
21	Larry Goodman 4900 NW O'Neil Hwy Prineville, OR 97754	15S-16E-06AB-11700 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.389 781+75, Left 1A-8-27 PTBP 0 64	No Action	outside of work limits Include on Access Deficiency List
22	Fawbush, Jeri 600 NW Third St Prineville, OR 97754	15S-16E-06AB-7000 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.394 782+00, Right 1A-8-27 PTBP 0 25	No Action	outside of work limits Include on Access Deficiency List
23	Larry Goodman 4900 NW O'Neil Hwy Prineville, OR 97754	15S-16E-06AB-11700 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.399 782+25, Left 1A-8-27 PTBP 0 30	No Action	outside of work limits Include on Access Deficiency List

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
24	Fawbush, Jeri 600 NW Third St Prineville, OR 97754	15S-16E-06AB-7000 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.405		
				Existing Eng Station:	782+60, Right		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	26		
25	Larry Goodman 4900 NW O'Neil Hwy Prineville, OR 97754	15S-16E-06AB-11600, 11500 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.41		
				Existing Eng Station:	782+94, Left		
				R/W Map:	4B-26-10		
				Legal Status	Existing Permit		
				Permitted Width (ft):	40'		
				Existing width (ft):	40		
26	Fawbush, Jeri 600 NW Third St Prineville, OR 97754	15S-16E-06AB-7000 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.425		
				Existing Eng Station:	783+60, Right		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	26		
27	Inspirit Properties LLC 70 SW Century Dr STE 100-242 Bend, OR 97702	15S-16E-06AB-11300 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.429		
				Existing Eng Station:	784+10, Left		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	18		
28	Inspirit Properties LLC 70 SW Century Dr STE 100-242 Bend, OR 97702	15S-16E-06AB-11300 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.438		
				Existing Eng Station:	784+40, Left		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	18		
29	City of Prineville	15S-16E-06AB-ROAD 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Public Roads		
				Existing Mile Point:	18.44		
				Existing Eng Station:	784+50, Right		
				R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	40		

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
30	RGW Properties LLC 6218 SE Ruger Rd Prineville, OR 97754	15S-16E-06AB-3501, 3500 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.462		
				Existing Eng Station:	785+80, Right		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	34		
31	Home Federal Bank PO Box 190 Nampa, ID 83653	15S-16E-06AB-11200 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.466		
				Existing Eng Station:	786+05, Left		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	40		
32	RGW Properties LLC 6218 SE Ruger Rd Prineville, OR 97754	15S-16E-06AB-3501 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.481		
				Existing Eng Station:	786+90, Right		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	36		
33	RGW Properties 14600 SW Winchester Loop Prineville, OR 97754	0 0		Reservation of access:	0	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.483		
				Existing Eng Station:	NULL, Right		
				R/W Map:	0		
				Legal Status	0		
				Permitted Width (ft):	0		
				Existing width (ft):	0		
34	Paul & Kathryn Rodby 1960 Kingfisher Circle Redmond, OR 97756	15S-16E-06AB-3400, 370015S-16E-06AA-2600 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.49		
				Existing Eng Station:	787+31, Right		
				R/W Map:	1A-8-27		
				Legal Status	Existing Permit		
				Permitted Width (ft):	26		
				Existing width (ft):	25		
35	STET LLC PO Box 737 Prineville, OR 97754	15S-16E-06AB-3300, 15S-16E-06AA-8800 0		Reservation of access:	No Access Control	No Action	outside of work limits Include on Access Deficiency List
				Property Use:	Commercial		
				Existing Mile Point:	18.49		
				Existing Eng Station:	787+40, Left		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	25		

ACCESS MANAGEMENT STRATEGY								
Limits: 2nd Street to Combs Flat								
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
36	STET LLC PO Box 737 Prineville, OR 97754	15S-16E-06AB-3300, 15S-16E-06AA-8800 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.502 788+05, Left 1A-8-27 PTBP 0 20	No Action	outside of work limits Include on Access Deficiency List
37	McDonalds Real Estate Company 1960 Kingfisher Circle Redmond, OR 97756	15S-16E-06AB-3400, 370015S-16E-06AA-2600 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.518 788+90, Right 1A-8-27 Existing Permit 26 32	Reconstruct acces as part of sidewalk reconstruction. TRAFFIC SEPARATOR BEING CONSIDERED BETWEEN WB TRAVEL & EB LEFT-TURN LANE - WILL RESTRICT WB-TO-SB LEFT TURNS INTO PROPERTY & LEFT-TURN EXITS FROM PROPERTY	Access is out of compliance (permitted width). Consider rebuild of access to permitted width (26') unless new permit is issued •Revisited 2020-10-15 - Mobility needs to be included in conversation
38	GBG Investments PO Box 431 Prineville, OR 97754	15S-16E-06AA-8900, 9100 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.528 789+42, Left 1A-8-27 Existing Permit 16 16	rebuild access with sidewalk reconstruction. TRAFFIC SEPARATOR BEING CONSIDERED BETWEEN WB TRAVEL & EB LEFT-TURN LANE - WILL RESTRICT EB-TO-NB LEFT TURNS INTO PROPERTY & LEFT-TURN EXITS FROM PROPERTY	Access in not built to standard for a dustpan style driveway approach
39	City of Prineville	15S-16E-06AA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.549 790+60, Left 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Curb extensions will be necessary in order to meet ADA requirements for ramps and pedestrian equipment (pushbuttons)
40	City of Prineville	15S-16E-06AA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.55 790+60, Right 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Curb extensions will be necessary in order to meet ADA requirements for ramps and pedestrian equipment (pushbuttons)

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
41	Colvin Oil Company 2520 Foothill Blvd Grants Pass, OR 97256	15S-16E-06AA-3100 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.562 791+35, Right 1A-8-27 PTBP 0 21	rebuild access in new location further EAST from the Deer intersection.	proximity of existing acces to the Deer intersection presents sight distance, on-site conflicts (parking, commercial sign, fire hydrant, etc.). By relocating the access, sight distance will be gained and additional conflict points will be removed.
42	Colvin Oil Company 2520 Foothill Blvd Grants Pass, OR 97256	15S-16E-06AA-3100 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.584 792+40, Right 1A-8-27 PTBP 0 30	rebuild access with sidewalk reconstruction.	Providing access which serves the economic needs of the property.
43	Straughan, James William & Shirley Lynne 4682 NW O'Neil Hwy Prineville, OR 97754	15S-16E-06AA-3000 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.589 793+00, Right 1A-8-27 PTBP 0 25	Original Action (Feb 2022): • Rebuild access with sidewalk reconstruction. Provide separation between adjacent driveway. Updated Action (Nov 2022): • Access (at Mile Point 18.588) shall not be	Original Action (Feb 2022): • given the close proximity to the neighboring access, this would be a location to either combine, or build smaller. The existing width leaves a portion of the driveway right in front of the building.
44	A. W. Erickson PO Box 14868 Portland, OR 97293	15S-16E-06AA-8100, 8300, 7600, 7500, 7700 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.598 793+50, Left 1A-8-27 PTBP 0 27	Original Action (Feb 2022): • Rebuild access with sidewalk reconstruction. Adjust width to 18' Updated Action (Nov 2022): • Access shall not be reconstructed and narrowed from 27 feet to 18 feet as described in ODOT's previous notice, and shall remain in it's existing condtion	Original Action (Feb 2022): • Guidance per Highway Design Manual. Reconstruction will provide for the economic needs of the property. The existing configuration is entrance only. Updated Action (Nov 2022): • Approach is outside of the limits of construction of the curb and sidewalk at the corner of Claypool Street

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
45	Straughan, James William & Shirley Lynne 4682 NW O'Neil Hwy Prineville, OR 97754	15S-16E-06AA-3000 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.6 793+50, Right 1A-8-27 PTBP 0 25	Original Action (Feb 2022): • Close access/ construct new curb extension/ped ramps with sidewalk reconstruction Updated Action (Nov 2022): • Access (at Mile Point 18.600) shall be removed as previously planned	Original Action (Feb 2022): • The proximity of this driveway to the Claypool intersection does not allow for the ped ramps at Claypool to be reconstructed to meet ADA standard. This property has open frontage to Claypool for nearly the entire length of the east side, as well as access to public alley at the south of the property. The parking is configured in such a way as to be better accessible from the Claypool frontage. City desires to have open frontage on Claypool eventually rebuilt to be a standard sidewalk with 2 separate driveways. Updated Action (Nov 2022): • Approach remains within the limits of construction of the curb and sidewalk construction at the corner of Claypool Street
46	City of Prineville	15S-16E-06AA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.61 793+90, Right 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
47	City of Prineville	15S-16E-06AA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.61 793+90, Left 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
48	3MKA LLC 297 NW 3rd St Prineville, OR 97754	15S-16E-06AA-7000 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.642 795+40, Left 1A-8-27 PTBP 0 14	Rebuild access with sidewalk reconstruction	Reconstruction will provide for the economic needs of the property

<table>
<tr><th colspan="7">ACCESS MANAGEMENT STRATEGY</th></tr>
<tr><th colspan="7">Limits: 2nd Street to Combs Flat</th></tr>
<tr><th>OPAL Reference #</th><th>Property Owned By</th><th>Tax Lot No./Twnsp-Sect-Rng</th><th>Occupied by</th><th>Approach Description</th><th>Proposed Action</th><th>Reason for Action</th></tr>
<tr><td>49</td><td>Bill Overall
PO Box 1313
Prineville, OR 97754</td><td>15S-16E-06AA-7300, 7400
0</td><td></td><td>Reservation of access: No Access Control
Property Use: Commercial
Existing Mile Point: 18.649
Existing Eng Station: 795+70, Left
R/W Map: 1A-8-27
Legal Status: PTBP
Permitted Width (ft): 0
Existing width (ft): 30</td><td>Original Action (Feb 2022):
• Rebuild and Combine with access 50.
Updated Action (Nov 2022):
•Access (at Mile Point18.650) shall not be removed</td><td>Original Action (Feb 2022):
• Provides appropriate spacing between 48, per highway design manual. Promotes shared approach. Removes additional vehicular/pedestrian conflict. Reasonably provides access that serves the economic needs of the property
Updated Action (Nov 2022):
• Approach is now outside the project limitsand the curb and sidewalk construcion at the corner of Beaver Street</td></tr>
<tr><td>50</td><td>Bill Overall
PO Box 1313
Prineville, OR 97754</td><td>15S-16E-06AA-7300, 7400
0</td><td></td><td>Reservation of access: No Access Control
Property Use: Commercial
Existing Mile Point: 18.666
Existing Eng Station: 796+50, Left
R/W Map: 1A-8-27
Legal Status: PTBP
Permitted Width (ft): 0
Existing width (ft): 28</td><td>Original Action (Feb 2022):
• Rebuild and Combine with access 49
Updated Action (Nov 2022):
• Approach (at Mile Point 18.665) shall be removed as previously planned</td><td>Original Action (Feb 2022):
• Provides appropriate spacing between 48, per highway design manual. Promotes shared approach. Relocation/combining with 49 Allows for curb extension to be rebuilt at NW corner of US26/Beaver. Removes additional vehicular/pedestrian conflict. Reasonably provides access that serves the economic needs of the property
Update Action (Nov 2022):
• Approach (at mile point 18.665) is within the limits of the curb and sidewalk construction at the corner of Beaver Street</td></tr>
</table>

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
51	City of Prineville	15S-16E-06AA-ROAD		Reservation of access:	No Access Control	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
				Property Use:	Public Roads		
				Existing Mile Point:	18.679		
				Existing Eng Station:	797+00, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	55		
52	City of Prineville	15S-16E-06AA-ROAD		Reservation of access:	No Access Control	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
				Property Use:	Public Roads		
				Existing Mile Point:	18.679		
				Existing Eng Station:	797+00, Right		
		0		R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	55		
53	Stafford, Mark 4411 NW Elliott Ln Prineville, OR 97754	15S-16E-06AA-6400, 6500, 6600		Reservation of access:	No Access Control	Rebuild access with sidewalk reconstruction	Providing access which serves the economic needs and/or useage of the property (current building configured with a drive thru aisle)
				Property Use:	Commercial		
				Existing Mile Point:	18.721		
				Existing Eng Station:	799+10, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	18		
54	City of Prineville	15S-16E-06AA-ROAD		Reservation of access:	No Access Control	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
				Property Use:	Public Roads		
				Existing Mile Point:	18.75		
				Existing Eng Station:	800+22.8, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	55		
55	City of Prineville	15S-16E-06AA-ROAD		Reservation of access:	No Access Control	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
				Property Use:	Public Roads		
				Existing Mile Point:	18.75		
				Existing Eng Station:	800+22.8, Right		
		0		R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	55		
56	Shri Ganasha LLC 123 NE 3rd St Prineville, OR 97754	15S-16E-05BB-2301, 2300, 2400, 2500, 2600		Reservation of access:	No Access Control	Rebuild access with sidewalk reconstruction	Providing access which serves the economic needs and/or useage of the property
				Property Use:	Commercial		
				Existing Mile Point:	18.778		
				Existing Eng Station:	2+10, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	21		

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
57	Crook County 300 NE 3rd St Prineville, OR 97754	15S-16E-05BB-3500 0		Reservation of access:	No Access Control	Original Action (Feb 2022): • Close access Updated Action (Nov 2022): • Access (at Mile Point 18.779) shall not be removed.	OriginalAction (Feb 2022): • Access to be provided from lower classification road (Belknap - city street). Moves in the direction of meeting access spacing standards per Highway Design Manual. Closure supports owners plans for future property use. Updated Action (Nov 2022): • Approach is now outside the limits of the curb and sidewalk construction at the corner of Belknap Street.
				Property Use:	Commercial		
				Existing Mile Point:	18.779		
				Existing Eng Station:	2+25, Right		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	28		
58	Crook County 300 NE 3rd St Prineville, OR 97754	15S-16E-05BB-3500 0		Reservation of access:	No Access Control	Original Action (Feb 2022): • Close access Updated Action (Nov 2022): • Access (at Mile Point 18.790) shall be removed as previously planned	Original Action (Feb 2022): • Access to be provided from lower classification road (Belknap - city street). There are 4 total access points to this property. This particular of size and location that introduce conflicts with both infrastructure and operation. Moves in the direction of meeting access spacing standards per Highway Design Manual. Closure supports owners plans for future property use. Updated Action (Nov 2022): • Approach is within the limits of the curb and sidewalk construction at the corner of Belknap Street
				Property Use:	Commercial		
				Existing Mile Point:	18.79		
				Existing Eng Station:	2+75, Right		
				R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	30		
59	City of Prineville	15S-16E-05BB-ROAD 0		Reservation of access:	No Access Control	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
				Property Use:	Public Roads		
				Existing Mile Point:	18.799		
				Existing Eng Station:	3+40, Right		
				R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	53		
60	City of Prineville	15S-16E-05BB-ROAD 0		Reservation of access:	No Access Control	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
				Property Use:	Public Roads		
				Existing Mile Point:	18.799		
				Existing Eng Station:	3+40, Left		
				R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	54		

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
61	U.S. National Bank of Oregon 2800 East Lake Street Minneapolis, MN 55406	15S-16E-05BB-6000 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.811 4+00, Left 1A-8-27 PTBP 0 24	Rebuild access with sidewalk construction. Coordinate with curb reconstruction	Providing access which serves the economic needs of the property.
62	Argos Properties 1122 Foxwood Pl Bend, OR 97701	15S-16E-05BB-4800 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.834 5+25, Right 1A-8-27 Existing Permit 36 30	Rebuild access with sidewalk construction. Maintain existing width.	even though the existing access is not being uses, it is permitted and future uses of property may want/need to utilize the access - serves the economic needs of the property. •Revisited 2020-10-15 - Retain/Rebuild access
63	City of Prineville	15S-16E-05BB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.858 6+50, Right 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
64	City of Prineville	15S-16E-05BB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.858 6+50, Left 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
65	City of Prineville	15S-16E-05BB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.911 9+40, Right 1A-8-27 Other (describe) 0 48	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
66	City of Prineville	15S-16E-05BB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.918 9+70, Left 1A-8-27 Other (describe) 0 38	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public driveway (Crook Co & City of Prineville)

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
67	7-Eleven Inc. #20376 PO Box 711 Dallas, TX 75221	15S-16E-05BB-10600, 10601 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.931 10+40, Left 1A-8-27 Existing Permit 30 30	Rebuild access with sidewalk construction. Consider rebuilding access 10' east to allow for curb extension/ADA ramps to be constructed at Dunham St intersection.	Providing access which serves the economic needs of the property.
68	7-Eleven Inc. #20376 PO Box 711 Dallas, TX 75221	15S-16E-05BB-10600, 10601 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.941 10+70, Left 1A-8-27 Existing Permit 30 28	Rebuild access with sidewalk construction	Providing access which serves the economic needs of the property.
69	Jana L. Rhoden PO Box 770 Prineville, OR 97754	15S-16E-05BB-10800, 10900 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.954 11+90, Left 1A-8-27 Existing Permit 14 16	Rebuild access to permitted width, with sidewalk construction	Providing access which serves the economic needs of the property.
70	City of Prineville	15S-16E-05BB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.978 13+00, Left 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
71	City of Prineville	15S-16E-05BB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 18.978 13+00, Right 1A-8-27 Other (describe) 0 51	Rebuild curb and ped ramps with 4' curb extensions, per plans. Maintain existing public access.	Public road.
72	Washington Mutual Bank C/O E-Property Tax Inc, Dept 304 PO Box 4900 Scottsdale, AZ 85261	15S-16E-05BA-7000, 6900 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 18.992 13+50, Right 1A-8-27 PTBP 0 28	Rebuild access with sidewalk construction. Incorporate access with curb/ADA ramp reconstruction	Access 74 serves the same business, however is a different tax lot. Rebuilding this access maintains economic needs of the property.

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
73	Karen E. Jay 599 NE 3rd St Prineville, OR 97754	15S-16E-05BA-6600, 6300, 6200 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.004 14+25, Left 1A-8-27 PTBP 0 23	No Action with this project. Future improvement to rebuild access with sidewalk construction. Include on Access Deficiency list	Providing access which serves the economic needs of the property. Outside street scape project limits.
74	JPMC Lease Administration 1111 Polaris Parkway STE 1J Columbus, OH 43240	15S-16E-05BA-7000, 6900 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.024 15+40, Right 1A-8-27 PTBP 0 23	No Action with this project. Future improvement to rebuild access with sidewalk construction. Include on Access Deficiency list	outside of streetscape work limits Include on Access Deficiency List
75	City of Prineville	15S-16E-05BA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.038 16+20, Right 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps per plans. Maintain existing public access.	Public access. Outside of streetscape work limits
76	City of Prineville	15S-16E-05BA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.038 16+20, Left 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps per plans. Maintain existing public access.	Public access. Outside of streetscape work limits
77	City of Prineville	15S-16E-05BA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.088 19+40, Left 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps per plans. Maintain existing public access.	Public access. Outside of streetscape work limits
78	City of Prineville	15S-16E-05BA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.16 22+60, Left 1A-8-27 Other (describe) 0 55	Rebuild curb and ped ramps per plans. Maintain existing public access.	Public access. Outside of streetscape work limits

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
79	City of Prineville	15S-16E-05BA-ROAD		Reservation of access:	No Access Control	Rebuild curb and ped ramps per plans. Maintain existing public access.	Public access. Outside of streetscape work limits
				Property Use:	Public Roads		
				Existing Mile Point:	19.16		
				Existing Eng Station:	22+60, Right		
		0		R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	55		
80	Seifert, Terri Lynn 845 NE 3rd St Prineville, OR 97754	15S-16E-05BA-4200		Reservation of access:	No Access Control	No Action with this project. Future improvement to rebuild access with sidewalk construction. Include on Access Deficiency list	outside of streetscape work limits. Concrete is in poor condition
				Property Use:	Residential		
				Existing Mile Point:	19.18		
				Existing Eng Station:	23+70, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	14		
81	City of Prineville	15S-16E-05BA-ROAD		Reservation of access:	No Access Control	Rebuild curb and ped ramps per plans. Maintain existing public access.	Public access. Outside of streetscape work limits
				Property Use:	Public Roads		
				Existing Mile Point:	19.22		
				Existing Eng Station:	25+90, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	40		
82	City of Prineville	15S-16E-05BA-ROAD		Reservation of access:	No Access Control	Rebuild curb and ped ramps per plans. Maintain existing public access.	Public access. Outside of streetscape work limits
				Property Use:	Public Roads		
				Existing Mile Point:	19.22		
				Existing Eng Station:	25+90, Right		
		0		R/W Map:	1A-8-27		
				Legal Status	Other (describe)		
				Permitted Width (ft):	0		
				Existing width (ft):	55		
83	Patty Martin 947 NE Third St Prineville, OR 97754	15S-16E-05AB-5100		Reservation of access:	No Access Control	No Action with this project. Future improvement to rebuild access with sidewalk construction. Include on Access Deficiency list	outside of streetscape work limits. Existing width appears to be sub-standard
				Property Use:	Residential		
				Existing Mile Point:	19.249		
				Existing Eng Station:	27+15, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	10		
84	Steven Lent PO Box 482 Prineville, OR 97754	15S-16E-05AB-5000		Reservation of access:	No Access Control	No Action with this project. Future improvement to rebuild access with sidewalk construction. Include on Access Deficiency list	outside of streetscape work limits. Existing width appears to be sub-standard. Concrete condition is poor
				Property Use:	Residential		
				Existing Mile Point:	19.264		
				Existing Eng Station:	27+90, Left		
		0		R/W Map:	1A-8-27		
				Legal Status	PTBP		
				Permitted Width (ft):	0		
				Existing width (ft):	11		

ACCESS MANAGEMENT STRATEGY								
Limits: 2nd Street to Combs Flat								
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
85	City of Prineville	15S-16E-05AB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.289 29+00, Right 1A-8-27 Other (describe) 0 57	Rebuild curb and ped ramps per plans. Maintain existing public access.	outside of work limits Include on Access Deficiency List
86	City of Prineville	15S-16E-05AB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.289 29+00, Left 1A-8-27 Other (describe) 0 54	Rebuild curb and ped ramps per plans. Maintain existing public access.	outside of work limits Include on Access Deficiency List
86B	Church of Christ Prineville, OR 97754	15S-16E-05AB-1500 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.328 31+00, Left 4B-26-10 PTBP 0 42	Construct continuous sidewalk across access. Include dustpan style approach - consider 36' to allow for 3 lanes of access to/from property. •Revisited 2020-10-15 - Per direction from Area Mgr, it's preferred that this approach be rebuilt as a dustpan to remove the existing ADA ramps from state inventory. if the ADA ramps remain, they could be designed as directional. The pedestrian crossing time to cross this driveway is longer than desired due to overall width. DECISION: rebuild approach as a dustpan (2 separated dustpans).	Existing configuration (curb returns) is not appropriate for this type of property use (church). Current configuration has safety concerns RE: pedestrian.vehiclt confict points. •Revisited 2020-10-15 - 2 separated dustpan style approaches to shorten pedestrian exposure/enhance pedestrian safety.
87	Church of Christ Prineville, OR 97754	15S-16E-05AB-1500 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.335 31+25, Left 4B-26-10 PTBP 0 42	Same/shared acess with 86B. See recommended action for 86B	Existing configuration (curb returns) is not appropriate for this type of property use (church). Current configuration has safety concerns RE: pedestrian.vehiclt confict points. •Revisited 2020-10-15 - 2

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
88	Executive Inn 1050 NE Third St Prineville, OR 97754	15S-16E-05AB-2200 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.357 32+60, Right 4B-26-10 Existing Permit 40 30	Rebuild approach with Dustpan style •Revisited 2020-10-15 - precedent established by rebuilding approach for church (86B/87). ADT likely dictates that a dustpan style is appropriate for this approach.	Consistent with project goals to provide continuous sidewalks. Consistent with higway design manual for access.
89	City of Prineville	15S-16E-05AB-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.379 33+78, Right 4B-26-10 Existing Permit 40 33	Rebuild per plans	Public road.
90	S DAVIS ENTERPRISES LLC 1255 NE 3RD ST PRINEVILLE, OR 97754	15S-16E-05AB-1700, 1800 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.42 35+80, Left 4B-26-10 Existing Permit 24 33	No action. Add to access deficiency list	outside of sidewalk project limits. Out of compliance with permit
91	Schwab Properties PO Box 5350 Bend, OR 97708	15S-16E-05AB-2100 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.434 36+55, Right 4B-26-10 Existing Permit 50 50	Rebuild ADA ramps	Upgrade safety and accessibility
92	Prineville Men's Wear 231 N Main St Prineville, OR 97754	15S-16E-05AB-1900, 2000 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.454 37+70, Left 4B-26-10 Existing Permit 24 28	No action. Add to access deficiency list (low priority)	outside of sidewalk project limits. Out of compliance with permitted width
93	Prineville Men's Wear 231 N Main St Prineville, OR 97754	15S-16E-05AB-1900, 2000 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.485 39+20, Left 4B-26-10 Existing Permit 24 28	No action. Add to access deficiency list (low priority)	outside of sidewalk project limits. Out of compliance with permitted width

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
94	Schwab Properties PO Box 5350 Bend, OR 97708	15S-16E-05AB-2100 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.49 39+43, Right 4B-26-10 Existing Permit 50 46	Rebuild ADA ramps	Upgrade safety and accessibility
95	City of Prineville	15S-16E-05AA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.555 42+80, Right 4B-26-10 Other (describe) 0 33	No action	Intersection deficiencies being addressed by overlapping project (Rails-to-Trails)
96	Telos Development Company LLC 445 Myers St. SE Salem, OR 97302	15S-16E-05AA-300, 700, 600, 500, 400, 401, 402, 900, 800 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.579 44+10, Left 4B-26-10 Existing Permit 0 33	Rebuild curb radii and ADA ramps. Revise radii and ADA ramp location to provide better sight distance and earlier conflict recognition for pedestrians and vehicles	Consistent with safety goals of the project, specifically regarding pedestrian safety
96B	Bradley L Forseth 405A NW 3rd St Prineville, OR 97754	15S-16E-05AA-1500, 1600 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	0 Commercial 19.63 46+40, Right 4B-26-10 Existing Permit 25 24	No action	no existing acces to parcel today and nothing permitted. ODOT has issued permit to construct new approach
97	Bradley L Forseth 405A NW 3rd St Prineville, OR 97754	15S-16E-05AA-1500, 1600 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.655 47+90, Right 4B-26-10 Existing Permit 25 29	No action	owner is going to remove this approach
98	Telos Development Company LLC 445 Myers St. SE Salem, OR 97302	15S-16E-05AA-1100, 1000, 1200, 1300, 1400, 900, 800 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.67 48+90, Left 4B-26-10 Existing Permit 0 35	Rebuild ramps	Consistent with project goals to provide continuous sidewalks. Consistent with higway design manual for access.

ACCESS MANAGEMENT STRATEGY							
Limits: 2nd Street to Combs Flat							
OPAL Reference #	Property Owned By	Tax Lot No./Twnsp-Sect-Rng	Occupied by	Approach Description		Proposed Action	Reason for Action
99	Bradley L Forseth 405A NW 3rd St Prineville, OR 97754	15S-16E-05AA-1500, 1600 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.678 49+25, Right 4B-26-10 Existing Permit 25 28	No action. Add to deficiency list	outside of sidewalk project limits.,
100	Prineville Partners LLC PO Box 1583 Corvallis, OR 97339	15S-16E-05AA-1700, 1701, 1702 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Commercial 19.708 50+70, Right 4B-26-10 Existing Permit 25 25	No action •Revisited 2020-10-15 - Consideration of traffic separator to limit WB left turns into access 100.	project is considering a traffic separator between EB left and WB through lanes. Team to consult with traffic
101	City of Prineville	15S-16E-05AA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.75 52+85, Left 4B-26-10 Other (describe) 0 39	Rebuild ped ramps per project plans	Existing ramps on SW, NW & NE corners don't meet ADA standard
102	City of Prineville	15S-16E-05AA-ROAD 0		Reservation of access: Property Use: Existing Mile Point: Existing Eng Station: R/W Map: Legal Status Permitted Width (ft): Existing width (ft):	No Access Control Public Roads 19.75 52+85, Right 4B-26-10 Other (describe) 0 44	Rebuild ped ramps per project plans	Existing ramps on SW, NW & NE corners don't meet ADA standard

Appendix C

West Y Cost Estimate

Opinion of Probable Construction Cost

Prineville Transportation System Plan

Prepared for

City of Prineville OR and Oregon Department of Transportation

CITY OF PRINEVILLE OREGON

Oregon Department of Transportation

February 2024

Parametrix

BASIS OF ESTIMATE

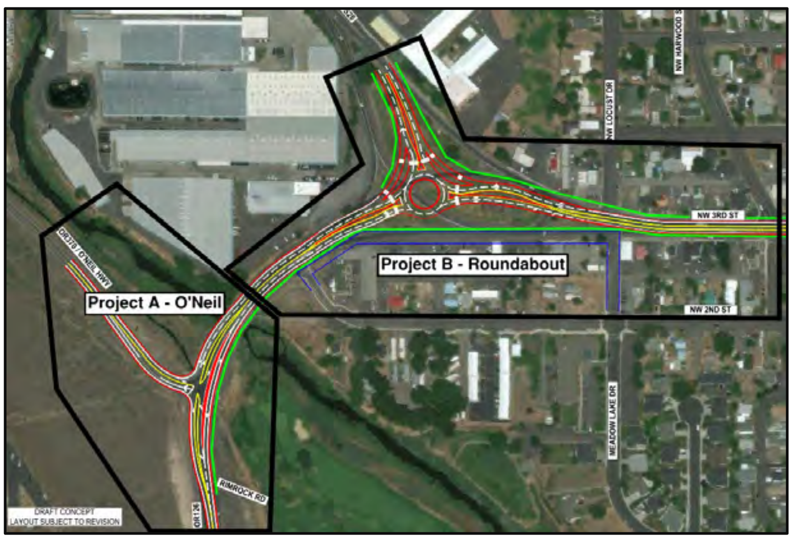
Project Name	Prineville Transportation System Plan (TSP)
Project Number	274395121
Date Prepared	2/28/2024
Prepared by	Alex Mannion, Parametrix Catherine Cerruti, Parametrix Luke McMullan, Parametrix
Estimate Classification	AACE Class 5
Estimate Purpose	Budget Planning
Estimate ID (Version)	2

Note that the accuracy of the associated cost estimate is dependent upon the various underlying assumptions, inclusions, and exclusions described herein. Actual project costs may differ and can be significantly affected by factors such as changes in the external environment, the manner in which the project is executed and controlled, and other factors that may impact the estimate basis or otherwise affect the project. Estimate accuracy ranges are only assessments based upon the cost estimating methods and data employed in preparing the estimate and are not a guarantee of actual project costs.

Project Name: *Prineville Transportation System Plan (TSP)*
Project Number: *274395121* Date: 2/28/2024

1.0 Purpose

The Prineville Transportation System Plan (TSP) is a plan to address current and future transportation needs in the city of Prineville, Oregon. The TSP is a joint effort between the City of Prineville and the Oregon Department of Transportation (ODOT) and this project emphasizes improving connections and safety conditions for all travelers in the City. While there are many components to the overall TSP, this estimate's focus areas include the "West Y" interchange at NW 3rd St, OR 126 (Ochoco Highway), and NW Madras Highway, and the intersection of OR 126 and NW O'Neil Highway. This scope of work is currently planned to be bid as two separate construction packages. Project A (The Left-Accelerated Intersection / O'Neil) includes a bridge that will either need to be modified or replaced in full, as well as the widening of roadways, and new surfacing for all paved areas. Project B (The Y / Roundabout) will require full demolition of existing roadways and other site features, new roadways, and new site landscaping.



The probabilistic estimate was developed to establish a Class 5 conceptual cost estimate based on the most recent project information and is intended to support the City of Prineville and ODOT in planning and budgeting.

AACE Class 5 Estimate				
ID	Item	Low Range (P10)	**Opinion of Probable Construction Cost (P50)**	High Range (P90)
1	Project A – O'Neil (Full Bridge Replacement)	$21,088,000	$26,360,000	$34,268,000
2	Project A – O'Neil (Bridge Modification Only)	$13,576,000	$16,970,000	$22,061,000
3	Project B - Roundabout	$15,152,000	$18,940,000	$24,622,000
Total Construction Cost with Replacement (1 + 3)		$36,240,000	**$45,300,000**	$58,890,000
Total Construction Cost with Modification (2 + 3)		$28,728,000	**$35,910,000**	$46,683,000

Project Name: *Prineville Transportation System Plan (TSP)*
Project Number: *274395121* Date: 2/28/2024

2.0 Project Scope Definition

The costs were prepared using a standard Bid-Item format to align with the provided scoping email and provide clarity and transparency to the estimated costs. The scope of the project includes the following:

- Project A – O'Neil – Full Bridge Replacement
  - Demolition of the Crooked Creek bridge and highway interchange roadways, and site structures
  - Construction of a new 130' long and 80' wide bridge with deep foundations, abutments, concrete girders, a concrete deck, and street lighting systems
  - Widening of roadway connections, bike and pedestrian lanes, and traffic barriers
  - Roadway signage and striping
- Project A – O'Neil – Bridge Modification
  - Upgrades to the Crooked Creek bridge including the widening of the drivable surface and associated adjustments to structural components, fences, lighting, and pavement resurfacing
  - Widening of roadway connections, bike and pedestrian lanes, and traffic barriers
  - Roadway signage and striping
- Project B - Roundabout
  - Select demolition of roadways, landscaping, and site structures
  - Construction of new roadways, connections, and splitter islands around the roundabout
  - Construction of bike and pedestrian lanes
  - Landscaping restoration
  - Roadway signage and striping

3.0 Design Basis

This is an AACE Class 5 estimate with all the required documentation. The estimate is based on the Concept level design and engineering documents provided by the project design team. These design documents include:

1. Pineville Y Concept Updates, January 2024

4.0 Planning Basis

The following planning basis assumptions were made for the project estimate:

- No construction plan is currently in place.
- This project delivery method is Design-Bid-Build with an anticipated competitive bidding process.
- The anticipated construction duration is noted below:
  - Project A – O'Neil – Full Replacement: 18 months
  - Project A – O'Neil – Bridge Modification: 12 months
  - Project B – Roundabout: 18 months
- No unusual site conditions have been considered as part of this estimate.

5.0 Cost Basis

Estimated Construction Costs are generated from historical allowances, sources such as Parametrix estimating databases, and bid tabulations for similar scopes of work in the region. All costs included in the estimate reflect the best understanding of the requirements as they existed at the time this estimate was prepared.

- The standard workweek is assumed to be a 5-day – 8-hour per day work week with limited overtime.
- Direct construction costs were estimated in 1st quarter 2024 dollars.
- Unit prices in the Construction Estimate reflect the complexity and scope of the individual project, as identified.

6.0 Allowances

The following are the allowances for items included in the construction cost estimate:

Additional Construction Cost Markups

- A 5% allowance for Erosion Controls and Water Pollution Prevention for the necessary containment that will be required for each site.
- An allowance for Temporary Traffic Controls has been included for the projects as noted below:
  - Project A – O'Neil – Full Replacement: 30%
  - Project A – O'Neil – Bridge Modification: 20%
  - Project B – Roundabout: 20%

- A 10% allowance for Mobilization and Demobilization to and from the site.
- A 25% Allowance for Indeterminates (AFI) is applied to the base construction cost. The AFI is an allowance that accounts for the cost of known but undefined requirements necessary for a complete and workable project. The AFI accounts for elements that are not explicitly shown in the project documents to be further defined as part of the design development and project delivery process.

Indirect Construction Costs

- An allowance of 2% has been included for Permitting.
- A 25% allowance for engineering and design has been included for the projects.
- An allowance of $20,000 per month has been included for Construction Administration Fees for the duration of each project.

Sales Tax

- Sales tax is not included in this estimate.

Right of Way

- A negotiated partial purchase allowance of $500,000 has been allocated for the acquisition of the ROW for the frontage road in Project B – Roundabout. The conceptual drawings show the frontage road impacting the following tax lots:
  - 151606BA04500, estimated value $198,600
  - 151606BA04501, estimated value $708,920

7.0 Exclusions

Potential items of cost that might be associated with the project but for which no costs have been included are as follows:

- Hazardous materials such as lead paint, asbestos, pipe wrappings, or contaminated soils
- Delays due to interferences or differing field conditions
- Unanticipated weather disruptions, such as periods of excessive rainfall during the dry weather season or severe winter weather during off-season construction
- Any modifications to existing or installation of new utility systems
- Special considerations for existing site furnishings and/or historical monuments
- Requirements for environmental mitigation and/or remediation (wetlands, environmental impact analysis, contaminated soils)
- Escalation

8.0 Assumptions

The following assumptions were made during the cost-estimating process:

- All costs included in the estimate reflect the best understanding of requirements as they existed at the time the estimates were prepared. Any modifications to the present scope and/or location of the project site may have substantial cost and schedule impacts.
- Work will be sequenced to minimize process, service, and community interruptions.
- A degree of minimal cost rounding will occur during the normal estimating process.

9.0 Risks (Threats and Opportunities)

The following potential threat items were identified when considering the construction of the project:

- Permitting delays could delay construction start time.
- Potential challenges may arise with neighboring business owners, posing a risk of delays and potential additional costs for the project owner.
- The scheduled timing of project execution will greatly impact bottom-line costs. There is risk related to labor availability and fluctuating commodity and equipment pricing in the timeframe between this estimate and the actual execution of the project. Rising costs due to inflation, escalation, and competing major projects pose the possibility of noticeable project cost and schedule increases.
- Demolition plans have not yet been developed, conservative assumptions were made regarding site demolition and tree removal. Further details and clarifications for on-site demolition could result in either increased or decreased costs.
- It is uncertain how existing side streets will intersect with the new roadways, the potential realignment of side streets may introduce additional costs.

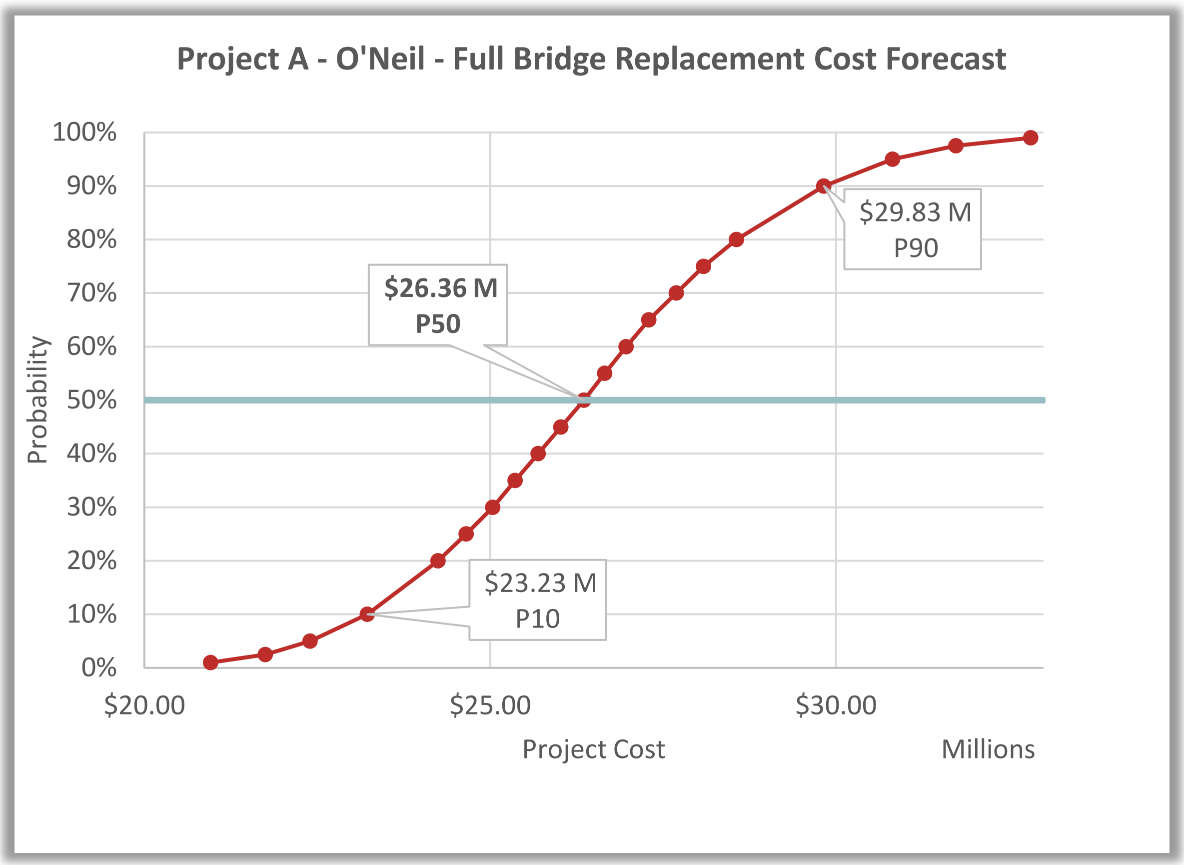
10.0 Contingency

The current level of design lends itself to a wide range of potential costs that are best estimated using an uncertainty model that provides an understanding of how costs may deviate from the anticipated deterministic estimate. The elements of this project most vulnerable to uncertainty are the following:

- Scope and Quantity: the conceptual plans have a high likelihood of evolving over time to include additional elements of work that are not clearly identifiable.
- Permitting and Outside Agency Construction: the project will require the City of Prineville and ODOT to collaborate and share costs which could impact the total project cost. This project also includes a bridge over Crooked Creek which may require additional agency input.

- Construction Risks: there is a high level of uncertainty in any project that involves earthwork and modifications to below grade items.

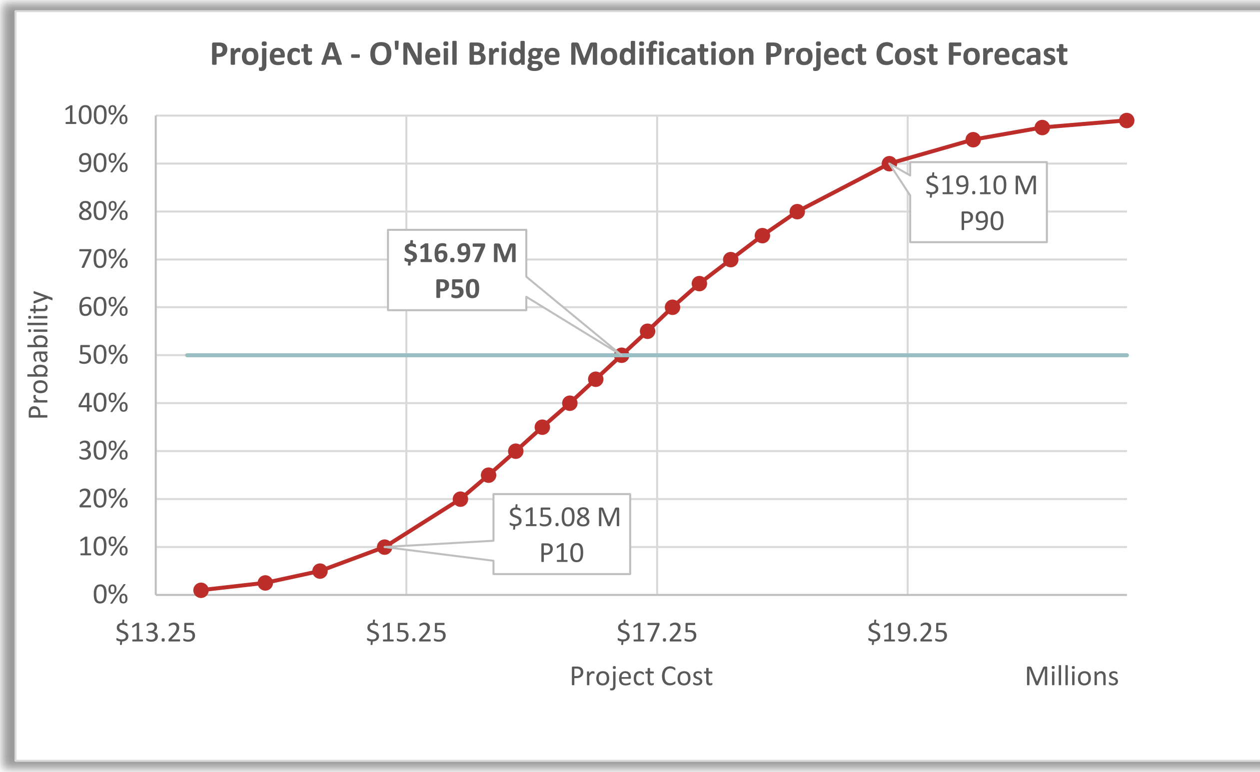
The uncertainty model was developed using MS Excel, using Palisade's @Risk Monte Carlo simulation software. The model used a Latin Hypercube simulation with 10,000 iterations to generate composite data results of the distributions for each line item. Distributions for each project were calibrated by establishing the lower bound of each distribution as the P10 confidence interval (i.e., 90% probability of exceedance) and the upper bounds of each distribution as the P90 confidence interval (i.e., 10% probability of exceedance).



Item	P10	P30	P50	P70	P90
O'Neil + Full Replace	$23,230,000	$25,040,000	$26,360,000	$27,690,000	$29,830,000
Contingency %	35.0%	45.5%	53.2%	60.9%	73.3%

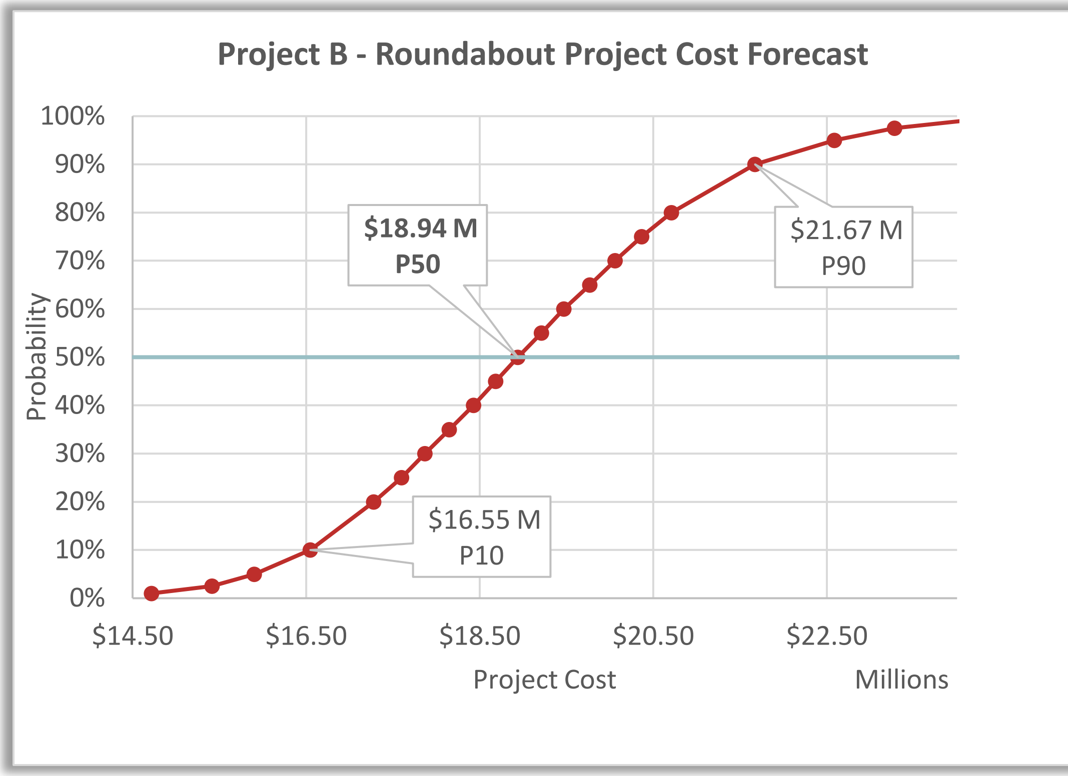
The Project A O'Neil (Full Bridge Replacement) uncertainty cost model indicates a P50 value for total project costs of $26,360,000 for the currently defined scope of the project which includes the recommended contingency allocation of 53.2%.

Project Name: *Prineville Transportation System Plan (TSP)*
Project Number: *274395121* Date: 2/28/2024



Item	P10	P30	P50	P70	P90
O’Neil + Bridge Mod	$15,080,000	$16,120,000	$16,970,000	$17,840,000	$19,100,000
Contingency %	35.9%	45.4%	53.0%	60.8%	72.2%

The Project A O’Neil (Bridge Modification) uncertainty cost model indicates a P50 value for total project costs of $16,970,000 for the currently defined scope of the project which includes the recommended contingency allocation of 53.0%.



Item	P10	P30	P50	P70	P90
Project B Roundabout	$16,550,000	$17,870,000	$18,940,000	$20,060,000	$21,670,000
Contingency %	32.5%	43.1%	51.7%	60.6%	73.6%

The Project B Roundabout uncertainty cost model indicates a P50 value for total project costs of $18,940,000 for the currently defined scope of the project which includes the recommended contingency allocation of 51.7%.

11.0 Reconciliation

A formal reconciliation has not been conducted for this estimate. Future estimates may be reconciled against this estimate.

12.0 Benchmarking

Key direct construction cost line items have been benchmarked against a similar portfolio of recently bid projects in the regional area including earthwork, concrete, paving, and other common project elements. The bid tabs for similar projects from ODOT were also referenced.

13.0 Estimate Quality Assurance Plan

An internal Quality Assurance / Quality Control review has been conducted within the Parametrix estimating team. The Parametrix internal QA/QC process involves three main reviews: qualitative, quantitative, and technical editing. The qualitative review focuses on the completeness and accuracy of the estimate; the quantitative review involves validation of technical information, confirming items such as material take off quantities, unit pricing, labor rate build-up, etc.; the technical editing review ensures the accuracy of spelling, grammar, and formatting.

14.0 Attachments

Attachment A: Project A Full Replacement Opinion of Probable Construction Cost

Attachment B: Project A Modification Opinion of Probable Construction Cost

Attachment C: Project B Roundabout Opinion of Probable Construction Cost

Attachment A:
Project A – O'Neil – Replace

PRINEVILLE TSP UPGRADE - PROJECT A - O'NEIL (FULL REPLACEMENT)
CITY OF PRINEVILLE

ENGINEER'S ESTIMATE - PLANNING LEVEL

AACE International Class 5 Estimate

PREPARED BY: Parametrix, Strategic Advisory Services DATE: 2/28/2024

CHECKED BY: Parametrix, Transportation DATE:

NO.	ITEM	QUANT.	UNIT	UNIT COST	AMOUNT
1	ROADWAY SURVEY	1	LS	$ 65,000.00	$ 65,000.00
2	CLEARING AND GRUBBING	1	ACRE	$ 16,320.00	$ 16,320.00
3	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS	$ 20,000.00	$ 20,000.00
4	ASPHALT PAVEMENT SAW CUTTING	2,750	LF	$ 4.00	$ 11,000.00
5	REMOVAL OF ASPHALT PAVEMENT	8,140	SY	$ 11.50	$ 93,610.00
6	ROADWAY EXCAVATION INCL. HAUL	5,590	CY	$ 65.00	$ 363,350.00
7	DITCH EXCAVATION INCL. HAUL	5,590	CY	$ 45.00	$ 251,550.00
8	NEW ASPHALT PAVING INCL. SUB BASE	100,500	SF	$ 10.00	$ 1,005,000.00
9	PAVEMENT MARKINGS AND SYMBOLS	1	LS	$ 20,000.00	$ 20,000.00
10	PERMANENT SIGNING	1	LS	$ 20,000.00	$ 20,000.00
11	BIKE/PEDESTRIAN LANE - ASPHALT PAVEMENT SAW CUTTING	2,400	LF	$ 4.00	$ 9,600.00
12	BIKE/PEDESTRIAN LANE - ROADWAY EXCAVATION INCL. HAUL	1,200	LF	$ 43.50	$ 52,200.00
13	BIKE/PEDESTRIAN LANE - CONCRETE, 12' WIDE	1,200	LF	$ 119.00	$ 142,800.00
14	REPLACE EXISTING BRIDGE				
15	*BRIDGE - SURVEY*	1	LS	$ 65,000.00	$ 65,000.00
16	*BRIDGE - SITE PREPARATION*	1	LS	$ 50,000.00	$ 50,000.00
17	*BRIDGE - DECK DEMOLITION AND REMOVAL*	2,170	SY	$ 250.00	$ 542,500.00
18	*BRIDGE - STRUCTURE DEMOLITION AND REMOVAL*	1	LS	$ 250,000.00	$ 250,000.00
19	*BRIDGE - SHORING*	230	SY	$ 350.00	$ 80,500.00
20	*BRIDGE - EXCAVATION AND FILL*	220	CY	$ 85.00	$ 18,700.00
21	*BRIDGE - APPROACHES*	2	EA	$ 180,000.00	$ 360,000.00
22	*BRIDGE - DEEP FOUNDATIONS*	1,200	LF	$ 250.00	$ 300,000.00
23	*BRIDGE - ABUTMENTS*	2	EA	$ 135,000.00	$ 270,000.00
24	*BRIDGE - DIAPHRAGMS*	2	EA	$ 135,000.00	$ 270,000.00
25	*BRIDGE - GIRDERS*	1,500	LF	$ 750.00	$ 1,125,000.00
26	*BRIDGE - DECK*	12,000	SF	$ 85.00	$ 1,020,000.00
27	*BRIDGE - TRAFFIC BARRIERS (CONCRETE PARAPETS)*	600	LF	$ 510.00	$ 306,000.00
28	*BRIDGE - FENCES*	400	LF	$ 200.00	$ 80,000.00
29	*BRIDGE - SURFACE TREATMENT*	12,000	SF	$ 5.00	$ 60,000.00
30	*BRIDGE - ELECTRICAL LIGHTING SYSTEMS*	300	LF	$ 500.00	$ 150,000.00
31	*BRIDGE - SITE RESTORATION*	1	LS	$ 50,000.00	$ 50,000.00
	Subtotal				$ 7,068,130.00
	Erosion Controls and Water Pollution Prevention	*5%*			$ 353,406.50
	Temporary Traffic Controls	*30%*			$ 2,226,460.95
	Mobilization	*10%*			$ 964,799.75
	Allowance for Indeterminates	*25%*			$ 2,653,199.30
	CONSTRUCTION SUBTOTAL (ROUNDED)				**$13,266,000**
	Permitting	*2%*			$ 265,320.00
	Engineering Design Fees	*25%*			$ 3,316,500.00
	Construction Administration Fees	18	MOS	$ 20,000	$ 360,000.00
	Right of Way Cost				*None Included*
	City of Prineville Staff Labor				*None Included*
	NON-CONSTRUCTION SUBTOTAL				**$3,941,820**
	Project Contingency	*53.2%*			$ 9,154,560
	YEAR 2024 PROJECT TOTAL (ROUNDED)				**$ 26,360,000**

Attachment B:
Project A – O'Neil – Modify

PRINEVILLE TSP UPGRADE - PROJECT A - O'NEIL (MODIFICATION)
CITY OF PRINEVILLE

ENGINEER'S ESTIMATE - PLANNING LEVEL

AACE International Class 5 Estimate

PREPARED BY: Parametrix, Strategic Advisory Services — DATE: 2/28/2024

CHECKED BY: Parametrix, Transportation — DATE:

NO.	ITEM	QUANT.	UNIT	UNIT COST	AMOUNT
1	ROADWAY SURVEY	1	LS	$ 65,000.00	$ 65,000.00
2	CLEARING AND GRUBBING	1	ACRE	$ 16,320.00	$ 16,320.00
3	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS	$ 20,000.00	$ 20,000.00
4	ASPHALT PAVEMENT SAW CUTTING	2,750	LF	$ 4.00	$ 11,000.00
5	REMOVAL OF ASPHALT PAVEMENT	8,140	SY	$ 11.50	$ 93,610.00
6	ROADWAY EXCAVATION INCL. HAUL	5,590	CY	$ 65.00	$ 363,350.00
7	DITCH EXCAVATION INCL. HAUL	5,590	CY	$ 45.00	$ 251,550.00
8	NEW ASPHALT PAVING INCL. SUB BASE	100,500	SF	$ 10.00	$ 1,005,000.00
9	PAVEMENT MARKINGS AND SYMBOLS	1	LS	$ 20,000.00	$ 20,000.00
10	PERMANENT SIGNING	1	LS	$ 20,000.00	$ 20,000.00
11	BIKE/PEDESTRIAN LANE - ASPHALT PAVEMENT SAW CUTTING	2,400	LF	$ 4.00	$ 9,600.00
12	BIKE/PEDESTRIAN LANE - ROADWAY EXCAVATION INCL. HAUL	1,200	LF	$ 43.50	$ 52,200.00
13	BIKE/PEDESTRIAN LANE - CONCRETE, 12' WIDE	1,200	LF	$ 119.00	$ 142,800.00
14	MODIFY EXISTING BRIDGE				
15	*BRIDGE - SURVEY*	1	LS	$ 65,000.00	$ 65,000.00
16	*BRIDGE - SITE PREPARATION*	1	LS	$ 150,000.00	$ 150,000.00
17	*BRIDGE - DEMOLITION AND REMOVAL - FENCES/BARRIERS/LIGHTING*	250	LF	$ 350.00	$ 87,500.00
18	*BRIDGE - SHORING*	150	SY	$ 350.00	$ 52,325.00
19	*BRIDGE - EXCAVATION AND FILL*	143	CY	$ 85.00	$ 12,155.00
20	*BRIDGE - APPROACH MODIFICATIONS*	2	EA	$ 135,000.00	$ 270,000.00
21	*BRIDGE - ADDITIONAL DEEP FOUNDATIONS*	600	LF	$ 250.00	$ 150,000.00
22	*BRIDGE - ABUTMENT MODIFICATIONS*	2	EA	$ 101,250.00	$ 202,500.00
23	*BRIDGE - DIAPHRAGM MODIFICATIONS*	2	EA	$ 101,250.00	$ 202,500.00
24	*BRIDGE - NEW GIRDERS*	450	LF	$ 900.00	$ 405,000.00
25	*BRIDGE - EXISTING GIRDER MODIFICATIONS*	1,500	LF	$ 150.00	$ 225,000.00
26	*BRIDGE - EXISTING/NEW DECK CONNECTION ALLOWANCE*	150	LF	$ 250.00	$ 37,500.00
27	*BRIDGE - NEW DECK*	4,400	SF	$ 127.50	$ 561,000.00
28	*BRIDGE - SELECT TRAFFIC BARRIER REPLACEMENTS (CONCRETE PARAPETS)*	300	LF	$ 510.00	$ 153,000.00
29	*BRIDGE - SELECT FENCE REPLACEMENTS*	200	LF	$ 200.00	$ 40,000.00
30	*BRIDGE - EXISTING SURFACE RESTORATION*	9,750	SF	$ 10.00	$ 97,500.00
31	*BRIDGE - MODIFY ELECTRICAL LIGHTING SYSTEMS*	200	LF	$ 500.00	$ 100,000.00
32	*BRIDGE - SITE RESTORATION*	1	LS	$ 50,000.00	$ 50,000.00
	Subtotal				$ 4,931,410.00
	Erosion Controls and Water Pollution Prevention	*5%*			$ 246,570.50
	Temporary Traffic Controls	*20%*			$ 1,035,596.10
	Mobilization	*10%*			$ 621,357.66
	Allowance for Indeterminates	*25%*			$ 1,708,733.57
	CONSTRUCTION SUBTOTAL (ROUNDED)				**$8,544,000**
	Permitting	*2%*			$ 170,880.00
	Engineering Design Fees	*25%*			$ 2,136,000.00
	Construction Administration Fees	12	MOS	$ 20,000	$ 240,000.00
	Right of Way Cost				*None Included*
	City of Prineville Staff Labor				*None Included*
	NON-CONSTRUCTION SUBTOTAL				**$2,546,880**
	Project Contingency	*53.0%*			$ 5,878,166
	YEAR 2024 PROJECT TOTAL (ROUNDED)				**$ 16,970,000**

Attachment C:
Project B – Roundabout

PRINEVILLE TSP UPGRADE - PROJECT B - ROUNDABOUT
CITY OF PRINEVILLE

ENGINEER'S ESTIMATE - PLANNING LEVEL
AACE International Class 5 Estimate

PREPARED BY: Parametrix, Strategic Advisory Services — DATE: 2/28/2024
CHECKED BY: Parametrix, Transportation — DATE:

NO.	ITEM	QUANT.	UNIT	UNIT COST	AMOUNT
1	ROADWAY SURVEY	1	LS	$ 85,000.00	$ 85,000.00
2	TREE REMOVAL	20	EA	$ 1,630.00	$ 32,600.00
3	TREE PROTECTION ALLOWANCE	5	EA	$ 1,100.00	$ 5,500.00
4	CLEARING AND GRUBBING	4	ACRE	$ 16,400.00	$ 65,600.00
5	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS	$ 25,000.00	$ 25,000.00
6	SALVAGE SITE ITEMS	1	LS	$ 15,000.00	$ 15,000.00
7	ASPHALT PAVEMENT SAW CUTTING	5000	LF	$ 4.00	$ 20,000.00
8	REMOVAL OF ASPHALT PAVEMENT	18170	SY	$ 11.50	$ 208,955.00
9	ROADWAY EXCAVATION INCL. HAUL	8020	CY	$ 65.00	$ 521,300.00
10	NEW ASPHALT PAVING INCL. SUB BASE	144200	SF	$ 10.00	$ 1,442,000.00
11	CONCRETE SPLITTER ISLAND INCL. FORMWORK	2400	SY	$ 44.00	$ 105,600.00
12	PEDESTRIAN FLASHING BEACON SYSTEM	1	LS	$450,000.00	$ 450,000.00
13	CONCRETE CURB	6000	LF	$ 28.00	$ 168,000.00
14	PAVEMENT MARKINGS AND SYMBOLS	1	LS	$150,000.00	$ 150,000.00
15	PERMANENT SIGNING	1	LS	$ 50,000.00	$ 50,000.00
16	LANDSCAPING ALLOWANCE	10430	SY	$ 20.00	$ 208,600.00
17	BIKE/PEDESTRIAN LANE - ASPHALT PAVEMENT SAW CUTTING	9200	LF	$ 4.00	$ 36,800.00
18	BIKE/PEDESTRIAN LANE - ROADWAY EXCAVATION INCL. HAUL	4600	LF	$ 43.50	$ 200,100.00
19	BIKE/PEDESTRIAN LANE - CONCRETE, 12' WIDE	4600	LF	$ 119.00	$ 547,400.00
20	FRONTAGE ROAD - ASPHALT PAVEMENT SAW CUTTING	3100	LF	$ 4.00	$ 12,400.00
21	FRONTAGE ROAD - REMOVAL OF ASPHALT PAVEMENT	1680	SY	$ 11.50	$ 19,320.00
22	FRONTAGE ROAD - ROADWAY EXCAVATION INCL. HAUL	2870	CY	$ 65.00	$ 186,550.00
23	FRONTAGE ROAD - NEW ASPHALT PAVING INCL. SUB BASE	51600	SF	$ 10.00	$ 516,000.00
24	FRONTAGE ROAD BIKE/PEDESTRIAN LANE - ASPHALT PAVEMENT SA	3800	LF	$ 4.00	$ 15,200.00
25	FRONTAGE ROAD BIKE/PEDESTRIAN LANE - ROADWAY EXCAVATION	1900	LF	$ 43.50	$ 82,650.00
26	FRONTAGE ROAD BIKE/PEDESTRIAN LANE - CONCRETE, 6' WIDE	1900	LF	$ 60.50	$ 114,950.00
	Subtotal				$ 5,284,525.00
	Erosion Controls and Water Pollution Prevention	*5%*			$ 264,226.25
	Temporary Traffic Controls	*20%*			$ 1,109,750.25
	Mobilization	*10%*			$ 665,850.15
	Allowance for Indeterminates	*25%*			$ 1,831,087.91
	CONSTRUCTION SUBTOTAL (ROUNDED)				**$9,155,000**
	Permitting	*2%*			$ 183,100.00
	Engineering Design Fees	*25%*			$ 2,288,750.00
	Construction Administration Fees	18	MOS	$ 20,000	$ 360,000.00
	Right of Way Cost	1	LS	$ 500,000	$ 500,000.00
	City of Prineville Staff Labor				*None Included*
	NON-CONSTRUCTION SUBTOTAL				**$3,331,850**
	Project Contingency	*51.7%*			$ 6,455,701
	YEAR 2024 PROJECT TOTAL (ROUNDED)				**$ 18,940,000**

Appendix G

Preferred Solutions

Prineville Transportation System Plan Preferred Solutions

Prepared for
City of Prineville

Oregon Department of Transportation

Oregon Department of Transportation

October 2024

Parametrix

Prineville Transportation System Plan Preferred Solutions

Prepared for

Oregon Department of Transportation
63055 North Highway 97
Bend, OR 97703
P. 541-388-6180

Prepared by

Parametrix
150 NW Pacific Park Lane, Suite 110
Bend, OR 97701
T. 541.508.7710 F. 1.855.542.6353
www.parametrix.com

October 2024 | 274-2395-121

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1. Introduction

This report identifies the preferred system improvements for the City of Prineville Transportation System Plan (TSP) Update. The preferred system improvements include projects, strategies, and potential programs to address transportation needs and opportunities in the city. The preferred improvements were determined through the following:

- An alternatives analysis was conducted and is described in TM #4: Prineville Solutions Analysis and Funding. The improvements were analyzed against evaluation criteria that were derived from the project goals and objectives.
- City and Oregon Department of Transportation (ODOT) staff feedback.
- Public feedback.
- Planning Commission and City Council feedback.
- Project Advisory Committee feedback.

The preferred system improvements consider all transportation modes within the city: driving, cycling, walking or using a mobility device, transit, and freight. These improvements consist of a range of investments to the City's transportation system such as physical improvements to roads and crossings, strategies for improving bicycle and pedestrian connectivity, improvements to increase transportation safety, and developing transit service options through town. This report also includes a discussion of available and potential funding sources including local and state revenue and state and federal grants that can be used to fund the preferred system improvements.

This report organizes projects based on priority and includes a financially constrained list of projects that can be reasonably achieved using estimated available transportation funds over the 20-year life of the TSP.

1.1 Evaluation Framework

Table 1 shows the evaluation criteria used to analyze the alternatives. Developed earlier in the TSP update process, the criteria are reiterated here to serve as a reminder about the overall goals of the TSP process.

Table 1. Project and Program Evaluation Criteria

Goal	Criterion	How is it measured?
Goal 1: Ensure a safe, efficient, and accessible transportation system for all users.	Project enhances transportation options, access, or mobility for vulnerable populations.	▪ Qualitative assessment of effects on multimodal access or improved mobility options for low-income residents, elderly populations, youth, or people living with disabilities
	Project addresses a known safety issue identified during TSP development.	▪ Qualitative assessment

Goal	Criterion	How is it measured?
Goal 2: Build a complete system of walking and cycling routes that connect neighborhoods to schools, parks, jobs, and other key places.	Project provides new or enhanced connection for people walking, cycling, or using a mobility device and/or provides connection to a previously unserved destination such as a grocery store, neighborhood, school, or recreation site.	▪ Improvement in pedestrian or bicycle level of traffic stress ▪ Qualitative assessment
Goal 3: Build and maintain the transportation system to support economic development in the region.	Project cost-effectively addresses a transportation need or issue.	▪ Qualitative assessment of the degree to which an alternative or project addresses desired outcomes relative to cost ▪ Cost information for projects will be provided without a rating
Goal 4: Improve system performance by balancing mobility and access along main travel routes, including on state highways.	Project addresses transportation system performance on key state or local highways in town and/or improves the local network so as to reduce pressure on state highways.	▪ Assessment based on traffic analysis and the travel model to determine performance (LOS or V/C ratio) of different alternatives
Goal 5. Minimize the impacts of the transportation system on the natural and built environments.	Project minimizes significant right-of-way and/or residential, commercial, or industrial displacements, and/or impacts to known environmental resources.	▪ Compare proposed alternatives or cross sections to available right of way and street width, as well as available natural resource information ▪ Qualitative assessment of impacts to existing structures or known environmental resources

LOS = level of service; TSP = transportation system plan; V/C = volume to capacity

2. Funding

Special Revenue funds support the Transportation Fund, estimated to have approximately $1.77 million for fiscal year (FY) 2023. Development in the city also supports the Transportation Fund through collection of transportation system development charge (SDC) revenue. FY2023 revenue collected from transportation SDCs is estimated to be approximately $800,000, with an average of $540,000 annually from FY2015 to FY2023.

SDC revenues represent a dedicated source of funding for transportation system capital investments, with consistent revenues in recent years from continued growth in the city. The City's current SDC fee structure assesses $5,849.32 per PM peak hour trip generated (based on the ITE Trip Generation Manual or approved Trip Generation study); the fees should be recalibrated based on the updated TSP when complete. Table 4 provides details regarding other funding and financing mechanisms identified as part of the 2013 TSP with updated applicability recommendations.

The Transportation Fund is unrestricted in funding purposes, though transfers from the general fund to the transportation fund are typically for transportation operations. The Transportation SDC Fund is dedicated for capital improvement projects and cannot be used for other purposes; typical distributions support substantial improvements such as traffic signals or new roadways. Project-specific intergovernmental grant revenues are funds for specific capital projects provided to the City from state or other governmental grants. Table 2 and Table 3 illustrate historical funding sources for transportation in Prineville.

Based on recent revenue history, the City is likely to have more than $2.25 million in local funds per year available for transportation maintenance, operations, and capital projects. The share of these funds available for capital construction is estimated at $1.5 million annually, based on recent years' expenditures and discussions with City staff.

Table 2. Historical Transportation Funding

Fiscal Year	Franchise Fee Revenue – Water	Franchise Fee Revenue – Wastewater	Excavation Permits	State Revenue Sharing	Gas Tax	Transfer from General Fund	Total Primary Funding Sources
FY23 (Estimate)	$ 148,000	$ 205,000	$ 10,701	$ 144,458	$ 866,000	$ 400,000	$ 1,774,159
FY22	$ 144,000	$ 196,000	$ 10,270	$ 135,993	$ 853,469	$ 400,000	$ 1,739,731
FY21	$ 147,000	$ 191,000	$ 18,380	$ 136,539	$ 758,319	$ 400,000	$ 1,651,239
FY20	$ 142,000	$ 185,000	$ 16,474	$ 121,983	$ 686,113	$ 300,000	$ 1,451,570
FY19	$ 253,000	$ 177,000	$ 9,841	$ 112,853	$ 721,924	$ 300,000	$ 1,574,617
FY18	-	$ 173,000	$ 11,745	$ 107,529	$ 624,833	$ 400,000	$ 1,317,107
FY17	$ 113,000	$ 164,000	$ 12,075	$ 100,135	$ 566,538	$ 100,000	$ 1,055,748
FY16	$ 100,000	$ 159,000	$ 8,805	$ 92,247	$ 551,850	$ 100,000	$ 1,011,902
FY15	$ 94,000	$ 151,000	$ 24,406	$ 91,241	$ 533,823	$ 146,000	$ 1,040,470

Source: City of Prineville, 2023

Table 3. Historical Transportation SDC Funding

Fiscal Year	Project-Specific Intergovernmental Grant Revenue	SDC Collection	Misc.	Interest	Total Primary Funding Sources
FY23 - Estimate	$ 9,900,000	$ 804,988	-	$ 235,221	$ 10,940,208
FY22	$ 900,000	$ 592,747	$ 50,000	$ 3,869	$ 1,546,616
FY21	$ 1,797	$ 783,401	-	$ 7,894	$ 793,091
FY20	$ 1,547,600	$ 633,346	-	$ 24,536	$ 2,205,482
FY19	$ 277,615	$ 593,125	$ 9,000	$ 31,425	$ 911,164
FY18	-	$ 525,075	-	$ 11,120	$ 536,195
FY17	-	$ 334,548	-	$ 4,236	$ 338,784
FY16	-	$ 486,025	$ 44	$ 1,728	$ 487,798
FY15	-	$ 120,884	-	$ 2,950	$ 123,834

Source: City of Prineville, 2023
SDC = system development charge

2.1 Potential Grants and Revenue Sources

Grants provide an important source of funds for projects, supplementing local funds. Grants are often targeted toward specific types of transportation projects. Table 4 describes potential grant funding sources and their applicability to TSP projects in Prineville.

Table 4. Potential Grants for TSP Projects

Source	Funding Available	Description	Eligibility and Considerations
Building Resilient Infrastructure and Communities (BRIC) Hazard Mitigation Assistance Grant *Administrated by FEMA*	Approximately $100 million available for Oregon in the most recent grant solicitation. 25% match required.	FEMA hazard mitigation assistance provides funding for eligible mitigation measures that reduce disaster losses. The BRIC grant supports projects that address future risks from natural disasters, including ones involving wildfires, drought, hurricanes, earthquakes, extreme heat, and flooding. Funds support mitigation activities with a focus on infrastructure projects benefitting disadvantaged communities, climate resilience and adaption, and adopting hazard-resistant building codes.	Projects may be eligible if they also serve a disaster mitigation purpose, such as evacuation from wildfires. Because of Prineville's wildfire risk and the consideration of incorporating evacuation routes into the City's transportation plans, several TSP projects may likely be eligible for funding through this program.
Transportation and Growth Management Grants (TGM)	The TGM Program typically awards between $2 million and $2.5 million. Individual award amounts generally range from $150,000 and $300,000. TGM requires a local grant match of 10.27% of the total project costs.	TGM grants are administered by ODOT and awarded on an annual basis. The TGM grants are generally awarded to projects that will lead to more livable, economically vital, transportation-efficient, sustainable, and pedestrian-friendly communities. The grants are awarded in two categories: transportation system planning and integrated land use and transportation planning.	TGM grants can support planning and refinement of TSP projects such as corridors, paths, or active transportation projects.
Statewide Transportation Improvement Program (STIP) *Administrated by ODOT*	Approximately $2 billion is available statewide for the 2024–2027 STIP. Match requirements vary.	The STIP is the major statewide program for funding significant projects, usually of regional importance. The STIP programs both state and federal dollars.	Major projects on U.S. 26, OR 126, OR 370, and OR 380 are most likely eligible for funding, though the STIP process is extremely competitive. Projects in the STIP are typically chosen based on asset condition, safety, modernization, and other priorities set by the Oregon Transportation Commission (OTC). .

Source	Funding Available	Description	Eligibility and Considerations
Recreational Trails Program *Administrated by OPRD*	Approximately $1.6 million allocated each year. Minimum grant request: $10,000. Recommended grant request maximum: $150,000 for nonmotorized proposals. Applicants must commit to at least 20% match. Match can include volunteer labor or other donations.	Funds to develop, improve, or expand motorized and nonmotorized trails and their facilities. Recreational Trails Program funding is intended for recreational trail projects and can be used for construction of new trails, major rehabilitation of existing trails, development or improvement of trailhead or other support facilities, acquisition of land or easements for the purpose of trail development, and safety and education projects.	This funding source is very competitive, and funding is generally based on the needs identified in the Oregon Statewide Trails Plan.
Oregon Community Paths (OCP) *Administrated by ODOT*	Project Refinement funding: $150,000 to $750,000 per project. Construction funding: $500,000 to $6,000,000 per project. 10% to 30% match depending on funding source (federal or state).	Supports multiuse path projects including paths that pass through a park, along a greenway, and that connect to community centers, services, housing, employment, schools, and recreation. Types of community path projects: ▪ Critical Links – walking and biking connections to schools, downtowns, shopping, employment, and other essential destinations. ▪ Regional Paths – connecting communities no more than 15 miles apart, or traverses one community with a path 10 miles long or greater.	OCP projects must serve a transportation purpose (not just recreational). The TSP update is likely to include projects that fall under the “Critical Links” project type.
Safe Routes to School (SRTS) *Administrated by ODOT*	$60,000 to $2,000,000. New funding program guidance is under development by ODOT. 20% to 40% match required.	Projects are eligible for SRTS funding if they are within a 1-mile radius of a school, within a local roadway, and in a jurisdiction plan. Projects must improve, educate, or re-encourage children safely walking or biking to school. Projects in smaller communities, for elementary and middle schools, and that can demonstrate substantial need are likely to fare best.	Because the Prineville TSP is likely to include projects that would have a direct impact on cycling and walking to school, SRTS is likely a promising source of funding for projects.

Source	Funding Available	Description	Eligibility and Considerations
Statewide Transportation Improvement Fund (STIF) *Administrated by ODOT*	Funding amount varies. There is no match for STIF formula; STIF discretionary match is generally 20%. STIF formula funds may be used as the local match for state and federal funds which also provide public transportation. STIF discretionary funding is used for new or pilot projects and for capital purchases.	STIF formula funds may be used for public transportation purposes that support the effective planning, deployment, operation, and administration of public transportation programs. The STIF discretionary fund supports a wide variety of project types but cannot be used to fund ongoing operations. The intercommunity discretionary fund supports maintaining, expanding, and improving public transportation services between two or more communities. The Oregon Transportation Commission finalizes award decisions using criteria derived from statute and the Oregon Public Transportation Plan.	STIF formula funding is awarded through the Qualified Entity (QE) which is a county or transit district, based on population and taxes paid within their geographic area. STIF discretionary and intercommunity discretionary funds are awarded to public transportation service providers to improve public transportation through a competitive grant process. Though Prineville is not qualified to seek funds directly, the City could work with regional transit providers on an application for improvements to transit service in Prineville.
Travel Oregon Competitive Grants Program *Administrated by Travel Oregon*	Over $3 million is available for funding 2023–2025.	This program awards eligible applicants for projects that contribute to the development and improvement of local economies and communities throughout Oregon by means of the enhancement, expansion, and promotion of the visitor industry.	Prineville's tourism draw would likely result in project eligibility in areas with popular tourist destinations.
Federal Land Access Program (FLAP) *Administered by FHWA and USDOT*	$37,766,000 available per fiscal year in Oregon. No local match required in Oregon.	Funds to improve transportation facilities that provide access to, are adjacent to, or are located within federal lands. The Access Program supplements state and local resources for public roads, transit systems, and other transportation facilities with an emphasis on high-use recreation sites and economic generators. Applicant must be state, county, tribal, or city government that owns or maintains the transportation facility.	Any state, county, or local government or tribe that owns or maintains a public transportation facility is eligible to apply. Project must be located on, adjacent to, or provide direct access to federal lands. Connections to the Ochoco National Forest and Crooked River National Grassland and nearby Bureau of Land Management areas may be eligible.
Carbon Reduction Program (CRP) *Administered by ODOT and FHWA*	$12 million available annually in Oregon through approximately 2026 (unless the federal funding is authorized for further years).	Provides funding for transportation projects that reduce carbon dioxide emissions for small communities via Small Urban and Rural Areas grants; administered by ODOT as part of the CRP.	Eligible communities for Small Urban and Rural Areas grants include local jurisdictions representing urbanized and rural areas with a population pf less than 200,000. Project types include transportation system management, active transportation, transit, and a variety of transportation investments that have a connection to reducing greenhouse gas emissions.

Inclusion of an improvement in this TSP does not represent a commitment by ODOT to fund, allow, or construct the Project. Projects on the State of Oregon Transportation System that are contained in the TSP are not considered “planned” projects until they are programmed into the Statewide Transportation Improvement Program (STIP). As such, Projects proposed in the TSP that are located on a State system cannot be considered as mitigation for future development or land use actions until they are programmed into an adopted STIP or ODOT provides a letter indicating that the Project is “reasonably likely” to be funded in the STIP. State Highway Projects that are programmed to be constructed may have to be altered or canceled at a later time to meet changing budgets or unanticipated conditions such as environmental constraints.

FEMA = Federal Emergency Management Agency; ODOT = Oregon Department of Transportation; OPRD = Oregon Parks and Recreation Department

2.2 Local Funding Sources

Local revenue is another important source of funds for transportation projects and programs. Table 5 describes sources and considerations of local funding for TSP projects identified during the prior TSP process and potential new sources of local funding.

Table 5. Potential Local Funding Sources for TSP Projects

Source	Funding Available	Description	Considerations
Existing Sources			
Utility Fees	$353,000 estimated for FY 2023–2024	Utility taxes, franchise fees, and payments in lieu of taxes from city utilities in Prineville are one of the three main sources of revenue for the City's General Fund.	Utility fees typically fund projects related to that utility, such as stormwater, but these fees can help defray the costs of transportation investments. For example, a road reconstruction project often is an opportunity to upgrade or update the utilities, and utility fees can contribute toward the cost of the transportation project.
General Fund	The City transferred $400,000 from the general fund for transportation operations.	The general fund has two main sources of revenue: ▪ Property Tax ▪ Utility taxes, franchise fees, and payments in lieu of taxes from city utilities	A greater percentage of revenue from the General Fund could be used to fund transportation projects in Prineville. However, general fund dollars are scarce and support a wide variety of government functions, meaning their use for capital projects is discretionary and depends on competing needs.
General Obligation (GO) Bonds	Prineville does not have a policy for issuing GO bonds.	General obligation bonds can help finance construction of capital improvement projects by borrowing money and paying it back over time in smaller installments. Bonds are typically backed by new revenue, such as an additional property tax levy. Usually, a specific package of improvements is identified and a levy is put to a local vote, then the revenue stream is bonded.	The City may consider issuing GO bonds in the future to help provide additional funding transportation capital improvement projects.
Tax Increment Financing (TIF)/Urban Renewal Area (URA)	No current TIF or URA exists in Prineville. However, the City is working to adopt a URA for 3rd Street/Downtown Prineville by the end of 2024.	URAs can provide a strategy for funding transportation (and other public improvements) within a defined URA boundary. URAs facilitate "tax increment financing;" in short, property tax receipts are frozen at URA inception and property tax revenue is then distributed via two streams; the frozen base revenue is distributed normally to taxing districts, while the "increment" of increased revenue due to increased property values in the URA is set aside for improvements. As property values increase, the additional tax revenue collected above the frozen base is used for improvement projects in the URA. This	The City's comprehensive plan includes a policy goal of exploring the establishment of URAs; there are currently none in the City. TIF revenues derived from a URA must be applied in the same area. Nearly any transportation investment would be eligible for funding. The City is working to adopt a URA for Downtown by the end of 2024. Funding generated through the URA can be used to fund improvements in Downtown and along 3rd Street.

Source	Funding Available	Description	Considerations
		revenue stream can be bonded to fund more substantial projects early on.	
System Development Charges (SDC)	Funding is based on the amount of development occurring in the City. The League of Oregon Cities' annual survey states the average annual transportation SDC revenue was $522,478 for Oregon cities in 2022.	These are one-time fees assessed on new use or on an increase in use of a property. For example, SDCs may be collected when someone develops a vacant property into a residence. SDCs, per state law, must be spent only on projects that increase capacity of the system; maintenance or preservation projects generally are not eligible for SDC use.	The City already levies SDCs on new development. Transportation SDCs are generally used by city governments to fund capital improvements from their TSPs and/or capital improvement programs. SDC rates should be reevaluated periodically to ensure they support the City's needs for transportation capital improvements.
Partnerships	Varies based on location.	Prineville can leverage partnerships with ODOT, the Crook County School District, and other public partners to fund projects that overlap with publicly owned facilities. Prineville can also explore public-private partnerships with developers to encourage or mandate the funding of transportation projects adjacent to new development.	U.S. 26, OR 27, OR 126, OR 370, and OR 380 are owned by ODOT. The TSP will include improvements on these highways that may be eligible for ODOT funding. Several new developments are planned in Prineville; the City may consider collaborating with Crook County, schools, and developers to fund improvements.
Possible New Sources			
Local Fuel Tax	Of those cities that currently assess local gas taxes, most smaller cities charge between $0.01 and $0.03 per gallon. It is difficult to estimate the potential revenue generated by a local gas tax without knowing annual gasoline sales.	Dozens of Oregon communities levy local gas taxes, the revenues from which are entirely available for use locally. An advantage of local fuel taxes is that locals, tourists, and people driving through who purchase gas would contribute to funding Prineville's transportation system.	Prineville does not currently levy a local fuel tax. A local gas fuel tax can be enacted through legislative action by the city council or by putting the tax to a public vote.
Transportation Maintenance Fee (also known as a transportation utility fee, street user fee, or road user fee)	The City currently does not levy a transportation maintenance or utility fee.	Based on use of the transportation system; collected from residences and businesses. These fees are typically assessed monthly to residents, businesses, and other nonresidential uses. Fees vary significantly from city to city. Some cities charge a flat fee regardless of the type of use. Other cities have different fees for residences versus other uses. Oregon jurisdictions levy such a fee to pay for maintenance and operations of city streets.	Prineville may consider charging such a fee to fund a greater share of maintenance costs, thereby freeing resources for capital projects. Fees could be collected to help with transportation maintenance costs.

Source	Funding Available	Description	Considerations
Leverage Utility Projects	N/A	There are opportunities to coordinate utility maintenance and replacement projects with street projects, including overlays and sidewalk construction. For example, combining a sewer main replacement with a desired overlay and sidewalk project would save the City money on construction costs.	

3. Preferred Solutions

The list of preferred solutions is categorized by key locations and travel modes. This section describes the solutions and potential outcomes and benefits to each mode and key locations in the city, including the West Y/O'Neil Highway Intersection and 3rd Street/U.S. 26. Figure 1 provides a comprehensive map of all preferred improvements.

3.1 West Y/O'Neil Highway Intersection

The project team identified a roundabout for the preferred solution to replace the existing West Y Intersection where U.S. 26 and OR 126 meet. Additionally, the project would reconfigure the intersection with O'Neil Highway to improve safety and traffic flow. The roundabout would be either a single- or multilane facility and would simplify the traffic scheme, reduce driver confusion, increase safety for all road users, greatly increase traffic mobility, and could free up the existing right-of-way for other uses. Traffic modeling shows that a partial two-lane roundabout would be required by 2045 to meet ODOT mobility targets; however, in the near term, a single-lane roundabout is likely to suffice until traffic increases warrant expansion. Figure 2 shows the potential alignment of the two-lane roundabout and revision to the O'Neil Highway/OR 126 intersection. The initial design , a single-lane roundabout will be constructed. When expansion becomes necessary, a two-lane and possibly slip lanes will need to be added.

3.2 3rd Street/U.S. 26

There are several projects that are in progress or are assumed to occur within the planning horizon of the TSP. These projects will provide substantial benefit in reducing congestion on 3rd Street and in meeting state mobility standards for intersections along 3rd Street. In addition to these assumed future projects, additional measures reviewed above will improve mobility for vehicles, as well as people walking, cycling, and using transit. New investments on 3rd Street include intersection traffic mobility improvements, three new enhanced pedestrian crossings, and improving parallel routes (on 2nd or 4th Street) to accommodate bicycling. Figure 3 provides greater detail and locations for these improvements.

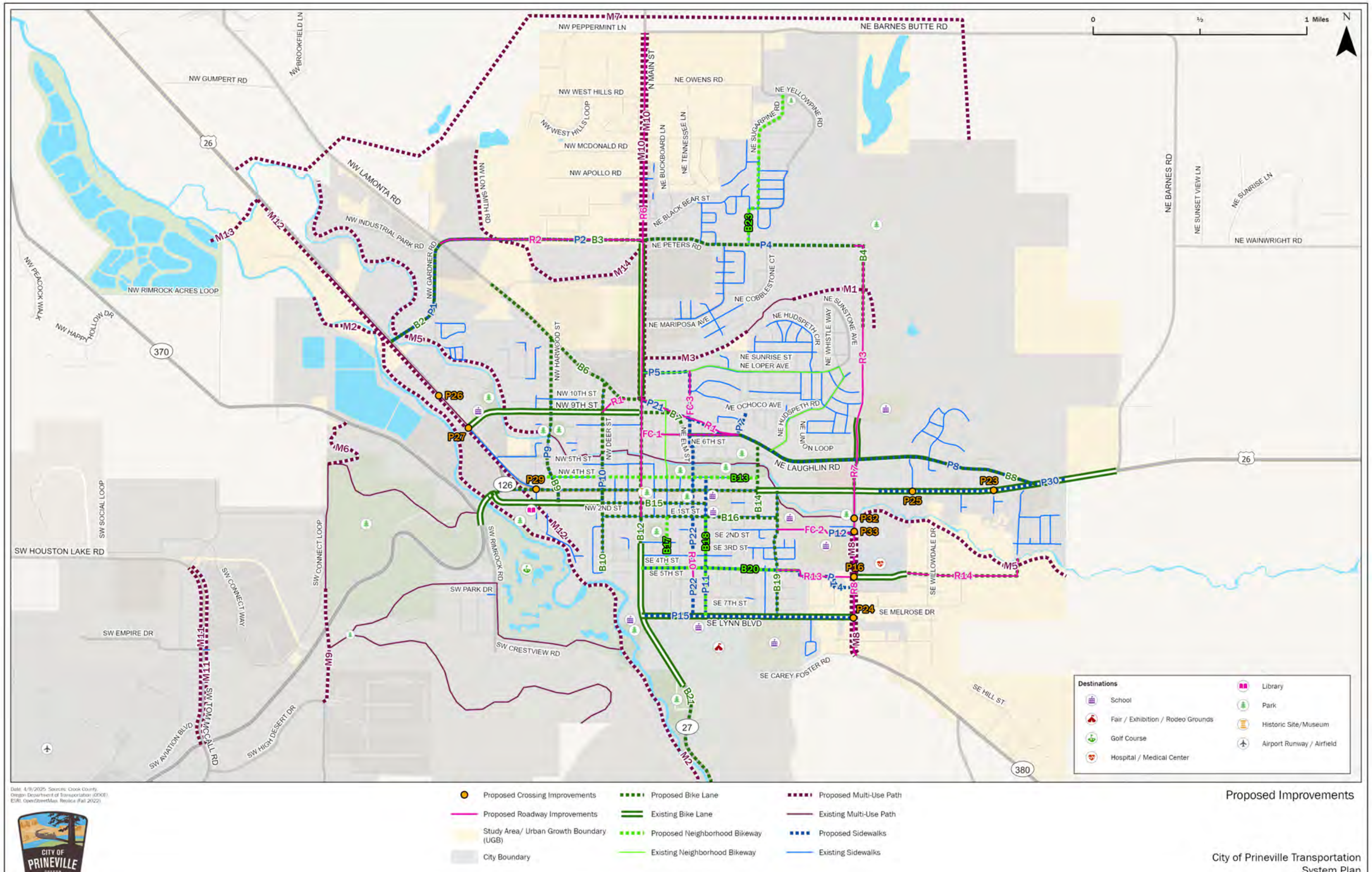

Figure 1 - Proposed Improvements

Figure 2. Preferred Solution for West Y/O'Neil Intersection

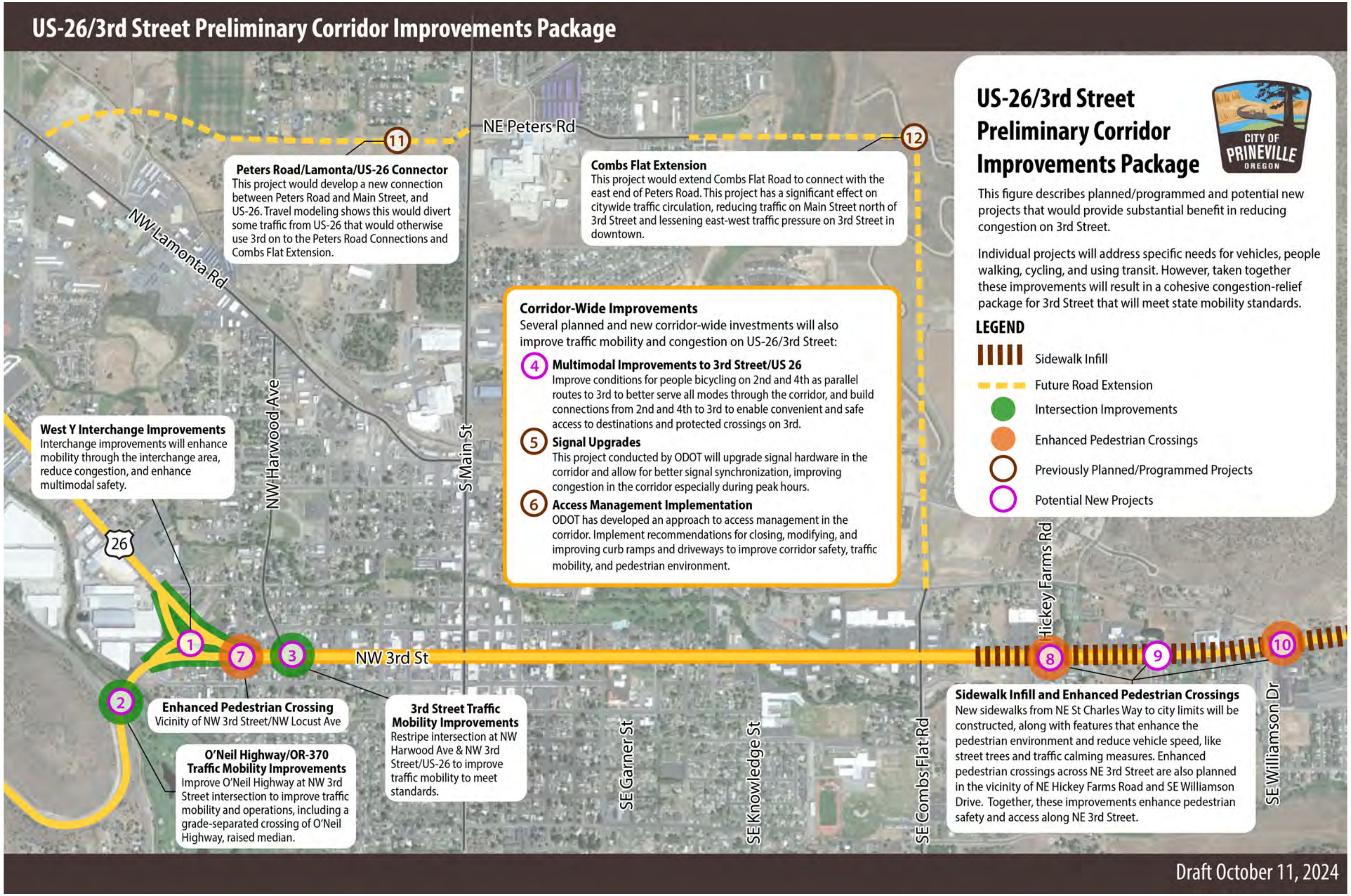

Figure 3. 3rd Street/U.S. 26 Corridor Improvements Package

3.3 Functional Classification Changes and New Roadway Connections

As a growing city, Prineville has roadway extension needs in new areas of town to increase the ease of getting from one place to another. Fast-developing areas in Prineville are prime candidates for implementing roadway projects to support additional transportation needs and minimally impact private properties. Figure 4 presents an updated look at recommended roadway projects and local functional classifications for roadways. Project numbers in Figure 4 refer to specific projects listed in Table 6.

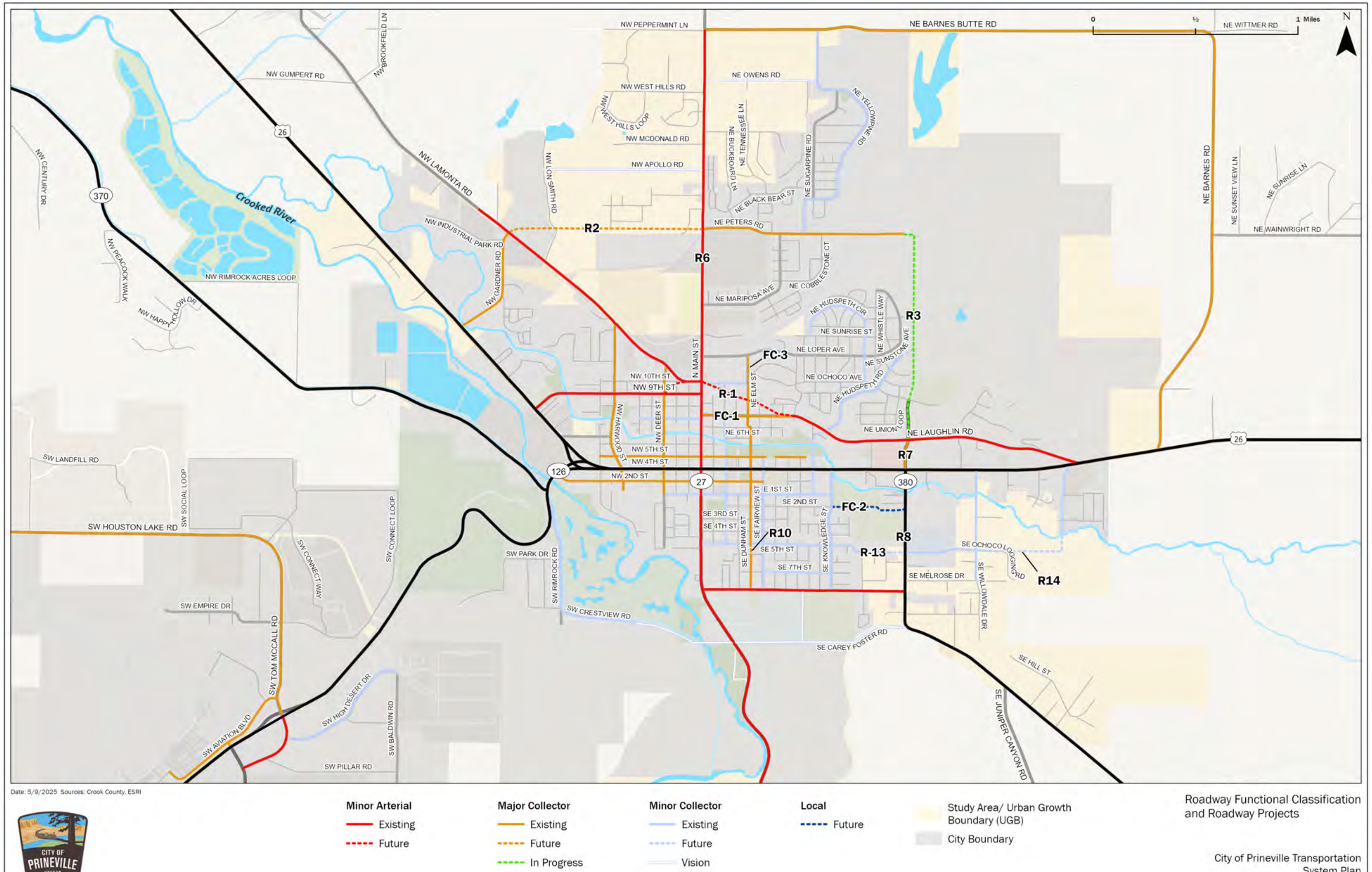

Figure 4. Roadway Functional Classification and Roadway Projects

3.4 Safety

A number of improvements to increase multimodal safety are described in the preferred solutions summary (Table 6). Many of the improvements are targeted toward intersections and seek to improve safety for people driving. The intersection of OR 27/S Main Street and 3rd Street/U.S. 26 in particular sees excessive crash rates and has several safety improvements identified. OR 380/SE Combs Flat Road was also identified as a corridor of concern as a result of community feedback. Improvements to reduce speeding through the corner near SE Lincoln Road are identified. Most projects in Table 6 enhance user safety, in addition to the specific safety-focused interventions described above.

3.5 Transportation System Management and Operations

TSMO is a set of strategies that focus on operational improvements that can maintain and even restore the performance of the existing transportation system before extra capacity is needed. TSMO strategies also encompass strategies typically considered transportation demand management. The project team reviewed potential TSMO strategies as described in Chapter 18 of the ODOT *Analysis Procedures Manual*. Two TSMO solutions are included in the preferred project list: installing signage providing weather information, and implementing a program to market and provide information on bicycle, pedestrian, and transit routes.

3.6 Bicycle and Pedestrian System

3.6.1 Pedestrian System

The list of preferred solutions to enhance pedestrian safety and connectivity includes several projects identified in the 2013 TSP that have not yet been constructed if they still meet an identified need, as well as new projects based on community input and evaluation by the project team. Improvements proposed for the O'Neil Highway intersection, the West Y, and 3rd Street within city limits are included in previous sections (see Figure 5).

3.6.2 Bicycle System

Similar to the pedestrian improvements, the list of preferred bicycle system improvements carries forward several projects from the 2013 TSP, depending on if they still meet an identified need, and new projects based on community input and evaluation by the project team. In some cases, the project team recommends that a bike lane project from the 2013 TSP be designated as a Neighborhood Greenway to speed implementation and visibility of bicycle infrastructure. See Figure 6.

3.6.3 Multiuse Paths and Trails

The City of Prineville recently adopted the *Unified Parks and Recreation System Plan*. This plan includes the most recent multiuse path considerations and proposes several miles of new multiuse trail within or immediately adjacent to Prineville. As these projects were adopted previously by the City, they are carried forward here for inclusion in the updated TSP. The pedestrians and bicycle system solutions sections consider these trails as connections.

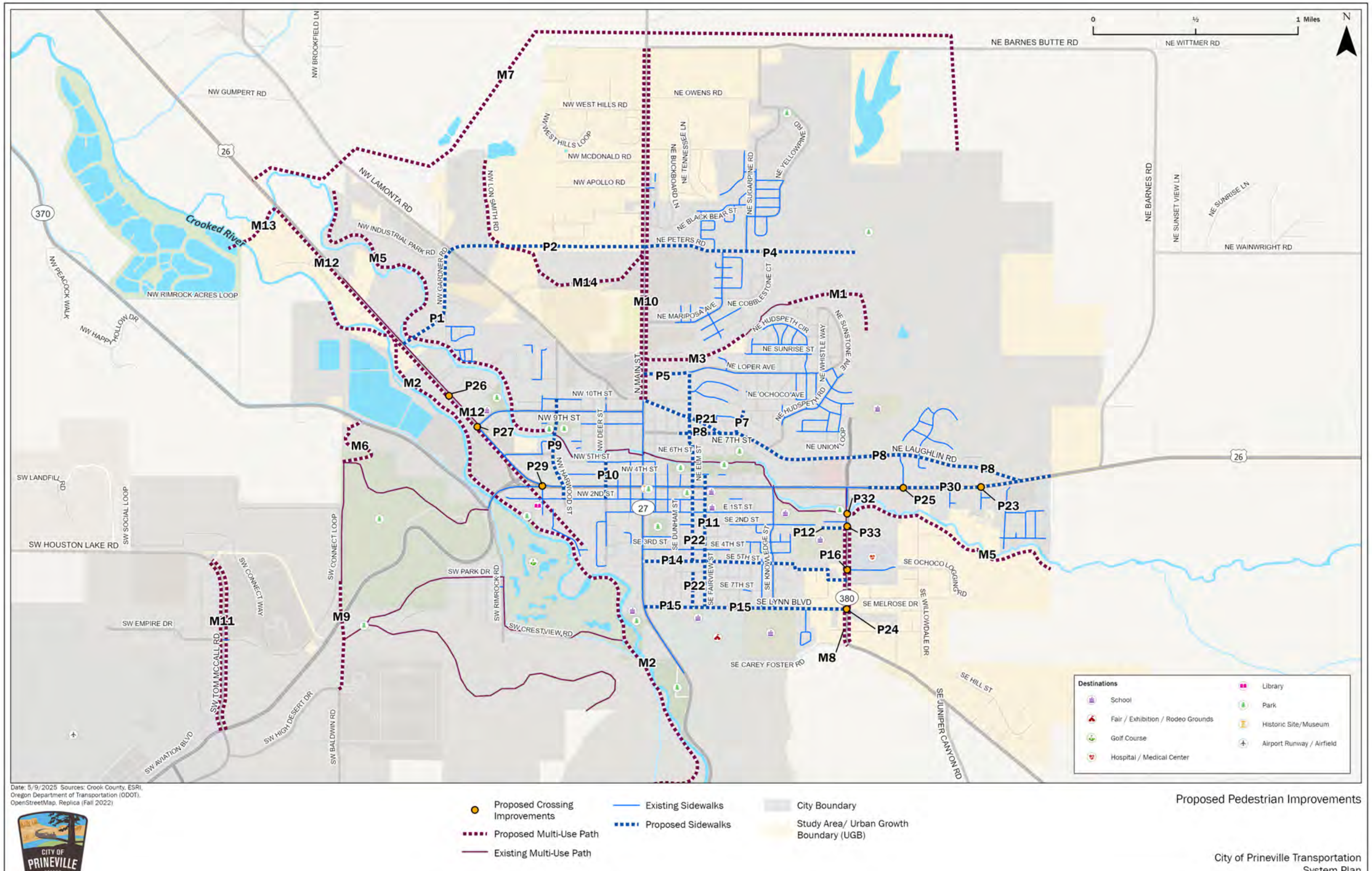

Figure 5. Proposed Pedestrian Improvements

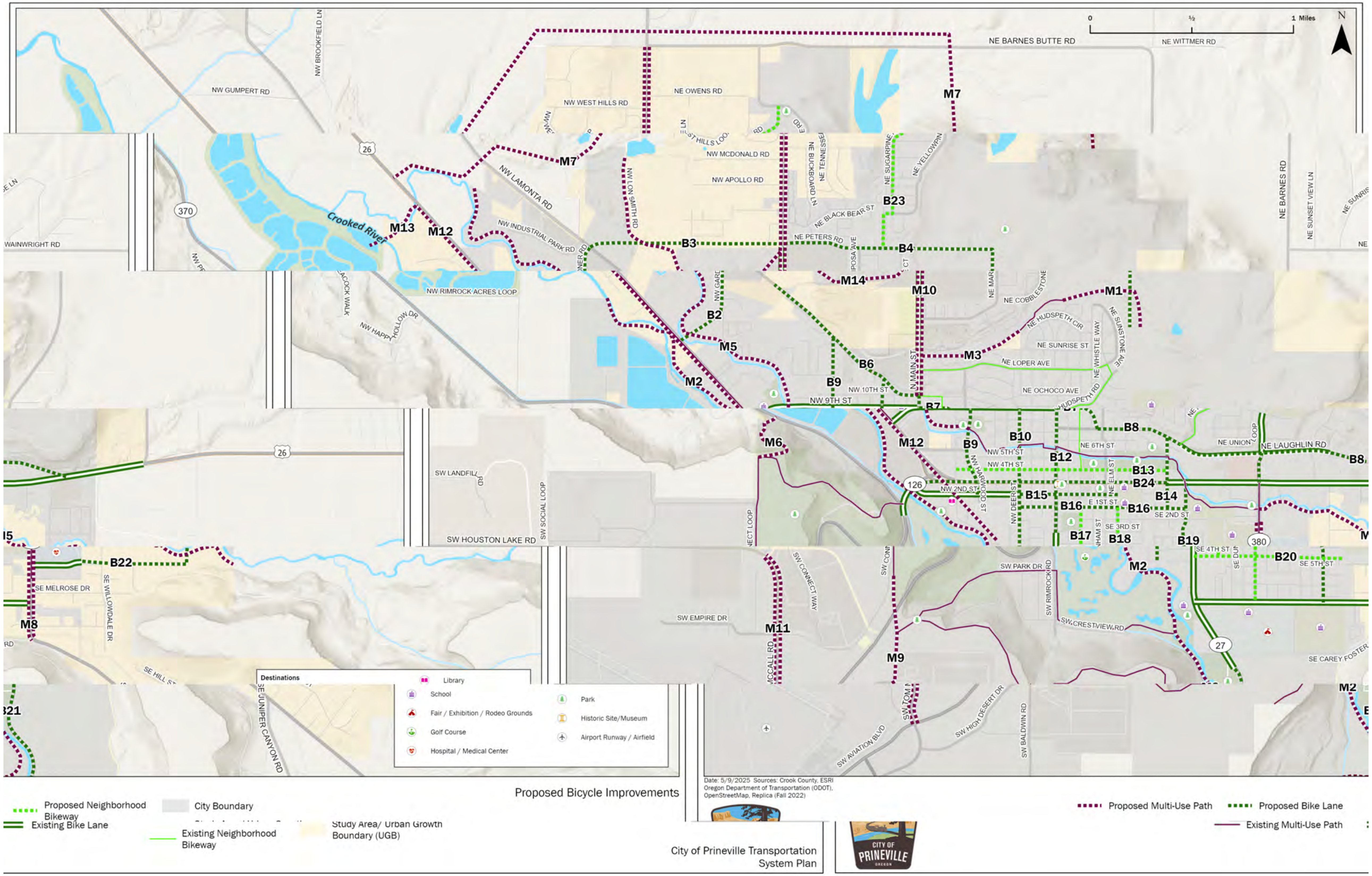

Figure 6. Proposed Bicycling Improvements

3.7 Public Transportation

The preferred solutions list includes two transit projects and enhancements identified in the Cascades East Transit 2040 Transit Master Plan: service enhancements to Route 26 connecting Prineville to Redmond and expanding Dial-a-Ride service. Two additional public transportation solutions are included based on community input: a direct, fixed-route service to Bend and a circulator for Prineville.

4. Preferred Solutions Summary

The list of preferred solutions was informed by the alternatives analysis and feedback from City and ODOT staff, the public, and the project advisory committee. The alternatives analysis considered five goals focused on improving transportation safety, enhancing bicycle and pedestrian connectivity, supporting economic development, improving system performance, and minimizing impacts on the natural and built environment. *Memo #4: Solutions Analysis and Funding* describes the alternatives analysis and all proposed projects in detail.

Table 6 summarizes the preferred solutions identified for the TSP. Cost estimates were developed for most of the improvements and represent planning-level costs based on average costs per unit for similar facilities. Solutions are categorized as near-term (0 to 5 years), medium-term (5 to 10 years), and long-term (>10 years) based on the perceived level of implementation difficultly and prioritization. Solutions are also categorized based on funding availability. Projects that are labeled “financially constrained” have guaranteed funding, while projects that are not financially constrained or “aspirational” require additional funding to carry out. Projects labeled “partnership” are located on state-owned facilities or refer to transit operations improvements. These projects are funded and implemented through a combination of local and regional or state support.

The preferred solutions in total, if built, would cost approximately $98 million based on the planning-level cost estimates. Of this total, $67.4 million is needed for solutions relying primarily on local funding or grant sources, while solutions in partnership with ODOT total $30.5 million. Based on recent annual transportation funding for Prineville, the estimated available funding for locally funded solutions is $30 million. As a result, the financially constrained budget is set at $37.5 million, reflecting ODOT guidance allowing 125% of the estimated total for locally funded solutions over the life of the TSP. This leaves a gap of $29.0 million between available funding and estimated costs of the preferred local solutions. The financially constrained list reflects this funding gap and prioritizes near- and medium-term solutions but includes most of the preferred solutions.

Table 6. Preferred Solutions Summary

ID Number	Project	Needs Addressed	Possible Funding Source	Cost Estimate	Priority	Financially Constrained?
West Y/O'Neil Intersection						
I4	Roundabout and O'Neil Highway intersection improvements: construct single lane roundabout at the Prineville Y and modify access at the O'Neil Highway intersection	▪ Reduce traffic congestion and delays ▪ Increase safety ▪ Provide multimodal access	ODOT	$10–25 million	Long	Partnership
3rd Street/U.S. 26						
I3	NW Harwood Avenue & NW 3rd Street/U.S. 26, minor intersection modifications: revise from current through/left and right turn lanes to through/right and left turn lane. No signal modifications needed.	▪ Minor changes to improve intersection mobility	ODOT	<$10,000	Near	Partnership
B25	NE/NW 3rd Street multimodal: greenways on parallel streets, including striping, widening, and/or curb modifications.	▪ Provide safe bicycle and pedestrian access to 3rd Street via a greenway on low traffic streets, such as NE/NW 2nd Street and NE/NW 4th Street	ODOT SRTS Local Funds	$1 million	Near	Partnership
P30	NE 3rd Street Sidewalk infill: complete sidewalks on 3rd Street east of NE St. Charles Way to city limits	▪ Provide safe pedestrian connections	ODOT SRTS SWIP Local Funds	$5.5 million	Medium	Partnership
P25	Enhanced pedestrian crossing: vicinity of NE 3rd Street/ NE Hickey Farms Road	▪ Provide safe pedestrian connections	ODOT SRTS SWIP Local Funds	$1 million Assumes inclusion of median and RRFB	Medium	Partnership
P23	Enhanced pedestrian crossing: vicinity of 3rd Street/Williamson Drive	▪ Provide safe pedestrian connections	ODOT SRTS SWIP Local Funds	$1 million Assumes inclusion of median and RRFB	Medium	Partnership
P29	Enhanced pedestrian crossing vicinity of 3rd Street/Locust Drive	▪ Provide safe pedestrian connections	ODOT SRTS SWIP Local Funds	$1 million Improvements to be determined	Long	Partnership

ID Number	Project	Needs Addressed	Possible Funding Source	Cost Estimate	Priority	Financially Constrained?
Other Intersections						
I1	SW Tom McCall Road/OR 126: add slip lanes to existing roundabout (future modeled V/C of 0.91) Note: Alternate mobility targets would be required.	▪ Reduce traffic congestion and delays	ODOT	$1–3 million	Near	Partnership
I2	N Main St./N Peters Rd. intersection: replace with roundabout	▪ Reduce traffic congestion and delays ▪	Local Funds Developer-Constructed	$3 million	Medium	Yes
Functional Classification and New Connections						
R1	NE 9th Street Extension from N Main St. to NE 7th	▪ Provides new roadway connections	SDCs Developer-Constructed	$4.15 million	Long	Yes
R2	NW Peters Road Connection from N Main St. to NW Lamonta Road	▪ Provides new roadway connections	SDCs Developer-Constructed	$5.5 million	Long	Developer supported/ Aspirational
R3	NE Combs Flat Road Extension/Connection with NE Peters Road	▪ Provides new roadway connections	SDCs Developer-Constructed	$9.4 million	Long	Developer supported/ Aspirational
R7	NE Combs Flat Road between U.S. 26 and NE Laughlin Road: upgrade to arterial standards	▪ Reduce traffic congestion and delays	SDCs Developer-Constructed	$690,000	Medium	Yes
R8	NE/SE Combs Flat Road between U.S. 26 and SE Lynn Boulevard: widen to arterial standard, including off-street path	▪ Reduce traffic congestion and delays ▪ Provide safe pedestrian connections	SDCs Developer-Constructed	$4.4 million	Near	Yes
R10	SE Elm Street Extension between SE 5th Street and SE 6th Street	▪ Provide new roadway connections	SDCs Developer-Constructed	$430,000	Long	Yes
R13	Complete SE 5th Street extension between S Main Street and SE Combs Flat Road	▪ Provide new roadway connections	SDCs Developer-Constructed	$2.5 million	Long	Yes
R14	Ochoco Logging Road Extension: complete connection between City Limits and NE Stearns Rd	▪ Provide new roadway connections	SDCs Developer-Constructed	$2.6 million	Medium	Yes

ID Number	Project	Needs Addressed	Possible Funding Source	Cost Estimate	Priority	Financially Constrained?
R6	Main Street (NW 10th Street to Rolla Road): Upgrade to arterial standards	▪ Upgrade street with multimodal facilities	SDCs Developer-Constructed	$18.4 million	Long	Aspirational
FC-1	NE 7th St (N Main Street – NE Laughlin Road): change functional classification to Major Collector	▪ Reflects preferred function of this street.	SDCs Developer-Constructed	Unknown	Near	Yes
FC-2	SE 2nd St (SE Knowledge Street – SE Combs Flat Road): designate functional classification as Local Street	▪ Reflects preferred function of this street.	SDCs Developer-Constructed	Unknown	Near	Yes
Safety and Operations						
I12	NW Deer Street & NW 2nd Street: provide “Stop Ahead” pavement markings on NW 2nd Street	▪ Increase vehicle and pedestrian safety	Grants	$10,000	Near	Yes
S1	NE Combs Flat Road/OR 380 & NE 3rd Street/U.S. 26: install “Signal Ahead” advance warning sign	▪ Increase vehicle and pedestrian safety	ODOT Grants	$2,000	Near	Partnership
S2	NE Combs Flat Rd/OR 380 & SE Lynn Boulevard: ▪ Install lighting and “Stop Ahead” pavement markings ▪ Consider changing to all-way stop ▪ Trim trees to improve sight distance	▪ Increase vehicle and pedestrian safety ▪ Increase visibility ▪ Reduce traffic congestion and delays	ODOT Grants	$200,000	Medium	Partnership
S3	OR 126 & S Rimrock Road: increase the curve radius of S Rimrock Road to increase visibility	▪ Increase vehicle and pedestrian safety ▪ Increase visibility	ODOT Grants	$100,000	Long	Partnership
S4	N Main Street & NW 9th Street: relocate utility poles	▪ Addresses identified safety issue ▪ Increase visibility	Grants	$100,000	Medium	Yes
S5	SW Tom McCall Road & OR 126: add safety measures to reduce approach speeds to the roundabout such as speed feedback signage	▪ Increase vehicle and pedestrian safety	ODOT Grants	$50,000	Medium	Partnership
S6	OR 27/S Main Street: flatten the horizontal curve, install signage, provide paved shoulder	▪ Increase vehicle and pedestrian safety ▪ Increase visibility	ODOT Grants	$150,000	Long	Partnership
S7	OR 380/SE Combs Flat Road: manage vegetation, install signage and street lighting	▪ Increase vehicle and pedestrian safety ▪ Increase visibility	ODOT Grants	$100,000	Near	Partnership

ID Number	Project	Needs Addressed	Possible Funding Source	Cost Estimate	Priority	Financially Constrained?
TSMO						
1	Install weather information signage	▪ Increase user safety	ODOT	Variable	Medium	Partnership
Pedestrian						
P7	NE Oregon Street: add sidewalks and curb from NE Laughlin Blvd to NE Allen Ave	▪ Provide safe pedestrian connections	SRTS Local Funds	$100,000	Near	Yes
P8	NE Laughlin Road: add sidewalks and curb from NE Garner St. to intersection with U.S. 26 on both sides. (sidewalks exist on the north side of Laughlin between NE Hudspeth Rd. and Wayfinder Dr).	▪ Provide safe pedestrian connections	SRTS Local Funds	$1.3 million	Near	Yes
P14	SE 5th Street: add sidewalks and curb on existing sections of SE 5th Street.	▪ Provide safe pedestrian connections	SRTS Local Funds	$420,000	Near	Yes
P15	SE Lynn Boulevard: add sidewalks and curb from S Main St. to SE Combs Flat Rd.	▪ Provide safe pedestrian connections	SRTS Local Funds	$600,000	Near	Yes
P4	NE Peters Road: add sidewalks and curb to existing NE Peters Road	▪ Provide safe pedestrian connections	SRTS Local Funds	$430,000	Medium	Yes
P5	NE Loper Avenue: add sidewalks and curb between Elm and Main Street	▪ Provide safe pedestrian connections	SRTS Local Funds	$200,000	Medium	Yes
P10	NW/SW Deer Street: add sidewalks between W 1st Street and Ochoco Creek	▪ Provide safe pedestrian connections	SRTS Local Funds	$70,000	Medium	Yes
P11	NE/SE Fairview Street: add sidewalks and curb between SE Lynn Boulevard and NE 4th Street	▪ Provide safe pedestrian connections	SRTS Local Funds	$330,000	Medium	Yes
P6	New NE Combs Flat Road Extensions: add sidewalks	▪ Provide safe pedestrian connections	N/A	Included as part of new roadways	Medium	N/A
P21	New NE 9th/10th Street Extension: add sidewalks	▪ Provide safe pedestrian connections	N/A	Included as part of new roadways	Medium	N/A
P2	New Peters Road Connection to NW Lamonta Road: sidewalks	▪ Provide safe pedestrian connections	N/A	Included as part of new roadways	Medium	N/A
P22	SW Elm Street: add sidewalks	▪ Provide safe pedestrian connections	SRTS Local Funds	$500,000	Long	Yes
P1	N Gardner Road: add sidewalks and curb	▪ Provide safe pedestrian connections	SRTS Local Funds	$500,000	Long	Yes

ID Number	Project	Needs Addressed	Possible Funding Source	Cost Estimate	Priority	Financially Constrained?
P9	NW Harwood Avenue: add sidewalks from NW 2nd St. to NW 10th St.	▪ Provide safe pedestrian connections	SRTS Local Funds	$270,000	Long	Yes
P12	SE 2nd Street Extension: add sidewalks	▪ Provide safe pedestrian connections	SRTS Local Funds	Included in new roadway construction	Long	N/A
P16	SE Crossing at Combs Flat Rd/SE 5th Street Extension: add crosswalk	▪ Provide safe pedestrian connections	ODOT SRTS Local Funds	$8,000	Medium	Yes
P31	Citywide curb ramp upgrades (Americans with Disabilities Act compliance)	▪ Upgrade to be compliant with ADA	ODOT Local Funds	TBD	As roads are re-developed throughout the city	Partnership
P20	N Main Street (NW 10th Street to Rolla Road): add sidewalks and curbs	▪ Provide safe pedestrian connections	SRTS Local Funds	Included as part of new roadways	Long	N/A
P24	SE Combs Flat Road & SE Lynn Boulevard: construct intersection and crossing improvements, including lighting	▪ Provide safe pedestrian connections	ODOT SRTS Local Funds	$500,000	Near	Partnership
P26	Vicinity of U.S. 26/Madras Highway and NW Studebaker Drive: add sidewalks	▪ Provide safe pedestrian connections	ODOT SRTS Local Funds	$500,000	Long	Partnership
P27	Vicinity of U.S. 26/Madras Highway and NW 9th Street: add sidewalks	▪ Provide safe pedestrian connections	ODOT SRTS Local Funds	$500,000	Long	Partnership
Bicycling						
B1	N Main Street (NW 10th Street – Rolla Road): add bike lanes, including widening	▪ Provide safe bicycle connections	SRTS Local Funds	Included as part of new roadways	Near	N/A
B2	N Gardner Road (U.S. 26 – NW Lamonta Road): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	$4,000	Long	Yes
B3	New Peters Road Connection (NW Lamonta Road – N Main St): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	Included as part of new roadways	Long	N/A

ID Number	Project	Needs Addressed	Possible Funding Source	Cost Estimate	Priority	Financially Constrained?
B4	Peters Road (N Main St – NE Combs Flat Road extension): add bike lanes, including widening	▪ Provide safe bicycle connections	SRTS Local Funds	$130,000	Medium	Yes
B5	New Combs Flat Rd Connection (NE 3rd Street – NE Peters Road): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	$4,150,000	Medium	Yes
B6	NW Lamonta Road (approx. N Lon Smith Road – N Main Street): add bike lanes, including widening	▪ Provide safe bicycle connections	SRTS Local Funds	$240,000	Medium	Yes
B7	New 9th Street Connection (N Main Street – NE Elm Street): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	Included as part of new roadways	Medium	N/A
B8	NE Laughlin Road (N Main Street – NE 3rd Street): add bike lanes, including widening	▪ Provide safe bicycle connections	SRTS Local Funds	$810,000	Medium	Yes
B9	NW Harwood Avenue (NW 2nd Street – NW Lamonta Road): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	<$20,000	Near	Yes
B10	SW/NW Deer Street (SW 5th Place – NW Lamonta Road): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	<$20,000	Long	Yes
B12	N/S Main Street (N 10th Street – S 3rd Street): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	<$20,000	Medium	Yes
B13	NW 4th Street (NW Locust Avenue – NE Juniper Street): Neighborhood Bikeway	▪ Provide safe bicycle connections	SRTS Local Funds	$50,000	Near	Yes
B14	NE Juniper Street (E 1st Street – NE Laughlin Road): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	<$20,000	Near	Yes
B15	NW 2nd Street (NW Deer Street – SE Fairview Street): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	<$20,000	Near	Yes
B16	E/W 1st Street (SW Deer Street – NE Knowledge Street): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	<$20,000	Near	Yes
B17	N/S Court Street (SE 5th Street – NE 4th Street): Neighborhood Bikeway and bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	$50,000	Medium	Yes
B18	N/S Fairview Street (SE Lynn Boulevard – NE 4th Street: Neighborhood Bikeway	▪ Provide safe bicycle connections	SRTS Local Funds	$50,000	Long	Yes
B19	N/S Knowledge Street (SE Lynn Blvd – NE 3rd Street): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	<$20,000	Medium	Yes
B20	SE 5th Street (S Main Street – SE Combs Flat Road): Neighborhood Bikeway and bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	$50,000	Near	Yes

ID Number	Project	Needs Addressed	Possible Funding Source	Cost Estimate	Priority	Financially Constrained?
B21	Main Street (end of existing bike lanes – south UGB): add bike lanes	▪ Provide safe bicycle connections	SRTS Local Funds	$550,000	Near	Yes
B22	Ochoco Logging Road Extension: complete bike lanes' connection between east city limits and NE Stearns Rd.	▪ Provide safe bicycle connections	SRTS Local Funds	Included as part of new roadways	Medium	N/A
B23	NE Sugar Pine Road/NE Yellowpine Road (NE Peters Road – NE Yellowpine Road): new neighborhood bikeway	▪ Provide safe bicycle connections	SRTS Local Funds	<$50,000	Medium	Yes
Multiuse Paths						
M1	Barnes Butte Main Loop shared-use path: add shared-use path connecting Barnes Butte Trail to NE Henry Dr.	▪ Provide new off-street bicycle and pedestrian connection	SRTS Local Funds	$590,000	Medium	Yes
M2	Crooked River Shared-Use Trail: add shared-use trail	▪ Provide new off-street bicycle and pedestrian connection	ODOT Oregon Community Paths	$2.7 million	Medium	Partnership
M3	Iron Horse Shared-Use Trail: add shared-use trail from NW Lamonta Rd. to Barnes Butte Reservoir	▪ Provide new off-street bicycle and pedestrian connection	SRTS Local Funds	$710,000	Medium	Yes
M4	Look-out Shared-Use Trail from SW Park Dr. to Tom McCall area.	▪ Provide new off-street bicycle and pedestrian connection	SRTS Local Funds	$250,000	Near	Yes
M5	Ochoco Creek Shared-Use Trail: add shared-use trail	▪ Provide new off-street bicycle and pedestrian connection	SRTS Local Funds	$2.2 million	Near	Yes
M6	O'Neil Highway: add trail from O'Neil Hwy to Tom McCall area	▪ Provide new off-street bicycle and pedestrian connection	ODOT Oregon Community Paths	$750,000	Near	Partnership
M7	North Prineville Loop	▪ Provide new off-street bicycle and pedestrian connection	SRTS Local Funds	TBD based on routing	Long	Aspirational
M8	SE Combs Flat Road Shared-Use Path: ▪ Construct multiuse path ▪ Add shared-use trail from SE 2nd Street to south City UGB	▪ Provide new off-street bicycle and pedestrian connection	ODOT Oregon Community Paths	$2 million	Long	Partnership

ID Number	Project	Needs Addressed	Possible Funding Source	Cost Estimate	Priority	Financially Constrained?
M9	Pedestrian and bicycling connection from NW 2nd Street to SW High Desert Drive: construct multiuse path	▪ Provide new off-street bicycle and pedestrian connection	ODOT Oregon Community Paths	TBD based on routing	Long	Partnership
M10	Main Street Improvements: add shared-use paths on both sides of the road from 10th Avenue north to the north UGB limits	▪ Provide new off-street bicycle and pedestrian connection	ODOT Oregon Community Paths	Cost included in project R6	Long	Partnership
M11	Tom McCall Road: shared-use path on one side of the road, from the Tom McCall roundabout at OR 126 north on to intersection with Social Loop	▪ Provide new off-street bicycle and pedestrian connection	Oregon Community Paths	$1.5 million	Long	Yes
M12	U.S. 26/Madras Highway (west side of highway): add sidewalks and curbs from NW Richland Lane (existing crossing) to approximately Riverland Loop before	▪ Provide safe pedestrian connections	ODOT SRTS Local Funds	$2 million	Long	Partnership
Public Transportation						
PT1	U.S. 26: Prineville to Redmond service improvements	▪ Increase public transportation service frequency	Already adopted as part of other plans			
PT2	Dial-a-Ride service expansion to serve more areas of Prineville	▪ Increase on-demand transit service area	Already adopted as part of other plans			
PT3	One-seat fixed-route service to Bend	▪ Provide a faster connection from Prineville to Bend	CET	N/A	Near	Partnership
PT4	Prineville Local Circulator	▪ Provide transit access to key destinations in Prineville	CET Local Funds	N/A	Medium	Partnership
PT5	Implement marketing /information program on walking, cycling, and transit routes	▪ Enhance ease of us of the bicycle, pedestrian, and transit system in and out of Prineville	ODOT Local Funds	Variable	Near	Yes

CET = Cascades East Transit; N/A = not applicable; ODOT = Oregon Department of Transportation; RRFB = rectangular rapid-flashing beacon; SDC = system development charge; SRTS = Safe Routes to School; SWIP = Sidewalk Improvement Program; TBD = to be developed; TSMO = transportation system management and operations; UGB = urban growth boundary

Appendix H

Engagement Summary

Parametrix
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Technical Memorandum

DATE: April 18, 2025
TO: City of Prineville, ODOT
FROM: Ryan Farncomb, Ben Kahn
SUBJECT: Appendix H: Engagement Summary
PROJECT NAME: Prineville TSP Update

Overview

This memorandum summarizes the public engagement efforts that took place to inform the Prineville Transportation System Plan (TSP) update. Opportunities for public engagement and input consisted of three events: an online open house in Fall 2023, an in-person open house in May 2024, and an online survey from April to May 2024.

Open House #1 Summary

Outreach Summary

This memorandum summarizes results of the first Online Open House conducted for the Prineville Transportation System Plan (TSP) update. The TSP update is a joint effort between the City of Prineville and the Oregon Department of Transportation (ODOT). The purpose of outreach was to gather input from the community on transportation opportunities, constraints, concerns, and issues that should be addressed. Feedback will be used to inform community needs and develop TSP solutions.

Overall Themes

The most common themes identified by respondents across all communication methods include (in no particular order):

1. Address congestion, traffic flow, and safety on NE 3rd Street and other local roads
2. Improve and expand crosswalk, sidewalk, and bike lane infrastructure in proximity to schools and parks and other recreation opportunities
3. Fix dangerous highway intersections like OR 126 / OR 370 and the West Y
4. Create alternative access route to Juniper Canyon
5. Slow speeding drivers by lowering speed limits and increasing traffic enforcement

Based on the responses, a majority of those who participated in the survey are most interested in improving traffic flow and safety throughout Prineville. These traffic issues center around several "hot spots:" speeding from westbound traffic on OR 126 leaving downtown, difficult northbound left turns at OR 126 / OR 370, a complicated West Y interchange, and persistently high afternoon traffic through 3rd Street were all cited as problems that needed to be fixed imminently. Residents felt that better traffic signal timing on 3rd Street could improve travel times and aide northbound and southbound drivers. Many respondents noted that constructing a bypass would reduce traffic on 3rd

Street and provide an alternate route for truckers and other travelers not needing to stop in Prineville. Many desired better sidewalks and bike lanes, particularly around schools. Residents agreed about the necessity of an alternate route to access Juniper Canyon, but differed on where such a route would be located.

Online Open House

The online open house survey received 87 responses and was open for comments from 10/31/23 to 12/24/23. An online open house in English was available via the Project's website. The City of Prineville advertised the open house via a website announcement, flyers, social media, and through word of mouth by the project's Project Advisory Committee.

Findings and Key Themes

The following section summarizes findings learned through the online open house survey.

- 58% of respondents thought it was "easy" or "very easy" to get around Prineville. They noted slow travel times around popular commercial areas, such as Downtown on 3rd Street and near denser housing developments like Wild Horse Mesa.
- Top transportation issues included dangerous intersections, people speeding, and distracted driving. The intersection of OR 126 / OR 370 was repeatedly mentioned as needing fixing. Speeding regularly occurred on Juniper Canyon Road and OR 126, which encouraged some drivers to take different routes to avoid dangerous intersections on these roadways.
- 86% of respondents drove a car or motorcycle regularly, compared to 11% who walked regularly, and 4% who rode a bike regularly, Less than 1% of respondents regularly took public transportation, and no respondents used a wheelchair or mobility device regularly.
- Top priorities for improving transportation including increasing safety for drivers, making it quicker to drive around town, and making it easier to walk around town. Some respondents thought that creating a downtown couplet would improve traffic flow on 3rd Street. Other respondents noted a lack of sidewalks around schools and urged the City to prioritize filling gaps in the pedestrian network.
- While residents overwhelmingly appreciated Prineville's small-town feel, they felt the City was growing and becoming more difficult to travel in due to the recent population increase.

Street Network Survey Questions and Responses

Participants of the online open house survey were asked the following questions:

1. How often do you use the following transportation options?
2. If you selected Other, please explain.
3. How easy is it getting around in Prineville?
4. What are the main transportation safety issues in Prineville?
5. If you selected Other, please explain.
6. Rank your top priorities for improving transportation in Prineville.
7. If you selected Other, please explain.
8. What's your favorite thing about living in Prineville?

9. What is the one thing you'd like to change about transportation in Prineville?
10. Anything else?
11. How safe is it getting around Prineville?

An option to provide comments on a Comment Map was made available through the online open house as well. Summaries of the results and main themes from these questions are provided below.

Multiple Choice Questions

Question 1. How often do you use the following transportation options?

Table 1. Question 1 Responses

	Regularly	Often	Sometimes	Never
Drive a car/motorcycle	86%	8%	2%	2%
Carpool/vanpool	2%	3%	23%	67%
Walk	11%	15%	46%	25%
Bicycle	4%	5%	30%	58%
Public transportation	<1%	<1%	4%	92%
Wheelchair or other mobility device	0%	2%	1%	93%
Other	<1%	<1%	<1%	51%

Note: Percentages may not add to 100% due to rounding or some respondents skipping questions

"Other" responses included utilizing modes of transportation such as motorcycles.

Question 3. How easy is it getting around in Prineville?

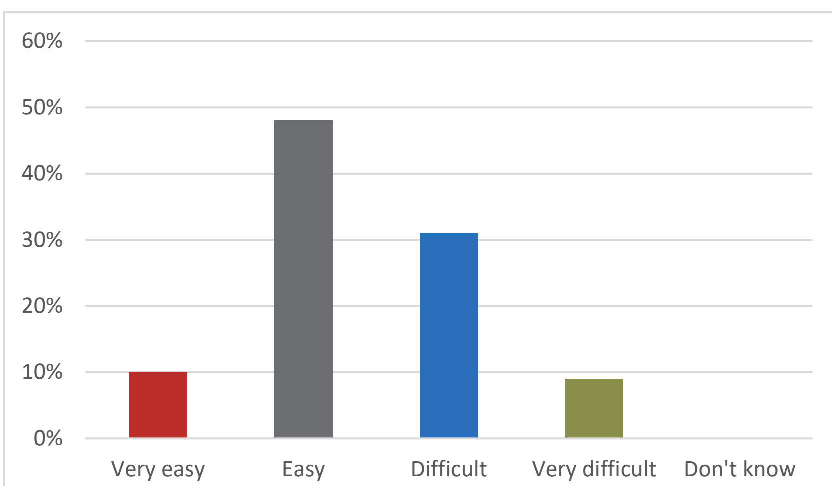

Figure 1. Question 3 Responses

Question 4. What are the main transportation safety issues in Prineville?

Table 2. Question 4 Responses

Answers	Percentage
People speeding	44%
Distracted driving	43%
Dangerous intersections	62%
Lack of pedestrian crossings	31%
Lack of safe places to ride a bike	27%
Inadequate sidewalks	37%
Inadequate pedestrian lighting / signs	34%
Other	15%

Note: Percentages may not add to 100% due to some respondents skipping questions or selecting multiple options

"Other" responses mentioned high volumes of traffic on Juniper Canyon Road with no other options, a disconnected sidewalk network, a lack of street lighting, and encroaching vegetation on sidewalks and bike lanes.

Question 6. Rank your top priorities for improving transportation in Prineville.

Table 3. Question 6 Responses

Rank	Answer	Average Score
1	Make it safer for drivers	6.17
2	Make it quicker to drive in town	6.08
3	Make it easier to walk safely around town	5.98
4	Increase parking options	5.34
5	More direct connections to where I need to go	5.03
6	Improving freight travel in and around the City	4.90
7	Make it easier to bike safely around town	4.61
8	Make it easier to take public transit in the City	4.21

"Other" responses mentioned encouraging higher rideshare usage, implementing safety improvements around schools, adding sidewalks, locating parking spaces for large trucks to avoid disruptions to traffic flow, adding street lighting, constructing a bypass for through traffic, and adding alternative access to Juniper Canyon.

Question 8. How safe is it getting around Prineville?

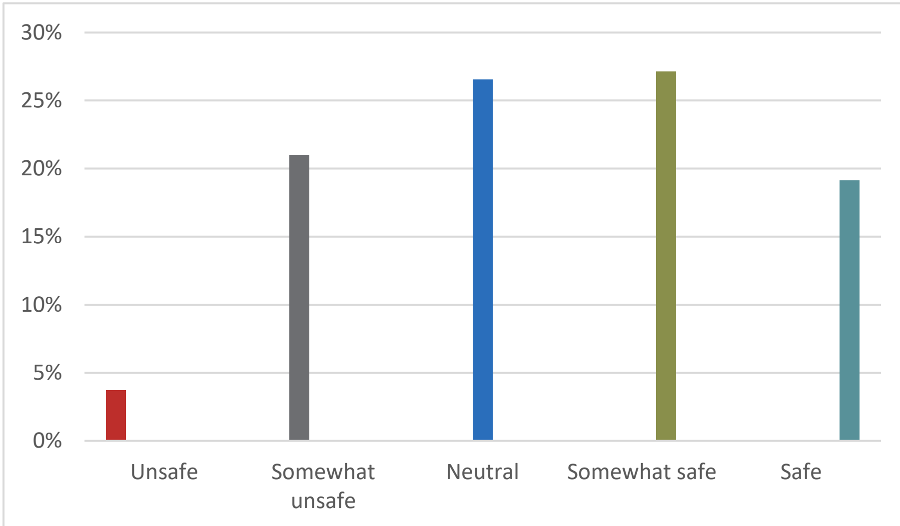

Figure 2. Question 8 Responses

Open-Ended Questions

Questions 9 through 11 were open-ended questions.

Question 9. What's your favorite thing about living in Prineville?

The first question asked participants about their favorite part about living in Prineville. Table 4 lists general themes while Figure 1 illustrates participants' responses.

Figure 3. Question 8 Word Cloud

Table 4. Question 9 Themes

Theme
Small-town feel
Variety of recreational and civic amenities like Barnes Butte or the library
Hospitality and friendly residents focused on building community
Natural beauty and plentiful open space
Peaceful, safe atmosphere with low crime
Lower traffic volumes and quick travel times
Conservative values and lifestyle

Question 10. What is the one thing you'd like to change about transportation in Prineville?

The second open-ended question asked respondents what they would change about transportation in Prineville. Table 5 lists general themes while Figure 2 illustrates participants' responses.

Table 5. Question 10 Themes

Category	Theme
Traffic	Improve traffic on 3rd Street by creating a couplet or constructing a bypass
Intersections	Optimize signal timing at busy intersections to improve traffic flow
	Improve traffic operations and safety at the Prineville Y
	Replace dangerous intersections with roundabouts to improve traffic flow and safety
	Increase safety of turning movements from O'Neil Highway onto OR 126
	Increase visibility at intersections, particularly in regard to large, parked trucks
Active Transportation	Add more sidewalks and bike lanes to create a cohesive network, particularly on major roads and close to schools
	Add more crosswalks that are enhanced with flashing lights and concrete medians
Roadway Network	Create alternate route for freight traffic not stopping in Prineville
	Add alternative access road to improve access to and from Juniper Canyon
Miscellaneous	Increase parking availability in Downtown
	Increase traffic enforcement by police to discourage dangerous driving behavior

Figure 4. Question 9 Word Cloud

Question 11. Anything else?

The final open-ended survey question asked for additional thoughts from respondents. The main themes of the responses are outlined in Table 6.

Table 6. Question 11 Themes

Theme
Add or widen shoulders on existing roadways
Improve, complete, and expand popular, scenic bike routes and paths
Prohibit trucks from driving on roads to bypass traffic on freight routes
Create dedicated left hand turn lanes at busy intersections

Comment Map

Respondents were offered a chance to provide input on geographically-specific locations in Prineville via a Comment Map. Themes are outlined in Table 7.

Table 7. Comment Map Themes

Theme	Approximate Location
Improve safety of crossing the street for pedestrians and / or making left turns for drivers	OR 126 / OR 370 NW 3rd Street / NW Meadow Lakes Road N Main Street / NW 9th Street SE Lynn Boulevard / SE Combs Flat Road
Improve ability to cross north and south at intersections along 3rd Street for drivers and pedestrians	NE Idlewood Street NE Knowledge Street NW Deer Street NW Harwood Street NE Elm Street
Reduce speeding	NE Whistle Way SE Knowledge Street SE Combs Flat Road N Main Street / NE Peters Road N Main Street / NW 10th Street
Improve visibility at intersection	NE Juniper Street / NE Laughlin Road NE 3rd Street / NE Knowledge Street N Main Street / NE Peters Road
Implement roundabout or traffic light at intersection	NE 3rd Street / NE Knowledge Street NE 3rd Street / NE Idlewood Street NE Laughlin Road / NE Hudspeth Road SE Lynn Boulevard / SE Combs Flat Road
Increase quantity and quality of connections for people walking and biking	NE 3rd Street / NE Hickey Farms Drive NE 3rd Street / NE Willowdale Drive N Main Street / NW 9th Street SE Juniper Canyon Road / OR 380 SW Meadowlakes Drive / SW Ivy Court U.S. 26 between Downtown and Crooked River Wetlands Complex NE Mountain Ash Road / Barnes Butte Recreation Area

Open House #2 Summary

This memorandum summarizes public input received from an open house held on May 2, 2024 and an online survey open from April 15 to May 17, 2024 as part of the Prineville TSP Update. The open house and survey sought feedback on draft solutions for roadways and intersections in Prineville, particularly for congestion on U.S. 26 / 3rd Street and safety at the West Y and O'Neil Hwy / OR 126 intersections. Feedback from the open house and responses to the survey addressed the following priorities for Prineville's transportation system:

- Improving traffic flow and safety around the West Y and O'Neil Highway / OR 370 intersections.
- Managing congestion and parking on 3rd St.
- Expanding access around town for people riding bikes and walking, particularly via protected infrastructure.
- Maintaining access for freight vehicles and large trucks.
- Expanding transit access.
- Increase safety at intersections.
- Identifying opportunities to beautify infrastructure through native vegetation and Indigenous art.

Open House Summary

The City of Prineville conducted an in-person open house as the second engagement milestone of the TSP Update. The in-person open house was held on May 2, 2024 from 4:30 to 6:30 p.m. at Golden Coffee Co., a popular community gathering place located one block away from 3rd St. The open house included poster boards describing proposed design solutions for the West Y and O'Neill / Ochoco Highway intersections, 3rd Street / U.S. 26, and citywide solutions. 11 attendees participated in the open house. Staff from Parametrix, the City of Prineville, and the Oregon Department of Transportation (ODOT) supported the event and engaged participants. The following is a summary of feedback heard at the open house:

West Y and O'Neil Highway / Ochoco Highway

Needs and Issues

Residents offered the following feedback on the congestion and crashes occurring at the two intersections:

- Use a less-costly solution than a roundabout.
- The West Y pocket park could be better utilized as a wildflower/native plan zone to reduce water use, maintenance of grass that is unlikely to be well utilized and provide for pollinators/beneficial wildlife and insects. Also there is potential for public education.

Ideas Considered

Residents left the following feedback for design ideas to improve safety, including adding traffic signals, realigning roadways, constructing grade-separated interchanges, and constructing a roundabout at the West Y and realigning the O'Neil Highway intersection:

- Install art in the roundabout.
- Include art in roundabout from Native / Indigenous artists.

3rd Street / U.S. 26 Highway

Needs and Issues

Residents provided feedback on the main issues for 3rd Street, which included vehicle mobility issues and bicycle/pedestrian issues:

- Construct more protected left turn lanes at 3rd St intersections.
- Improve visibility and pedestrian waiting times at 3rd St / Beaver St crosswalk.
- Consider improvements or upgrades at 7th St / Main St and 9th St / Main St due to 7th St's presence as an east-west-running alternative to 3rd Street.

Citywide / General Feedback

Needs and Issues

Residents suggested the following solutions to address citywide issues, including growing traffic, infrequent transit service, and poor road safety:

- Install bike path on 7th St.
- Prioritize distributing vouchers to people for Uber and taxi services instead of maintaining a bus system.
- Keep the bus system so infrastructure can pay for bike trails.
- Connect SE Carey Foster Rd. to SE Combs Flat Rd. to reduce traffic at Lynn Blvd / SE Combs Flat Rd intersection.
- Construct bike path or trail on west side of SE Juniper Canyon Rd., south of OR 380.

Other Solutions

Respondents left the following feedback for proposed solutions that included future extensions of Peters Road and Combs Flat Road and intersection improvements at Combs Flat / Lynn, OR 27 / S Main, OR 380 / Combs Flat, and Tom McCall / OR 126 roundabout:

- Do not consider all-way stop at Combs Flat / Lynn.
- Install crossing on SE Combs Flat Rd to Crook County High School / Crooked River Elementary School.
- Make SE 5th St connect to SE Combs Flat Rd.

General Feedback

Residents felt the following improvements were missing:

- Bike lanes.
- Better accommodations for community events in the street, such as automated street closings.
- A map of all Prineville bike trails with a QR code.
- More bike friendly travel routes.

Online Survey Summary

The online survey was open from April 15 to May 17, 2024 and garnered 19 unique responses. Feedback heard from the survey identified the following themes and topics as priorities for the draft solutions of the TSP Update:

West Y and O'Neil Hwy. / OR 370

Approximately 57% of survey respondents were unsure whether the proposed solutions for the West Y and O'Neil Hwy. / OR 370 intersections were on the right track. Residents noted problems traveling in both directions on OR 126; they feel eastbound vehicles enter Prineville too fast, while the removal of the westbound climbing lane has resulted in more congestion going up the hill and should revert to its prior configuration. Approximately 41% of respondents see a need for managing congestion better. However, suggested solutions vary greatly. Approximately 14% of respondents expressed support for a bypass or realignment of the O'Neil Hwy, potentially connecting to U.S. 26 or NW 9th St. Approximately 36% of respondents thought adding roundabouts or repurposing the existing right-of-way would be an effective solution.

Most respondents agreed that the existing configuration is not working as it should, but there is consistent disagreement between those who wanted to relieve congestion and those who wanted to calm traffic and increase safety.

3rd Street / U.S. 26

Respondents disagree on strategies to solve congestion on 3rd St. All respondents acknowledged that 3rd St experiences heavy congestion. Some respondents expressed support for increasing the capacity of motor vehicles on 3rd St. Suggestions for strategies to do this include removing street parking or relocating it (approximately 17%), increasing the number of travel lanes or two-way left turn lanes (approximately 33%), creating a couplet (approximately 21%), or increasing signal time lengths / removing signals for east-west traffic (approximately 8%). Other respondents encouraged a more holistic approach by enhancing the walking and crossing experience for pedestrians (approximately 13%), adding bike lanes (approximately 8%), and even constructing a bypass or new alternative route (approximately 8%).

Nearly 75% of respondents either disagreed with the recommended 3rd St alternatives or are unsure whether they are on the right track. They want to see an emphasis on increasing traffic flow and keeping travel lanes wide and support removing parking to create more space. Some responses do acknowledge other travel modes and urge decision makers to install protected bike lanes and keep traffic speeds low.

General Feedback

Approximately 15% of respondents noted a lack of substantive active transportation infrastructure and expressed support for more, particularly to facilitate children walking and biking to school. Approximately 9% emphasized that this infrastructure should be completely separated from the roadway to make it safe and comfortable.

Respondents expressed mixed feelings on extending roads such as NE Peters Rd or NE Combs Flat Rd. While some felt they may aid in relieving congestion (approximately 6%), one respondent worried about the impact an extended NE Combs Flat Rd may have on wildlife.

A couple of respondents identified the need to increase the frequency and coverage of public transit to create better connections to job centers and key destinations, including for older people without access to a car.

One respondent supported increased safety around town for every mode of travel; another called for increased enforcement to deter speeding and running stop signs. A few respondents mentioned the importance of increasing safety at intersections such as SE Lynn Blvd / SE Combs Flat Rd, N Main St / NE Mariposa Ave, and NE Peters Rd / McKay Rd. One respondent mentioned that trucks parking too close to intersections obstructed sight lanes and hampered safe movements through the intersection. Another respondent stated that enhanced maintenance and sweeping of existing infrastructure may help people travel safer and more conveniently, particularly those riding bicycles on the road's shoulder.

Appendix A: Survey Questions and Responses

Question 1

What are the biggest needs for the West Y and O'Neil Hwy. / OR 370 intersections?

Responses included:

- Repurpose westbound OR 126 lanes east of O'Neil Hwy. to act as exclusive exit lane and travel lane.
- Slow drivers entering and merging onto NW 3rd St.
- Remove current merging location by merge OR 370 with U.S. 26 or connecting via bridge to NW 9th St.
- Provide safe bicycle facilities with exclusive bicycle access.
- Implement a roundabout at both intersections.
- Improve lighting at both intersections.
- Maintaining eastbound heavy truck speed to aid in summiting roadway grade.

Question 2

Are the recommended alternatives for the West Y and O'Neil Hwy. / OR 370 intersections on the right track?

Table 1 illustrates responses.

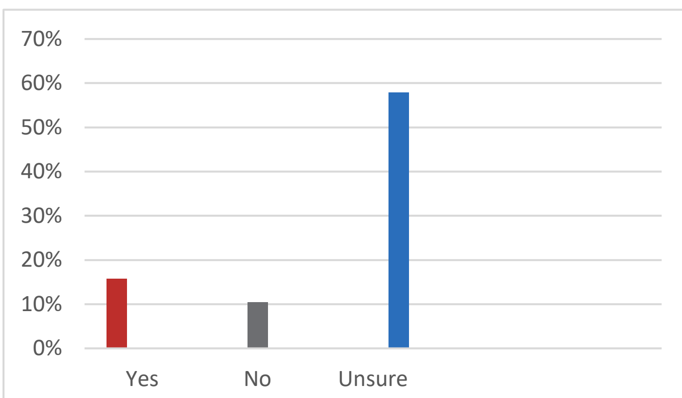

Table 8. Question 2 Responses

Question 3

If you answered "No" or "Unsure", please tell us why the recommended alternatives for the West Y and O'Neil Hwy. / OR 370 intersections are not on the right track.

Responses included:

- Merge traffic from O'Neil Hwy. to U.S. 26.
- Expand roundabout to include additional westbound lane.

- Restripe OR 126 to include westbound passing lane again.
- Implement a road grade interchange to keep traffic flowing.
- Consider additional measures to slow eastbound heavy trucks entering roundabout.

Question 4

What are the biggest needs for 3rd St.?

Responses included:

- Addressing traffic flow and congestion.
- Add infrastructure such as flashers to slow traffic and increase ease of pedestrian access across 3rd St.
- Add travel lanes.
- Make 3rd St one-way.
- Devise an alternative route for freight traffic.
- Repave the entirety of 3rd St.
- Enhance walkability.
- Move on-street parking to parking lots, perhaps at beginning and end of 3rd St.
- Reconfigure traffic signals to stay green/red longer or remove certain signals.
- Add bike lanes.
- Increase left turn capacity.

Question 5

Are the recommended alternatives for 3rd Street on the right track?

Table 2 displays responses.

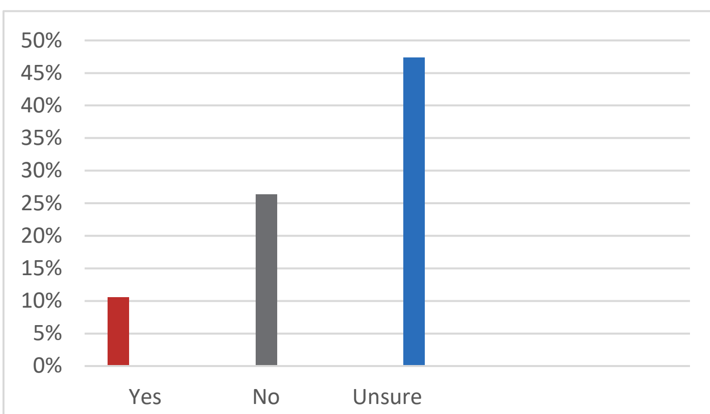

Table 9. Question 5 Responses

Question 6

If you answered "No" or "Unsure", please tell us why the recommended alternatives for 3rd Street are not on the right track.

Suggestions included:

- Focus more on improving traffic flow.
- Avoid narrowing lanes due to freight impacts.
- Remove parking so more lanes can be added.
- Include two travel lanes in each direction with parking.
- Implement a two-way couplet.
- Steer development towards adjacent roads like NW 2nd St to relieve traffic on 3rd St.

Question 7

What solutions do you want to see addressed first in Prineville?

Responses included:

- Improve and increase traffic flow, particularly in the east-west directions.
- Address wildlife concerns around NE Combs Flat Rd extension.
- Increase quantity of separated paths for people riding bikes and walking, particularly leading to schools.
- Install dedicated left turn lanes on NW Harwood Ave. at 3rd St.
- Widen 3rd Street or build a bypass.
- Extend NE Combs Flat Rd.
- Address parking issues on 3rd St.

Question 8

What are the most pressing transportation needs the City should be addressing?

Responses included:

- Tackle traffic flow on 3rd St.
- Provide shuttle bus services for people with disabilities and older people.
- Add more one-way roads.
- Bolster existing transit service frequencies, particularly to job centers.
- Balancing east-west traffic flow on 3rd with north-south traffic flow on roads like N Main St. and NE Combs Flat Rd.
- Increasing traffic enforcement to handle speeding and running stop signs.
- Improve SE Combs Flat Rd. / SE Lynn Blvd.
- Safety for drivers, pedestrians, and cyclists.
- Improve West Y and O'Neil Hwy. / OR 370 intersections.

Question 9

What's missing? Anything final you'd like to add?

Responses included:

- Bolster maintenance efforts, particularly sweeping paved shoulders of gravel and filling potholes.
- Prohibit cars parking too close to the intersection and hindering sight lines.
- Increase safety at NE Peters Rd. / McKay Rd.
- Fill in bicycle infrastructure.
- Create stricter development regulations so developers create roads that are wide enough to accommodate emergency services.
- Avoid extending NE Combs Flat Rd through Barnes Butte Recreation Area to preserve environmentally sensitive areas.
- Address danger at N Main St / NE Mariposa Ave intersection due to blind hill and speeding.
- Make Prineville more accessible to people walking and riding bikes.
- Consider how rerouting of traffic off 3rd St may induce people to spend more time and money on a more pleasant 3rd St.