

City of McMinnville Planning Department 231 NE Fifth Street McMinnville, OR 97128 (503) 434-7311

www.mcminnvilleoregon.gov

Planning Commission ZOOM Online Meeting: October 21, 2021 Please Note that this meeting will be conducted via ZOOM meeting software due to the COVID-19 event.

6:30 PM Regular Meeting

ZOOM Meeting: You may join online via the following link:

https://mcminnvilleoregon.zoom.us/j/89247027868?pwd=ZXRNMFZ1ZGVBWEpOU1BkSTI5NGNJQT09

Zoom ID: 892 4702 7868 **Zoom Password:** 570332

Or you can call in and listen via zoom: 1 253 215 8782 ID: 892 4702 7868

Public Participation:

Citizen Comments: If you wish to address the Planning Commission on any item not on the agenda, you may respond as the Planning Commission Chair calls for "Citizen Comments."

Public Hearing: To participate in the public hearings, please choose one of the following.

- 1) Email in advance of the meeting Email at any time up to 12 p.m. the day of the meeting to <u>Sarah.Sullivan@mcminnvilleoregon.gov</u>, that email will be provided to the planning commissioners, lead planning staff and entered into the record at the meeting.
- 2) By ZOOM at the meeting Join the zoom meeting and send a chat directly to Planning Director, Heather Richards, to request to speak indicating which public hearing, and/or use the raise hand feature in zoom to request to speak once called upon by the Planning Commission chairperson. Once your turn is up, we will announce your name and unmute your mic.
- 3) By telephone at the meeting If appearing via telephone only please sign up prior to the meeting by emailing the Planning Director, <u>Heather.Richards@mcminnvilleoregon.gov</u> as the chat function is not available when calling in zoom.

----- MEETING AGENDA ON NEXT PAGE ------

The meeting site is accessible to handicapped individuals. Assistance with communications (visual, hearing) must be requested 24 hours in advance by contacting the City Manager (503) 434-7405 – 1-800-735-1232 for voice, or TDY 1-800-735-2900.

*Please note that these documents are also on the City's website, <u>www.mcminnvilleoregon.gov</u>. You may also request a copy from the Planning Department.

Commission Members	Agenda Items				
Roger Hall, Chair	6:30 PM – REGULAR MEETING				
Chair	1. Call to Order				
Lori Schanche, Vice-Chair	 Citizen Comments Public Hearing: <u>Quasi-Judicial Hearing: Comprehensive Plan Map Amendment (CPA 2-20) and Zone Change, including Planned Development Overlay</u> 				
Robert Banagay					
Ethan Downs	Designation (ZC 3-20) – (Exhibit 1) (Continued from September 16, 2021 PC Meeting)				
Gary Langenwalter	Continuance Requested to November 18, 2021, PC Meeting				
Sylla McClellan	Request: Approval to amend the Comprehensive Plan Map from Industrial to Commercial, and an amendment to the Zoning Map from M-2 (General Industrial) to C-3 PD (General				
Brian Randall	Commercial with a Planned Development Overlay), for approximately 37.7 acres of a 90.4-acre property.				
Beth Rankin	The 37.7 acres includes 4.25 acres intended for right-of-way dedication for a future frontage road. The application also shows a portion of the area subject to the map amendment				
Dan Tucholsky	intended for a north-south extension of Cumulus Avenue and future east-west street connectivity.				
Sidonie Winfield	The request is submitted per the Planned Development provisions in Section 17.51.010(B) of the Zoning Ordinance, which allows for a planned development overlay designation to be applied to property without a development plan; however, if approved, no development of any kind can occur on the portion of the property subject to the C-3 PD overlay until a final development plan has been submitted and approved in accordance with the Planned Development provisions of the Zoning Ordinance. This requires the application for the final development plan to be subject to the public hearing requirements again at such time as the final development plans are submitted.				
	Location: The subject site is located at 3310 SE Three Mile Lane, more specifically described at Tax Lot 700, Section 26, T.4S., R 4 W., W.M.				
	Application: Kimco McMinnville LLC, c/o Michael Strahs				

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B. <u>Legislative Hearing:</u> Proposed Comprehensive Plan Amendments (G 4-21) –(Exhibit 2)

Requests: This is a legislative amendment, initiated by the City of McMinnville, proposing amendments to the McMinnville Comprehensive Plan to adopt the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan as a Supplemental Document to the City of McMinnville Transportation System Plan.

Applicant: City of McMinnville

- 4. Discussion Item
 - Work Session Transit Plan (Exhibit 3)
- 5. Commissioner/Committee Member Comments
- 6. Staff Comments
- 7. Adjournment

The meeting site is accessible to handicapped individuals. Assistance with communications (visual, hearing) must be requested 24 hours in advance by contacting the City Manager (503) 434-7405 – 1-800-735-1232 for voice, or TDY 1-800-735-2900.



EXHIBIT 1 - STAFF REPORT

DATE:October 21, 2021TO:Planning Commission MembersFROM:Tom Schauer, Senior PlannerSUBJECT:Public Hearing (Docket CPA 2-20/ZC 3-20) – Kimco Map Amendment,
Request for Continuance

STRATEGIC PRIORITY & GOAL:



OBJECTIVE/S: Strategically plan for short and long-term growth and development that will create enduring value for the community

Report in Brief:

This agenda item is the Comprehensive Plan Map Amendment and Zone Change with a Planned Development Overlay (CPA 2-20/ZC 3-20) for the property owned by Kimco McMinnville LLC located at 3310 SE Three Mile Lane. Kimco has requested a continuance to the November 18, 2021 Planning Commission meeting.

Background and Discussion:

On July 14, Kimco requested a continuance to the September 16, 2021 Planning Commission hearing so they could continue to collaborate with their neighbors on coordinated applications for comprehensive plan/zoning map amendments. The continuance was approved by the Planning Commission. On September 7, Kimco requested an additional continuance to October 21, 2021, also approved by the Planning Commission. Kimco has met with and coordinated with the adjacent property owners of the properties to the east and west. The owners are working in coordination on proposed map amendments.

On October 8, 2021, Kimco requested an additional continuance to November 18, 2021 to continue with this coordination effort.

As noted in the attached email, "The three property owners are working toward having their applications considered concurrently at the November 18 meeting."

Staff is supportive of the continuance request and the coordinated efforts occurring with the property owners. As part of the work on the Three Mile Lane Area Plan (3MLAP), the City also previously

Attachments:

Attachment A – Continuance Request

sponsored a charette for joint conceptual planning involving these properties. Staff supports the continued efforts of the property owners to coordinate regarding their properties. Staff also previously met with representatives from Kimco and ODOT to review and discuss Kimco traffic analysis and proposed mitigation. The continuance will also provide further opportunity for coordinated review of traffic analysis and proposed mitigation.

Attachments:

Attachment A: October 8, 2021 e-mail from Dana Krawczuk requesting continuance

Recommendation:

Staff recommends that the Planning Commission continue the public hearing to the November 18, 2021 Planning Commission meeting.

"I MOVE THAT THE PLANNING COMMISSION CONTINUE THE PUBLIC HEARING FOR DOCKET CPA 2-20/ZC3-20 TO THE NOVEMBER 18, 2021 PLANNING COMMISSION MEETING."

 From:
 Tom Schauer

 To:
 Sarah Sullivan; Heather Richards

 Subject:
 FW: continuances

 Date:
 Thursday, October 7, 2021 4:56:29 PM

 Attachments:
 image005.png

See email below - continuance request for Kimco, with formal request letter coming tomorrow.



Tom Schauer, AICP Senior Planner 231 NE 5th Street McMinnville, OR 97128 (503) 474-5108

From: Krawczuk, Dana L. <dana.krawczuk@stoel.com> Sent: Thursday, October 7, 2021 4:52 PM To: Tom Schauer <Tom.Schauer@mcminnvilleoregon.gov> Subject: RE: continuances

This message originated outside of the City of McMinnville.

Hi Tom,

I just confirmed with our team that we'll seek a continuance to the November hearing. I'm under a deadline today, so will send you something more formal tomorrow. But, I wanted to let you know ASAP.

Dana

Dana Krawczuk | Partner STOEL RIVES LLP | 760 SW Ninth Avenue, Suite 3000 | Portland, OR 97205 Direct: (503) 294-9218 | Mobile: (503) 504-8081 | Fax: (503) 220-2480 dana.krawczuk@stoel.com | www.stoel.com

Stoel Rives

This email may contain material that is confidential, privileged and/or attorney work product for the sole use of the intended recipient. Any unauthorized review, use, or distribution is prohibited and may be unlawful.

From: Tom Schauer <<u>Tom.Schauer@mcminnvilleoregon.gov</u>>
Sent: Thursday, October 7, 2021 11:29 AM
To: Krawczuk, Dana L. <<u>dana.krawczuk@stoel.com</u>>
Subject: RE: continuances

Hi Dana,

Thank you for your e-mail. Will you be providing the continuance request today? Heather reminded me that we had previously identified October 4 as the date for materials for the October 21 Planning Commission meeting.

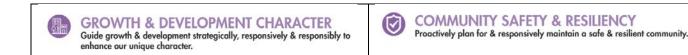
Thank you, Tom



EXHIBIT 2 - STAFF REPORT

DATE: October 21, 2021
TO: Planning Commission Members
FROM: Heather Richards, Planning Director
SUBJECT: Public Hearing – Docket G 4-21, Adopting the *McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan* as a Supplemental Document to the City of McMinnville Transportation System Plan.

STRATEGIC PRIORITY & GOAL:



Report in Brief:

This is a public hearing to consider a Comprehensive Plan Amendment adopting the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan as a supplemental document to the McMinnville Transportation System Plan, and to add Buffered Bike Lanes and Neighborhood Greenways to Chapter 6, Bicycle System Plan, of the Transportation System Plan, as bicycle facility types to utilize in McMinnville.

Background:

Recently ODOT adopted the "Blueprint for Urban Design" or (BUD) to establish a framework for determining how their facilities are used in urban situations for motorists, freight, transit, bicyclist and pedestrian.

To implement the program, ODOT identified the need for a pilot project. A couple of years ago, community stakeholders met with Jenna Berman, ODOT Region 2, Active Transportation Liaison, to discuss opportunities to improve bicycle and pedestrian infrastructure on ODOT facilities in McMinnville. Jenna was impressed with the turnout for the meeting which included city staff and community members coming together with a common goal.

At the same time, portions of Highway 99W as it travels through McMinnville were identified as a "highrisk" corridor for people walking and biking in ODOT's statewide systemic safety analysis. New walking

Attachments:

Attachment D: Proposed Amendment to Chapter 6, Bicycle System Plan, McMinnville Transportation System Plan

Attachment A: Decision Document - G 4-21

Attachment B: OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan

Attachment C: OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan Appendix

and biking infrastructure is needed to support safe connections for people utilizing Highway 99W as a transportation corridor that are not in a car.

When thinking about a potential pilot project, Jenna Berman approached city staff about utilizing McMinnville and Highway 99 as a potential pilot study for the BUD program. ODOT would provide the necessary resources to hire a consultant team to work with ODOT staff and City of McMinnville stakeholders on a Active Trans Plan for 99W utilizing the process and principles of the Blueprint for Urban Design (BUD) program.

City staff was enthusiastic to work with ODOT on the study and the project was conceptualized and underway within four months.

The primary purpose of the McMinnville OR 99W (Linfield to McDonald) Active Transportation Concept Plan is to identify improvements within the corridor that will result in a safer, more comfortable, and attractive place to walk, bike, roll and facilitate transit use.

The project management team (comprised of consultants from Kittleson and Associates, ODOT staff and City staff) have been working with a project advisory committee over the past year to identify solutions for improving Highway 99W (from Linfield to McDonald) for active (non-vehicular) modes of transportation.

Active Transportation is a term that describes self-propelled, human-powered transportation modes, such as walking, biking, skateboarding, and using a wheelchair.

Name of Member	Representation
Jack Crabtree	McMinnville School District
Jamie Fleckenstein	McMinnville Planning Department / Avid Cyclist
Zack Geary	McMinnville City Council
Peter Higbee	Bicyclist Community
Charles Hillestad	Community Member / Accessibility Advocate
Barb Jones	Accessibility Advocate
Steve Macartney	McMinnville Police Department
Cole Mullis	ODOT District Manager
Bahram Refael	Linfield University
Dave Rucklos	McMinnville Downtown Association
Cyrus Scarboro-Ford	McMinnville High School Student
Lori Schanche	Planning Commission, Retired Active Transportation Planner

Members of the Project Advisory Committee:

Discussion:

The results of that work have resulted in the OR 99W (NE McDonald to Linfield Avenue) Active Transportation Concept Plan.

The OR 99W Active Transportation Plan has identified the need for buffered bicycle lanes on Highway 99 as it travels through McMinnville as well as several enhanced pedestrian crossings, and a

Attachments:

Attachment A: Decision Document - G 4-21

Attachment C: OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan Appendix

Attachment D: Proposed Amendment to Chapter 6, Bicycle System Plan, McMinnville Transportation System Plan

Attachment B: OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan

parallel local route (neighborhood greenway) that is dedicated to active transportation as well (mostly on Davis Avenue) to alleviate the pressure on Highway 99W.

The neighborhood greenway, although a new concept for McMinnville, has emerged as a popular alternative public improvement to create local transportation infrastructure in a community that prioritizes active transportation modes for destination travel. Implementation is relatively inexpensive, and if strategically deployed, utilization is often very successful.

Attachments:

- Decision Document: G 4-21
- OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan
- OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan Appendix
- Suggested Amendment to Chapter 6, Bicycle System Plan of the *McMinnville Transportation* System Plan

Fiscal Impact:

This project was funded entirely by ODOT. Improvements to Highway 99W will likely be part of future ODOT improvement projects on the corridor and local improvements identified by the plan will need to eventually become part of the City's capital improvement plan, but could be funded through Safe Routes to School grants and other funding mechanisms.

Recommendation:

Staff recommends the Planning Commission recommend the proposed Comprehensive Plan amendment to the McMinnville City Council for adoption.

"THAT BASED ON THE FINDINGS OF FACT, THE CONCLUSIONARY FINDINGS FOR APPROVAL, AND THE MATERIALS SUBMITTED BY STAFF, THE PLANNING COMMISSION RECOMMENDS THAT THE CITY COUNCIL AMEND THE MCMINNVILLE COMPREHENSIVE PLAN BY ADOPTING THE OR 99W (NE MCDONALD LANE TO LINFIELD AVENUE) ACTIVE TRANSPORTATION CONCEPT PLAN AS A SUPPLEMENTAL DOCUMENT TO THE MCMINNVILLE TRANSPORTATION SYSTEM PLAN PRESENTED IN DOCKET G 4-21."

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Attachments:

Attachment A: Decision Document - G 4-21

Attachment C: OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan Appendix

Attachment D: Proposed Amendment to Chapter 6, Bicycle System Plan, McMinnville Transportation System Plan

Attachment B: OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan

ATTACHMENT A



CITY OF MCMINNVILLE PLANNING DEPARTMENT 231 NE FIFTH STREET MCMINNVILLE, OR 97128

503-434-7311 www.mcminnvilleoregon.gov

DECISION, CONDITIONS OF APPROVAL, FINDINGS OF FACT AND CONCLUSIONARY FINDINGS FOR THE APPROVAL OF AMENDING THE MCMINNVILLE COMPREHENSIVE PLAN BY ADOPTING THE MCMINNVILLE OR 99W (NE MCDONALD LANE TO LINFIELD AVENUE) ACTIVE TRANSPORTATION CONCEPT PLAN AS A SUPPLEMENTAL DOCUMENT TO THE CITY OF MCMINNVILLE TRANSPORTATION SYSTEM PLAN.

- DOCKET: G 4-21
- **REQUEST:** The City of McMinnville is proposing to amend the McMinnville Comprehensive Plan by adopting the *McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan* as a supplemental document to the City of McMinnville Transportation System Plan and to add Buffered Bike Lanes and Neighborhood Greenways to Chapter 6, Bicycle System Plan, of the Transportation System Plan, as bicycle facility types to utilize in McMinnville.
- LOCATION: City-Wide
- ZONING: N/A
- **APPLICANT:** City of McMinnville
- **STAFF:** Heather Richards, Planning Director
- **HEARINGS BODY:** McMinnville Planning Commission
- **DATE & TIME:** October 21, 2021. Public hearing held virtually via Zoom meeting software, Zoom Online Meeting ID 892 4702 7868.

DECISION-MAKING

BODY: McMinnville City Council

- DATE & TIME: TBD
- **PROCEDURE:** The application is subject to the legislative land use procedures specified in Sections 17.72.120 17.72.160 of the McMinnville Municipal Code.
- **CRITERIA:** Amendments to the McMinnville Comprehensive Plan must be consistent with Oregon State Regulations (ORS) governing Oregon land use goals, the Goals and Policies in Volume II of the Comprehensive Plan and the Purpose of the Zoning Ordinance.
- APPEAL: The Planning Commission will make a recommendation to the City Council. The City Council's decision on a legislative amendment may be appealed to the Oregon Land Use Board of Appeals (LUBA) within 21 days of the date written

notice of the City Council's decision is mailed to parties who participated in the local proceedings and entitled to notice and as provided in ORS 197.620 and ORS 197.830, and Section 17.72.190 of the McMinnville Municipal Code.

DECISION

Based on the findings and conclusions and the recommendation of the McMinnville Planning Commission, the McMinnville City Council **APPROVES** the attached Comprehensive Plan amendments (G 4-21).

City Council: Scott Hill, Mayor of McMinnville	Date:
Planning Commission: Roger Hall, Chair of the McMinnville Planning Commission	Date:
Planning Department: Heather Richards, Planning Director	Date:

I. Application Summary:

The City of McMinnville is proposing to amend the McMinnville Comprehensive Plan by adopting the *McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan* as a supplemental document to the City of McMinnville Transportation System Plan and to add Buffered Bike Lanes and Neighborhood Greenways to Chapter 6, Bicycle System Plan, of the Transportation System Plan, as bicycle facility types to utilize in McMinnville.

II. CONDITIONS OF APPROVAL

None.

III. FINDINGS OF FACT

- 1. In July, 2020, Oregon Department of Transportation, Active Trans Group, approached the City of McMinnville about preparing an Active Trans Plan for Oregon Highway 99W in McMinnville as a pilot program for the *Blueprint for Urban Design*.
- 2. From August, 2020 to April, 2021, a Project Management Team (PMT) worked with a Public Advisory Committee (PAC) and the consultants on evaluating existing conditions and recommending a draft OR 99W Active Trans Plan from NE McDonald Lane to Linfield Avenue.
- 3. On April 27, 2021, a joint work session was conducted with the McMinnville City Council and McMinnville Planning Commission to present the final draft of the plan.
- 4. Notice of the proposed amendment was provided to the Department of Land Conservation and Development (DLCD) on September 15, 2021.
- 5. Notice of the application and the October 21, 2021 Planning Commission public hearing was published in the News Register on Tuesday, October 12, 2021, in accordance with Section 17.72.120 of the Zoning Ordinance.
- 6. On October 21, 2021, the Planning Commission held a duly noticed public hearing to consider the request.

IV. Comments Received

No comments received.

V. CONCLUSIONARY FINDINGS:

Alignment with Oregon's Statewide Planning Goals and Administrative Rules:

Oregon Statewide Planning Goal #1, Citizen Involvement (OAR 660-015-0000(1)) – To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.

The governing body charged with preparing and adopting a comprehensive plan shall adopt and publicize a program for citizen involvement that clearly defines the procedures by which the general public will be involved in the on-going land-use planning process.

The citizen involvement program shall be appropriate to the scale of the planning effort. The program shall provide for continuity of citizen participation and of information that enables citizens to identify and comprehend the issues.

Federal, state and regional agencies and special-purpose districts shall coordinate their planning efforts with the affected governing bodies and make use of existing local citizen involvement programs established by counties and cities.

The citizen involvement program shall incorporate the following components: 1. Citizen Involvement -- To provide for widespread citizen involvement. The citizen involvement program shall involve a cross-section of affected citizens in all phases of the planning process. As a component, the program for citizen involvement shall include an officially recognized committee for citizen involvement (CCI) broadly representative of geographic areas and interests related to land use and land-use decisions. Committee members shall be selected by an open, wellpublicized public process. The committee for citizen involvement shall be responsible for assisting the governing body with the development of a program that promotes and enhances citizen involvement in land-use planning, assisting in the implementation of the citizen involvement program, and evaluating the process being used for citizen involvement. If the governing body wishes to assume the responsibility for, development as well as adoption and implementation of the citizen involvement program or to assign such responsibilities to a planning commission, a letter shall be submitted to the Land Conservation and Development Commission for the state Citizen Involvement Advisory Committee's review and recommendation stating the rationale for selecting this option, as well as indicating the mechanism to be used for an evaluation of the citizen involvement program. If the planning commission is to be used in lieu of an independent CCI, its members shall be selected by an open, well-publicized public process.

<u>FINDING</u>: **SATISFIED**. Chapter X of the McMinnville Comprehensive Plan outlines compliance with Oregon State Land-Use Goal #1. The Planning Commission has been identified as the Committee for Citizen Involvement for the City of McMinnville per McMinnville Comprehensive Plan Policy #190.00. The Planning Commission hosted a public hearing to consider this proposed amendment on October 21, 2021.

Policy #193.00 of Chapter X of the McMinnville Comprehensive Plan also encourages the City to engage local citizens in Project Advisory Committees for major Comprehensive Plan Amendments.

The Following Project Advisory Committee was established for this project:

Name of Member	Representation
Jack Crabtree	McMinnville School District
Jamie Fleckenstein	McMinnville Planning Department / Avid Cyclist
Zack Geary	McMinnville City Council
Peter Higbee	Bicyclist Community
Charles Hillestad	Community Member / Accessibility Advocate
Barb Jones	Accessibility Advocate
Steve Macartney	McMinnville Police Department
Cole Mullis	ODOT District Manager
Bahram Refael	Linfield University
Dave Rucklos	McMinnville Downtown Association
Cyrus Scarboro-Ford	McMinnville High School Student
Lori Schanche	Planning Commission, Retired Active Transportation Planner

Members of the Project Advisory Committee:

Oregon Statewide Planning Goal #2, Land Use Planning (OAR 660-015-0000(2)) – To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

<u>FINDING</u>: **SATISFIED**. The City of McMinnville has an acknowledged adopted Comprehensive Plan that provides a land use planning process and policy framework for all decisions and actions related to the use of land. The Comprehensive Plan is implemented through the McMinnville Municipal Code.

On February 23, 2010, the McMinnville City Council adopted Ordinance No. 4922 which adopted the *City of McMinnville Transportation System Plan* as part of Volume I of the McMinnville Comprehensive Plan.

This action amends the McMinnville Comprehensive Plan by adopting the *McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan* as a supplemental document to the McMinnville Transportation Plan.

Oregon Statewide Planning Goals #3 – 11 do not apply to this action.

Oregon Statewide Planning Goal #12, Transportation (OAR 660-015-0000(12)) – To provide and encourage a safe, convenient and economic transportation system.

A transportation plan shall (1) consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle and pedestrian; (2) be based upon an inventory of local, regional and state transportation needs; (3) consider the differences in social consequences that would result from utilizing differing combinations of transportation modes; (4) avoid principal reliance upon any one mode of transportation; (5) minimize adverse social, economic and environmental impacts and costs; (6) conserve energy; (7) meet the needs of the transportation disadvantaged by improving transportation services; (8) facilitate the flow of goods and services so as to strengthen the local and regional economy; and (9) conform with local and regional comprehensive land use plans.

Each plan shall include a provision for transportation as a key facility. Transportation -- refers to the movement of people and goods. Transportation Facility -- refers to any physical facility that moves or assists in the movement of people and goods excluding electricity, sewage and water. Transportation System -- refers to one or more transportation facilities that are planned, developed, operated and maintained in a coordinated manner to supply continuity of movement between modes, and within and between geographic and jurisdictional areas. Mass Transit -- refers to any form of passenger transportation which carries members of the public on a regular and continuing basis. Transportation Disadvantaged -- refers to those individuals who have difficulty in obtaining transportation because of their age, income, physical or mental disability.

GUIDELINES

A. PLANNING

1. All current area-wide transportation studies and plans should be revised in coordination with local and regional comprehensive plans and submitted to local and regional agencies for review and approval.

2. Transportation systems, to the fullest extent possible, should be planned to utilize existing facilities and rights-of-way within the state provided that such use is not inconsistent with the environmental, energy, land-use, economic or social policies of the state.

3. No major transportation facility should be planned or developed outside urban boundaries on Class 1 and II agricultural land, as defined by the U.S. Soil Conservation Service unless no feasible alternative exists.

4. Major transportation facilities should avoid dividing existing economic farm units and urban social units unless no feasible alternative exists.

5. Population densities and peak hour travel patterns of existing and planned developments should be considered in the choice of transportation modes for trips taken by persons. While high density developments with concentrated trip origins and destinations should be designed to be

principally served by mass transit, 2 low-density developments with dispersed origins and destinations should be principally served by the auto.

6. Plans providing for a transportation system should consider as a major determinant the carrying capacity of the air, land and water resources of the planning area. The land conservation and development actions provided for by such plans should not exceed the carrying capacity of such resources.

B. IMPLEMENTATION

1. The number and location of major transportation facilities should conform to applicable state or local land use plans and policies designed to direct urban expansion to areas identified as necessary and suitable for urban development. The planning and development of transportation facilities in rural areas should discourage urban growth while providing transportation service necessary to sustain rural and recreational uses in those areas so designated in the comprehensive plan.

2. Plans for new or for the improvement of major transportation facilities should identify the positive and negative impacts on: (1) local land use patterns, (2) environmental quality, (3) energy use and resources, (4) existing transportation systems and (5) fiscal resources in a manner sufficient to enable local governments to rationally consider the issues posed by the construction and operation of such facilities.

3. Lands adjacent to major mass transit stations, freeway interchanges, and other major air, land and water terminals should be managed and controlled so as to be consistent with and supportive of the land use and development patterns identified in the comprehensive plan of the jurisdiction within which the facilities are located.

4. Plans should provide for a detailed management program to assign respective implementation roles and responsibilities to those governmental bodies operating in the planning area and having interests in carrying out the goal

<u>FINDING</u>: **SATISFIED**. The City of McMinnville has an acknowledged adopted Transportation System Plan that addresses Oregon Land Use Goal #12. This action focuses on one aspect of the transportation network (active trans facilities) on one major arterial in the community – Oregon Highway 99W.

Oregon Statewide Planning Goals #13 – 19 do not apply to this action.

Alignment with McMinnville's Comprehensive Plan Goals and Policies:

City of McMinnville Comprehensive Plan, Volume II, Goals and Policies

The following policies from Chapter VI, "Transportation System", support this planning effort.

GOAL VI 1: TO ENCOURAGE DEVELOPMENT OF A TRANSPORTATION SYSTEM THAT PROVIDES FOR THE COORDINATED MOVEMENT OF PEOPLE AND FREIGHT IN A SAFE AND EFFICIENT MANNER.

130.00 The City of McMinnville shall encourage implementation of the Bicycle System Plan that connects residential areas to activity areas such as the downtown core, areas of work, schools, community facilities, and recreation facilities. (Ord.4922, February 23, 2010)

132.24.00 The safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and balanced in all types of transportation and development projects and through all phases of a project so that even the most vulnerable McMinnville residents – children, elderly, and persons with

disabilities – can travel safely within the public right-of-way. Examples of how the Compete Streets policy is implemented:

- 1. Design and construct right-of-way improvements in compliance with ADA accessibility guidelines (see below).
- 2. Incorporate features that create a pedestrian friendly environment, such as:
 - a. Narrower traffic lanes;
 - b. Median refuges and raised medians;
 - c. Curb extensions ("bulb-outs");
 - d. Count-down and audible pedestrian signals;
 - e. Wider sidewalks;
 - f. Bicycle lanes; and
 - g. Street furniture, street trees, and landscaping
 - 3. Improve pedestrian accommodation and safety at signalized intersections by:
- a. Using good geometric design to minimize crossing distances and increase visibility between pedestrians and motorists.
- b. Timing signals to minimize pedestrian delay and conflicts.
- c. Balancing competing needs of vehicular level of service and pedestrian safety. (Ord. 4922, February 23, 2010)

132.26.00 The vehicle, pedestrian, transit, and bicycle circulation systems shall be designed to connect major activity centers in the McMinnville planning area, increase the overall accessibility of downtown and other centers, as well as provide access to neighborhood residential, shopping, and industrial areas, and McMinnville's parks and schools.

132.30.00 The implementation of transportation system and transportation demand management measures, provision of enhanced transit service, and provision of bicycle and pedestrian facilities in the McMinnville planning area shall be embraced by policy as the first choice for accommodating travel demand and relieving congestion in a travel corridor, before street widening projects for additional travel lanes are undertaken.

132.31.00 The City of McMinnville shall make the design, construction, and operation of a safe transportation system for all modes of travel a high priority. (Ord. 4922, February 23, 2010)

132.35.00 Transportation facilities in the McMinnville planning area shall be, to the degree possible, designed and constructed to mitigate noise, energy consumption, and neighborhood disruption, and to encourage the use of public transit, bikeways, sidewalks, and walkways. (Ord. 4922, February 23, 2010)

132.37.00 Through implementation of the TSP and the Comprehensive Plan, the City of McMinnville will, to the extent possible, seek measures that simultaneously help reduce traffic congestion, pollution, crashes and consumer costs, while increasing mobility options for non-drivers, and encouraging a more efficient land use pattern. (Ord. 4922, February 23, 2010)

132.39.00 The City of McMinnville shall coordinate its transportation planning and construction efforts with those of Yamhill County and the Oregon Department of Transportation (ODOT). McMinnville's transportation plan shall be consistent with those developed at the regional and state level. (Ord. 4922, February 23, 2010)

132.56.00 Provide Bicycle Facilities on Arterials and some Collector Streets – To the extent possible, arterial and some collector streets undergoing overlays or reconstruction will either be restriped with bicycle lanes or sharrow (bicycle/auto shared-lane) routes as designated on the Bicycle System Plan Map. Every effort will be made to retrofit existing arterials and selective collectors with bicycle lanes, as designated on the Bicycle System Plan Map. (Ord. 4922, February 23, 2010)

132.56.10 Eliminate Barriers to Bicycle Travel – The City will actively pursue a comprehensive system of bicycle facilities through designing and constructing projects, as resources are available, and implementing standards and regulations designed to eliminate barriers to bicycle travel. As a result of this policy, new developments or major transportation projects will neither create new, nor maintain existing, barriers to bicycle travel. (Ord. 4922, February 23, 2010)

132.56.20 Complete the Major Bicycle System – A completed system of major bicycle facilities is one of the most important factors in encouraging bicycle travel. The City will work toward annually completing a minimum five percent addition to the bicycle system, as designated on the Bicycle System Plan Map, with priority given to projects that fill critical missing links in the bicycle system or address an identified safety hazard. (Ord. 4922, February 23, 2010)

132.60.15 Bicycle and Pedestrian System Funding – The City should establish a new allocation and set aside 1.0% of its Motor Vehicles Fuel Tax funds for creation of on-street bicycle facilities and curb ramp replacements. (Ord. 4922, February 23, 2010)

<u>FINDING</u>: **SATISFIED**. The *McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan* achieves the above stated goals of the McMinnville Comprehensive Plan.

Alignment with McMinnville's Transportation System Plan:

Chapter 5 of the *City of McMinnville Transportation Plan*, the Pedestrian System Plan, identified the "need to better link and weave the Highway 99W corridor into the multi-modal fabric of greater McMinnville, with strategic pedestrian connections to Downtown. There is also need to improve the pedestrian environment along Adams and Baker Streets by removing obstacles that impede safer travel and adding enhancements to the pedestrian environment."

"As noted in the Street System Plan, pavement conditions have deteriorated on Adams and Baker streets. At some point in time, both streets will likely need to be reconstructed to safely carry future traffic demand. McMinnville should coordinate with ODOT to define and program the reconstruction of Adams and Baker streets in the future update of the Statewide Transportation Improvement Program (STIP), including with it a number of pedestrian and bicycle access and safety enhancements." (Page 5-10 and 5-11 of the *City of McMinnville Transportation Plan*.)

<u>FINDING</u>: **SATISFIED**. The *McMinnville* OR 99W (*NE McDonald Lane to Linfield Avenue*) Active *Transportation Concept Plan* responds to the action called for in Chapter 5 of the *City of McMinnville Transportation System Plan*.

ATTACHMENT B

CITY OF MCMINNVILLE

OR 99W (Linfield to McDonald) **ACTIVE TRANSPORTATION CONCEPTION**

APRIL 2021



^{City of} MCMinnville

ACKNOWLEDGMENTS

Project Management Team

Jenna Berman, ODOT Region 2, Active Transportation Liaison Daniel Fricke, ODOT Region 2, Senior Transportation Planner Larry Sherwood, The City of McMinnville, Engineering Services Manager Heather Richards, The City of McMinnville, Planning Director Mike Bisset, The City of McMinnville, Community Development Director

ODOT Review Team

Dorothy Upton, ODOT Region 2, Region Traffic Operations Engineer Arielle Ferber, ODOT Region 2, Traffic Analysis Engineer Kristie Gladhill, ODOT Transportation Planning Analysis Unit, Senior Transportation Analyst

Consultant Project Team

KITTELSON & ASSOCIATES, INC. Marc Butorac, PE, PTOE, PMP, Project Principal Nick Gross, Project Manager Amy Griffiths, EIT, Lead Analyst Eric Germundson, Lead Designer Steve Rhyne Jon Sommerville Katie Taylor

Project Advisory Committee

Barb Jones, Accessibility Advocate Bahram Refaei, Linfield University Cyrus Scarboro-Ford, McMinnville High School Student Chuck Hillestad, Former Planning Commissioner, Board of Yamhill County Historic Society Dave Rucklos, Director of McMinnville Downtown Association Jack Crabtree, McMinnville School District Jamie Fleckenstein, McMinnville Planning Department and Avid Cyclist Cole Mullis, ODOT District Manager Peter Higbee, Bicyclist Community Steve Macartney, Public Safety Zack Geary, McMinnville City Council Lori Schanche, Planning Commission, Active Transportation Planner

CONTENTS

Introduction	5
Keeping the End User in Mind	7
What Needs Improving	11
Who Participated in the Planning Process?	15
Proposed Solutions	19
Preferred Solution Concepts	25
Enhanced Pedestrian Crossings	85
Making the Preferred Concept a Reality	87
Supporting Documentation	89





active transportation

is a term that describes self-propelled, human-powered transportation modes, such as walking, biking, skateboarding, and using a wheelchair.

1 / Introduction



An Active, Thriving Future for McMinnville

The primary purpose of the McMinnville OR 99W (Linfield to McDonald) Active Transportation Concept Plan is to identify improvements within the corridor that will result in a safer, more comfortable, more attractive place to walk, bike, roll, and facilitate transit use.

Today, the high speeds and traffic volumes on OR 99W make walking and biking uncomfortable for most people. The Adams Street-Baker Street segment of OR 99W ("the couplet") does not have bike lanes. Portions of these roads were identified in the Oregon Department of Transportation (ODOT) statewide systemic safety analysis as a high-risk corridor for people walking and biking. New walking and biking infrastructure are needed to support low-stress, safe connections for people walking and biking on and around OR 99W.



at ?	The project study area is the segment of OR 99W between NE McDonald Lane (north) to Linfield Avenue (south). Parallel neighborhood streets (under the jurisdiction of the City of McMinnville) were also considered for potential alternative bicycle routes.
t	This Concept Plan identifies the vision and presents a solution to address the needs of people walking, biking and rolling along the OR 99W corridor.
	Adoption of this Concept Plan into the McMinnville Transportation System Plan allows both the City and ODOT to pursue funding for the various concepts presented here. Once funding is received for implementation, the concepts will be further refined through a detailed design process before being constructed.

The Study Area



2 / Keeping the End User in Mind

Who is McMinnville?

With over 34,000 people, McMinnville is Yamhill County's largest city, and the gateway to wine country.

Downtown McMinnville's historic character, antique stores, breweries, restaurants, and galleries make it attractive to both visitors and locals traveling on foot or by bike. McMinnville High School at the north and Linfield University at the south end of the corridor generate a substantial number of walking and biking trips, particularly for student populations.

Performance-based or context-sensitive design is a Other walking and biking activity in the area is driven shift away from applying strict design standards toward by transit stops, schools, libraries, gyms, grocery stores, designing based on a community's specific setting and health clinics, municipal buildings, community centers, circumstances. Performance-based design supports places of worship, bike shops, and parks. planning efforts to create projects that are contextsensitive and reflect the original intended outcomes The area surrounding the OR 99W corridor is home where people want to live, work, and play.

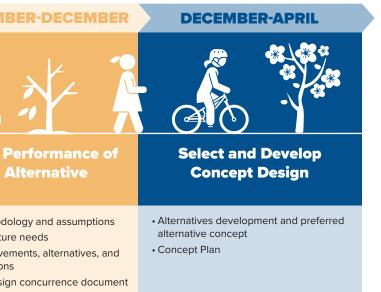
to many people from transportation-disadvantaged groups: people 65 and older, 17 and younger, non-white The ODOT Blueprint for Urban Design establishes a or Hispanic (who speak little or no English), low-income, framework for determining the urban context along with a disability, living in crowded households, or living state roadways. Identifying desired project outcomes in households without vehicle access. On average, and understanding the urban context, and who will be the people living around OR 99W at the northern end using the roadway, helps decision-makers determine of the corridor fit into slightly more transportation appropriate performance measures to evaluate the disadvantaged categories and the people living near trade-offs of various design decisions. Linfield University fit into slightly fewer.

Project Schedule & Performance-Based Approach

AUGUST-OCTOBER	SEPTEM
Establish Project Goals, Context, and Desired Outcomes	Evaluate I Each
 Corridor vision statement Evaluation criteria and performance measures Performance-based design framework Plans and policy review 	 Analysis method Existing and futu Planned improve recommendation Draft urban desi

Designing to Meet Community Needs

Traditionally, transportation planners and engineers applied a set of one-size-fits-all design standards to roadway projects. These standards did not necessarily fit the unique circumstances of every community or project. The result could be undesirable, sometimes uncomfortable conditions for people using the transportation system.



The Blueprint for Urban Design provides facility recommendations and modal priorities based on the urban context of the roadway. These recommendations are shown in the table below.

Existing Conditions & Recommendations by Mode

OR 99W Segment	Recommended Context	High Priority Modes	Vehicular Speed Comparison	Bicyclist Facility Comparison	Pedestrian Facility Comparison
NE McDonald Lane to NW 15th Street	Urban Mix	Pedestrian, Bicyclist, and Transit	Existing: 30-35 mph Recommended:	Existing: standard on-street bike lanes/none	Existing: standard sidewalks, no buffer
			25-30 mph	Recommended: wide, comfortable, buffered facilities	Recommended: wide, comfortable, buffered facilities
NW 15th Street to SE 1st Street	Traditional Downtown/Central Business District	Pedestrian, Bicyclist, and Transit	Existing: 30 mph Recommended: 25 mph	Existing: none Recommended: wide, comfortable facilities	Existing: standard sidewalks, no buffer Recommended: wide, comfortable, buffered facilities
SE 1st Street to SW Linfield Avenue	Urban Mix	Pedestrian, Bicyclist, and Transit	Existing: 35 mph Recommended: 25-30 mph	Existing: standard, on-street bike lanes/none Recommended: wide, comfortable, buffered facilities	Existing: standard sidewalks, no buffer Recommended: wide, comfortable, buffered facilities



a transportation mode

is a way of transporting people or goods. ODOT's Blueprint for Urban Design recognizes five modes: Motorist, Freight, Transit, Bicyclist, and Pedestrian.



WHAT ABOUT PARKING? **Analysis Shows Minimal Impacts**

By removing parking from the west side of Adams Street, this project can affordably provide walking, biking, and rolling facilities while maintaining space needed for motor vehicle and freight through movements.

Current and historic analysis shows that street parking along Adams Street is underused. Peak parking utilization for the total 208 spaces along Adams Street was 10%. The highest parking demand was observed along Adams Street south of 2nd Avenue and is likely generated by residences. Parking along the corridor could be accommodated below 85% occupancy-the nationally accepted target for parking utilization—during peak hours along one side of the roadway.

The study evaluated solutions that stay within the roadway's existing curb-to-curb width to reduce costs and minimize impacts to private rights of way.

H ST





Friday Peak Hour



How Did We Choose the Best Concept?

The City's Transportation System Plan (TSP) established goals and policies that were used to evaluate the suitability of each alternative concept for active transportation facilities along the OR 99W corridor through McMinnville. These criteria align with the Corridor Vision for OR 99W.

The table below lists the evaluation criteria and how each was used to evaluate the alternative concepts for the corridor. Public opinion was an important factor in arriving at the preferred concept.

Evaluation Criteria & Performance Measures

Evaluation Criterion	Description
Complete Streets	The preferred concept provides comfortable facilities for people walking and biking, regardless of age and ability. The "complete streets" criterion addresses the "Complete Streets" goal and supplemental policy identified in the TSP.
Multimodal Transportation System	The preferred concept provides an integrated network of facilities and services for a variety of motorized and non-motorized travel modes based on the appropriate relative priority given the corridor context. The "multimodal transportation system" criterion addresses the "Multimodal Transportation System" goal and supplemental policy identified in the TSP.
Connectivity	The preferred concept provides comprehensive connectivity and circulation to existing active transportation facilities in McMinnville. The preferred concept encourages walking and biking to essential destinations within the city. The "connectivity" criterion addresses the "Connectivity and Circulation," "Transportation System and Energy Efficiency," and "Transportation Sustainability" goals and supplemental policies identified in the TSP.
Safety	The preferred concept establishes safety countermeasures to reduce the number of fatal and severe injury crashes. The "safety" criterion addresses the "Transportation Safety" and "Transportation Sustainability" goals and supplemental policies identified in the TSP.
Equity	The preferred concept meets the requirements set forth in the Americans with Disabilities Act (ADA) and provides transportation options to transportation disadvantaged populations. The "equity" criterion addresses the "Accessibility for Persons with Disabilities" and "Health and Welfare" goals and supplemental policies identified in the TSP.
Livability	The preferred concept minimizes impacts to adjacent property owners and encourages the use of public transit, bikeways, sidewalks, and walkways. The preferred concept provides equity and receives public support. The "livability" criterion addresses the "Livability" and "Aesthetics and Streetscaping" goals and supplemental policies identified in the TSP.
Design Feasibility	The preferred concept has no major design feasibility concerns. The "design feasibility" criterion does not directly address any goals or supplemental policies identified in the TSP.



3 / What Needs Improving



What Stands in the Way of Walking, Biking, and Rolling in McMinnville Today?

The project team reviewed the project study area's characteristics, safety conditions, and existing walking and biking facilities to identify gaps and deficiencies.

A gap is a missing link in the network—for example, a missing sidewalk, crosswalk, pedestrian ramp, or bicycle facility.

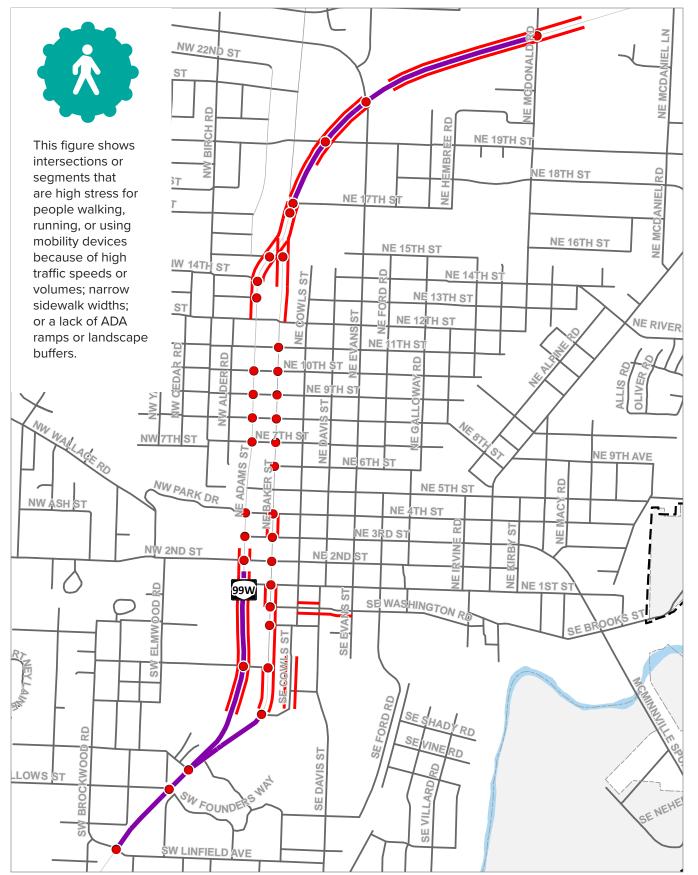
A deficiency is a pedestrian or bicycle facility—a sidewalk or bike lane, for example—that is insufficient to meet the needs of its users. An example of a deficient facility is a roadway near a school that is stressful for the students who travel on foot or by bike.



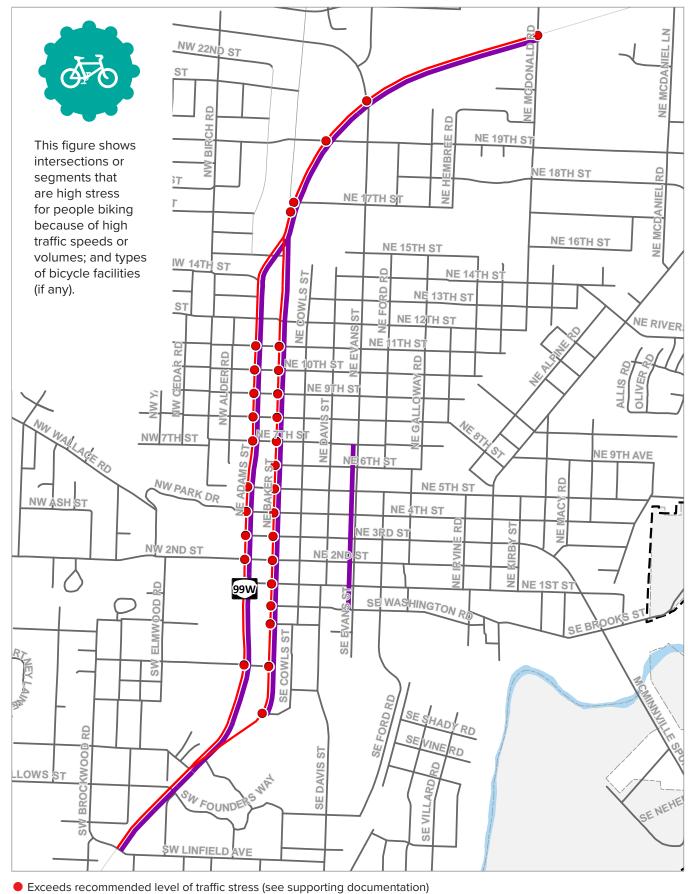
"If there were ways to **slow down vehicle traffic** and to provide clean bike lanes (often there is a lot of debris on the road), I would consider using OR 99W as my main route. However, I don't think Oregon drivers will gladly share such a main road with non-vehicular traffic based on my dealings as a cyclist with drivers."

-Public comment

Pedestrian Gaps & Deficiencies



Bicyclist Gaps & Deficiencies



• Exceeds recommended level of traffic stress (see supporting documentation)

• Top 40% pedestrian risk, per ODOT statewide systemic safety analysis

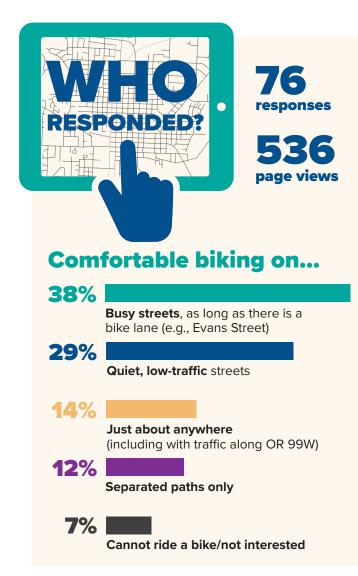
• Top 40% bicyclist risk, per ODOT statewide systemic safety analysis



4 / Who Participated in the Planning Process?

Community Leadership

A diverse group of 12 community members and stakeholders all interested in improving walking, biking, and rolling facilities along OR 99W—served on the Project Advisory Committee (PAC). Their responsibilities included attending committee meetings, reviewing and commenting on draft concept for advancement into the draft Concept Plan. technical memoranda prepared by the project team, providing The virtual open house included a survey, which was open information about existing and future needs for active from February 25 through March 11, 2021. A livestreamed transportation facilities in the study area, attending and virtual meeting was held on Thursday, March 4 and a advertising the public virtual meeting, and providing input on recording of this meeting was posted to the virtual open the concepts described in this plan. house website.



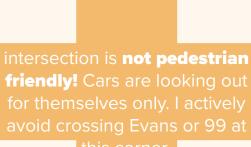
Virtual Open House

- The project team, ODOT, and the City of McMinnville hosted a virtual open house for the project in early 2021. The goal of the virtual open house was to educate the public on the project and solicit feedback on the selection of a preferred



We heard you!

We received **76 comments** from community members through interactive maps, emailed comments, a community survey and virtual open house. Here's what people had to say:



PLEASE!! ADD A DEDICATED LEFT HAND TURN LANE **GOING EAST ONTO HWY 99** AT THIS INTERSECTION!!! IT IS **SO DANGEROUS FOR KIDS/** PEDESTRIANS TRYING TO CROSS THAT HIGHWAY THERE! WITH SCHOOLS RESUMING, IT'S **INCREASINGLY IMPORTANT. THANK YOU!!**

I will be surprised if residents on Davis and Evans want what is proposed in their neighborhood. Does the solution have to be one concept or another? Can we have bike lanes on OR 99W and a neighborhood greenway?

...I SUPPORT [A SIGNAL ICON] AT 8TH AND ADAMS AND BAKER. TRAFFIC GETS BACKED UP TO THAT POINT ALREADY, SO IT WOULD BE NICE TO HAVE BOTH CARS AND PEDESTRIANS AWARE OF WHOSE TURN IT IS.

LIGHTS NEED TO HAVE THE **ABILITY TO CHANGE WHEN** A CYCLIST IS IN THE BIKE LANE AWAITING A GREEN LIGHT.

Evans Street is a high traffic area and primary route to the high school (with particularly young drivers) and I think this street should be avoided entirely.



Davis is fairly narrow along this strip with road parking and faster speeds, perhaps Ford Street can be a less trafficked option.

Traffic gets pretty backed up on the 99 during rush hours now. I think we need a stop light on 8th street. Additionally, either a bidirectional protected bike lane, or a greenway would be ideal.

Booth **Bend would** be great for a bike path (add wide safe shoulder).

I AM A PEDESTRIAN. I AVOID ADAMS/BAKER UNLESS MY DESTINATION IS ON THEM.

My basic route through McMinnville runs along Davis. Having an option parallel to Evans offers a less trafficked route with fewer stop signs, too. It makes traveling along on a bike much easier, which is my preferred and regular mode of transportation.

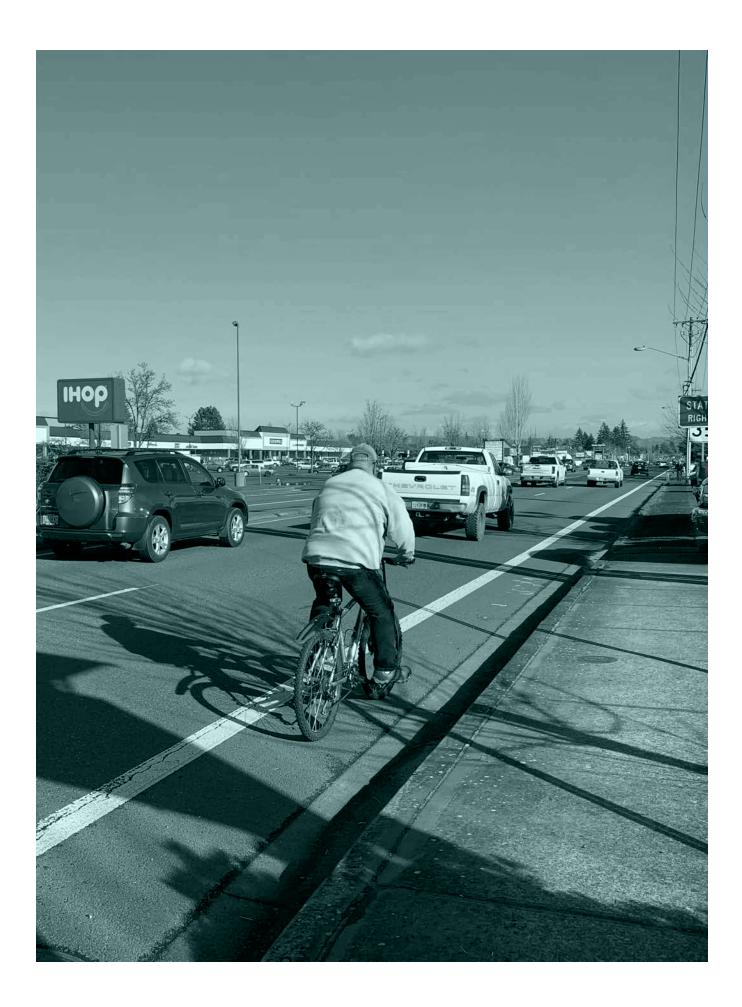
THE ROAD HERE IS FAST AND GETS NARROW, WOULD THERE BE A BIKE LANE?

THE LIGHTS ALONG 99W AND ON EVANS AND 5TH NEED TO BE BICYCLE-SENSITIVE! I HAVE WASTED SOME OF MY YOUNG YEARS AWAITING A LIGHT CHANGE IN MAC ON MY BIKE.

My concern is that most of the bike traffic will end up on the street sidewalks. I have biked on these streets and they are less stressful, but still not a street biking area for young children, youth or families.

> No stop signs creates huge hazards!

Linfield trail improvement to keep folks off the narrow section of Baker?



5 / Proposed Solutions

Today, around 20,000 to 30,000 vehicles pass throug McMinnville on Adams and Baker Streets every day. There are no dedicated bicycle lanes and no enhance pedestrian crossings within the couplet segment of O 99W. As a consequence, ODOT identified the couplet high risk for pedestrians and bicyclists in its statewide systemic safety analysis.

The OR 99W corridor needs context-sensitive solution to support a lower-stress, safer connection within McMinnville's multimodal transportation system.

Potential Design Options

The project team developed three concepts for the McMinnville OR 99W Active Transportation Concept Plan based on an analysis of existing conditions and input from the Project Management Team (PMT), Project Advisory Committee (PAC), and public.

BICYCLE DESIGN OPTIONS:

1 / Two-Way Separated Bike Lane

A two-way separated bike lane, also known as a twoway cycle track or protected bike lane, is located within the street right-of-way. It is separated from motor vehicle traffic by vertical features such as curbs, landscape planters, flexible post delineators (shown in the image on the right), or parked cars. Two-way separated bike lanes serve bicycle travel in two directions on one side of the street.

2 / Buffered Bike Lane

Buffered bicycle lanes are on-street lanes that include an additional striped buffer of typically 2-3 feet between the bicycle lane and the vehicle travel lane and/or between the bicycle lane and the vehicle parking lane.

3 / Neighborhood Greenway

Neighborhood greenways are low traffic volume, low-speed streets where people biking and people driving share road space, but where people biking are prioritized and people driving are not encouraged to use the road as a through street.

gh	These concepts included:
ed: CR	Concept 1: Two-Way Separated Bike Lane on Adams Street
et as e	Concept 2: Buffered Bike Lanes on Adams Street and Baker Street
ons	Concept 3: Neighborhood Greenway on Davis Street or Evans Street
	Concept layouts for these options are provided in the Appendix in TM #5: Alternatives Development and Preferred Alternative Concept.



VILLE

ACTIVE

TRANSPORTATION CONCEPT PLAN

OR 99W PRELIMINARY CONCEPTS

This section presents the preliminary concepts to address the active transportation needs within the study area.

Concept 1: Two-Way Separated Bike Lane on Adams Street

Concept 1 proposes a two-way separated bike lane along the west side of Adams Street between 2nd and 15th Streets, transitioning to buffered bike lanes to the north and south and tying into existing bike lanes on OR 99W. The separated bike lanes are proposed to be at street level, separated from vehicular traffic with flexible post delineators. This concept requires removing the parking lane on the west side of Adams Street and narrowing vehicle lane widths. It creates the need to transition bicycles from one-way buffered lanes to the two-way portion. Physical buffers may make it difficult for street sweepers to maintain and could impact freight travel through the corridor. The order of magnitude, preliminary cost estimate for this concept is \$857,000.

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Concept 2 proposes buffered bike lanes along Adams and Baker Street. The concept requires removing parking on the west side of Adams Street and narrowing vehicle lane widths on Baker Street. Parking will be maintained on Baker Street. This concept provides vertical separation from vehicular traffic along some segments and intersections, but not throughout the whole corridor, which makes it easier for street sweepers to maintain. It would also have less impact to freight movements than the two-way separated bike lane. The order of magnitude, preliminary cost estimate for this concept is \$418,000.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

Concept 3 proposes a neighborhood greenway parallel to OR 99W using signage and pavement markings to direct people through the neighborhood. These routes have lower traffic volumes and speeds compared to OR 99W, offering a more comfortable alternative to biking or walking along the highway. Additional infrastructure improvements can be used to reduce vehicle speeds and bring more attention to people walking and biking along the neighborhood greenway route, like the traffic diverters shown in the image at right. Traffic diverters prevent cut-through traffic for people driving, making the route more comfortable for people walking and biking. The neighborhood greenway concept considered two routes:

Concept 3A: Davis Street Neighborhood Greenway
Concept 3B: Evans Street Neighborhood Greenway.

The order of magnitude, preliminary cost estimate for these concepts is about \$141,000.

Concept 1



Concept 2





Evaluation Criteria

The evaluation criteria listed on page 10 were used to assess the trade-offs of each concept and determine which concept best aligns with the corridor context and community needs. These criteria were developed based on McMinnville's TSP's Guiding Goals and Policies.

The scoring scale for each criterion ranges from -1 to +2. An evaluation of the concept designs according to this scale is provided below. Using this method, the project team was able to create a data-driven approach to evaluating which concept(s) best align with McMinnville's goals for the transportation system.

Evaluation Criteria	Concept 1: Two-Way Separated Bike Lane	Concept 2: Buffered Bike Lanes	Concept 3A: Davis Street Greenway	Concept 3B: Evans Street Greenway
Complete Streets	+1.5	+1	+2	+2
Multimodal Transportation System	+1	+1	+1	+1
Connectivity	+2	+2	+1.7	+2
Safety	+1.8	+1.8	+2	+1.9
Equity	+1	+ 0.8	+1	+1
Livability	+1.5	+1.5	+1.5	+1.5
Design Feasibility	-1	0	+1	0
TOTAL SCORE	7.8	8.1	10.2	9.4



Pros and Cons of Each Concept

CONCEPT 1: TWO-WAY SEPARATED BIKE LANE ON ADAMS STREET

The two-way separated bike lane would create a physically-separated facility for people biking by installing raised curbs and flex posts. The proposed twoway separated bike lane alignment also provides direct access to businesses along the couplet. A physicallyseparated facility, however, could impact freight maneuvers within the corridor and be challenging for maintenance crews to clean and maintain.

The facility would be bidirectional, requiring some bicycles to travel adjacent to and facing oncoming traffic. Transitioning people biking from the two-way separated bike lane to the proposed buffered bike lanes to the north and south is a significant challenge. Additional challenges include dealing with access management due to the many driveways along the corridor and designing for contra-flow bicycle traffic entering and exiting the separated bike lane safely and efficiently.

CONCEPT 2: BUFFERED BIKE LANES ON ADAMS STREET AND BAKER STREET

This relatively inexpensive option provides an intuitive, directional, and continuous route along OR 99W. Buffered bike lanes do not require vertical separation from traffic. Adding vertical separation, where feasible based on driveways, parking, and curb-to-curb widths, increases comfort and utility of the facility. This concept does not provide vertical separation throughout the couplet in the near term, which makes it easier to maintain but less comfortable for people biking.

The buffered bike lane concept does not require bicyclists to transition across the couplet at the northerly (15th Street) and southerly (2nd Street) terminus points compared to the two-way separated bike lane concept. This makes the option more attractive for people biking through the corridor and reduces challenges and costs associated with transitioning people biking across the couplet.

CONCEPT 3A: NEIGHBORHOOD GREENWAY ON DAVIS STREET

Another inexpensive option, this parallel route offers a low-stress experience for people walking and biking due to lower traffic volumes and speeds. It is comfortable for users of all ages and abilities, provides wayfinding signage and traffic calming features, and uses a signalized crossing of 3rd Street.

This option offers less-direct access to businesses along OR 99W and may not be as attractive for confident people biking who prioritize speed over comfort.

CONCEPT 3B: NEIGHBORHOOD GREENWAY ON EVANS STREET

Another inexpensive and comfortable option for users of all ages and abilities, this parallel route is similar to Concept 3A but presents some challenges based on the higher volumes and speeds along the northern segment of Evans Street and the lack of a signalized crossing at 3rd Street. Traffic calming efforts would need to be more substantial to create a lower-stress environment for people walking and biking.

Costs

Planning-level cost estimates for each concept are provided in Table 2. The estimates include costs for mobilization, signage, striping, and a 30% contingency to cover costs for administrative or engineering services related to the potential projects. The cost of the enhanced crossing concepts is provided separately. The concepts maintain existing curb-to-curb cross sections; therefore, no right-of-way costs are anticipated.

Planning-level Cost Estimates

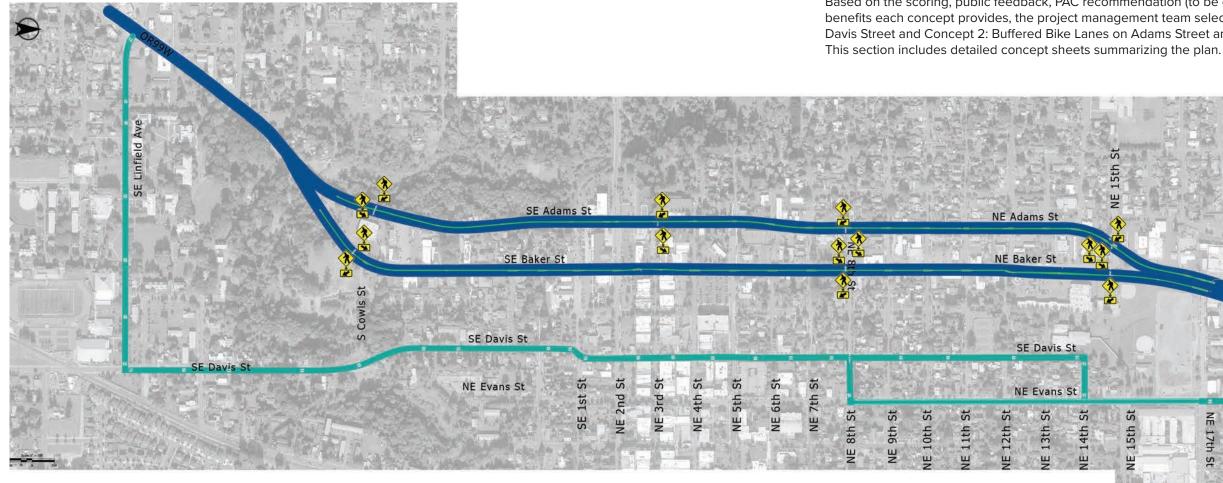
Concept	Planning-Level Cost Estimate	N
Concept 1: Two- Way Separated Bike Lane on Adams Street	\$857,000	•
Concept 2: Buffered Bike Lanes on Adams Street and Baker Street	\$418,000	•
Concept 3A: Neighborhood Greenway on Davis Street	\$141,000	•
Concept 3B: Neighborhood Greenway on Evans Street	\$141,000	•

As summarized in the table above, the two-way separated bike lane is the most expensive concept, followed by the buffered bike lanes and the neighborhood greenway concepts. Maintenance costs are anticipated to be substantially higher for Concept 1 than for the other concepts because of the flex-post delineators and special maintenance equipment needed to sweep the two-way separated bike lane.

otes Assumes project is completed with a paving project and estimate excludes costs associated with said paving project. Includes potential signal modifications to transition from the buffered bike lanes to the two-way separated bike lane at 2nd Street. Assumes project is completed with a paving project; estimate excludes costs associated with said paving project. Includes flex post delineators along Adams Street between OR 99W and 1st Street and at intersections with high turning volumes. Includes the cost of the following traffic calming elements: traffic diverters at the intersection of Davis Street/8th Street, one speed hump, and two speed tables. Includes the cost of wayfinding signage.

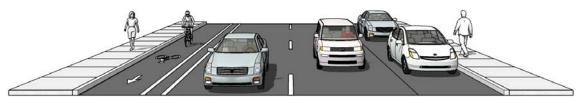
- Includes the cost of the following traffic calming elements: traffic diverters at one intersection, one speed hump, and two speed tables.
- Includes the cost of wayfinding signage.
- Estimate based on those used for the neighborhood greenway on Davis Street. Due to the higher speeds and volumes present along Evans Street, it is likely that the cost of Concept 3B is underestimated.

6 / Preferred Solution Concepts



Buffered Bike Lanes on Baker and Adams Streets





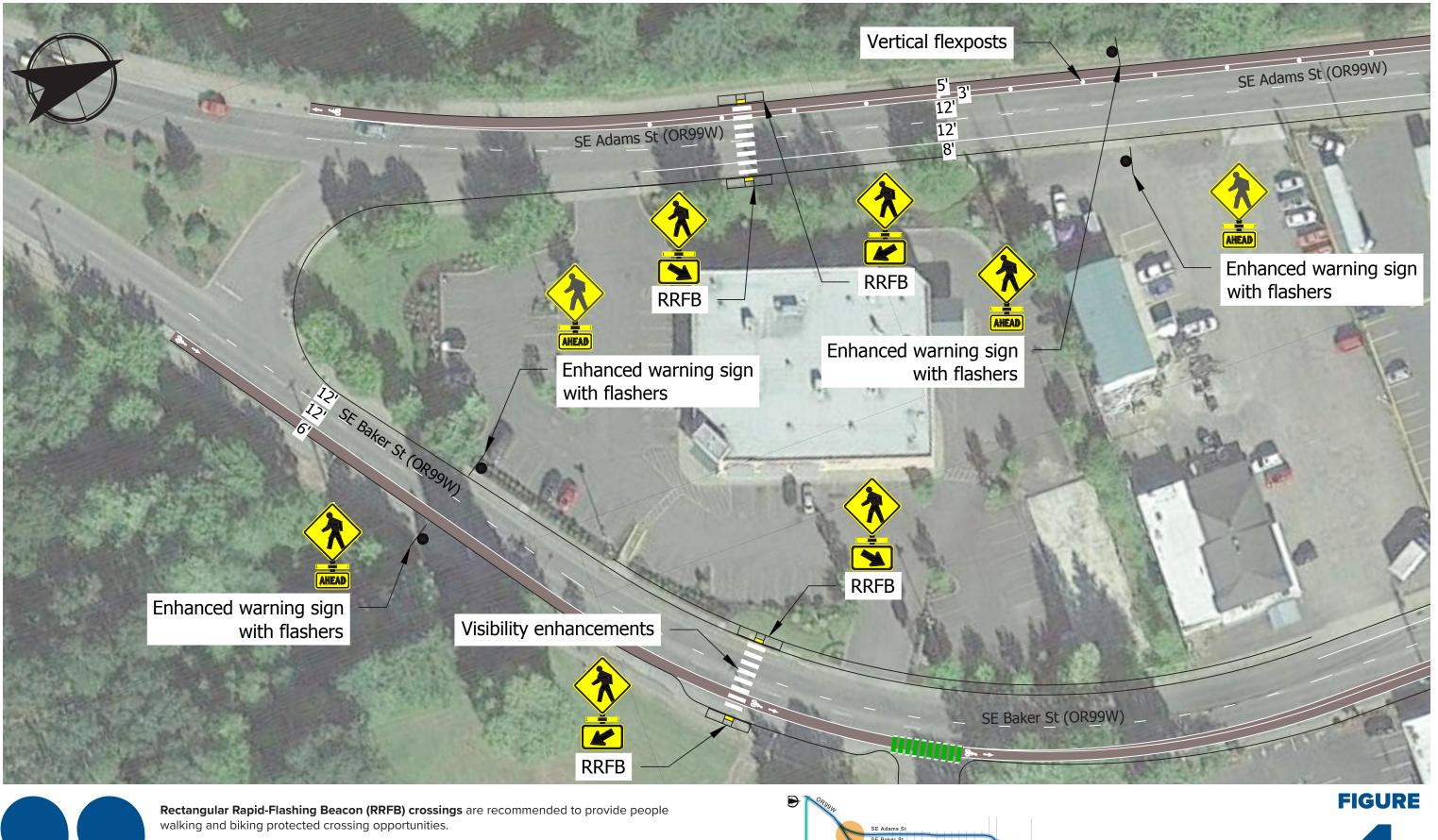
• Neighborhood Greenway on Davis Street



Based on the scoring, public feedback, PAC recommendation (to be confirmed), MAC input, and the distinct benefits each concept provides, the project management team selected Concept 3A: Neighborhood Greenway on Davis Street and Concept 2: Buffered Bike Lanes on Adams Street and Baker Street as the preferred alternative.*

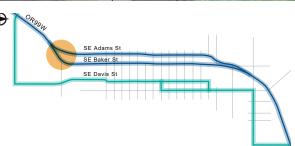


*Planning concept potentially reduces vehicle-carrying capacity of the highway; further evaluation of the project design will be required at the time of implementation to ensure compliance with ORS 366.215.





Vertical flexposts provide people biking with vertical separation from traffic. They are recommended in the near term along Adams Street between OR 99W and 1st Street because there are fewer driveway challenges along this segment. The type and extents of vertical separation may be updated in the future.





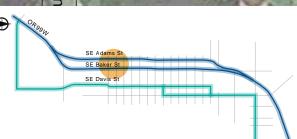


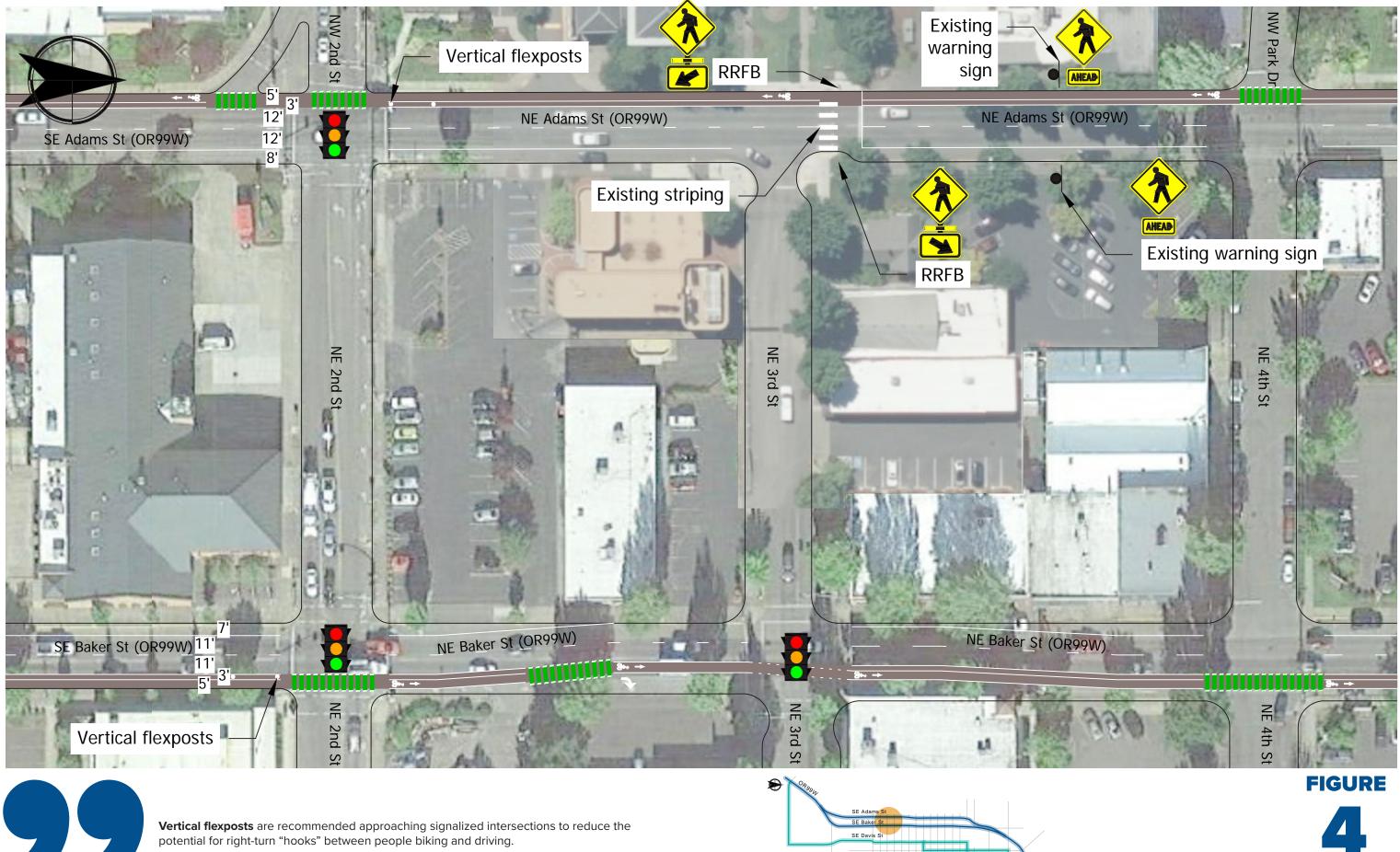






areas, improving safety where bike lanes cross intersections.

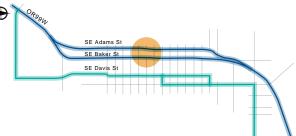


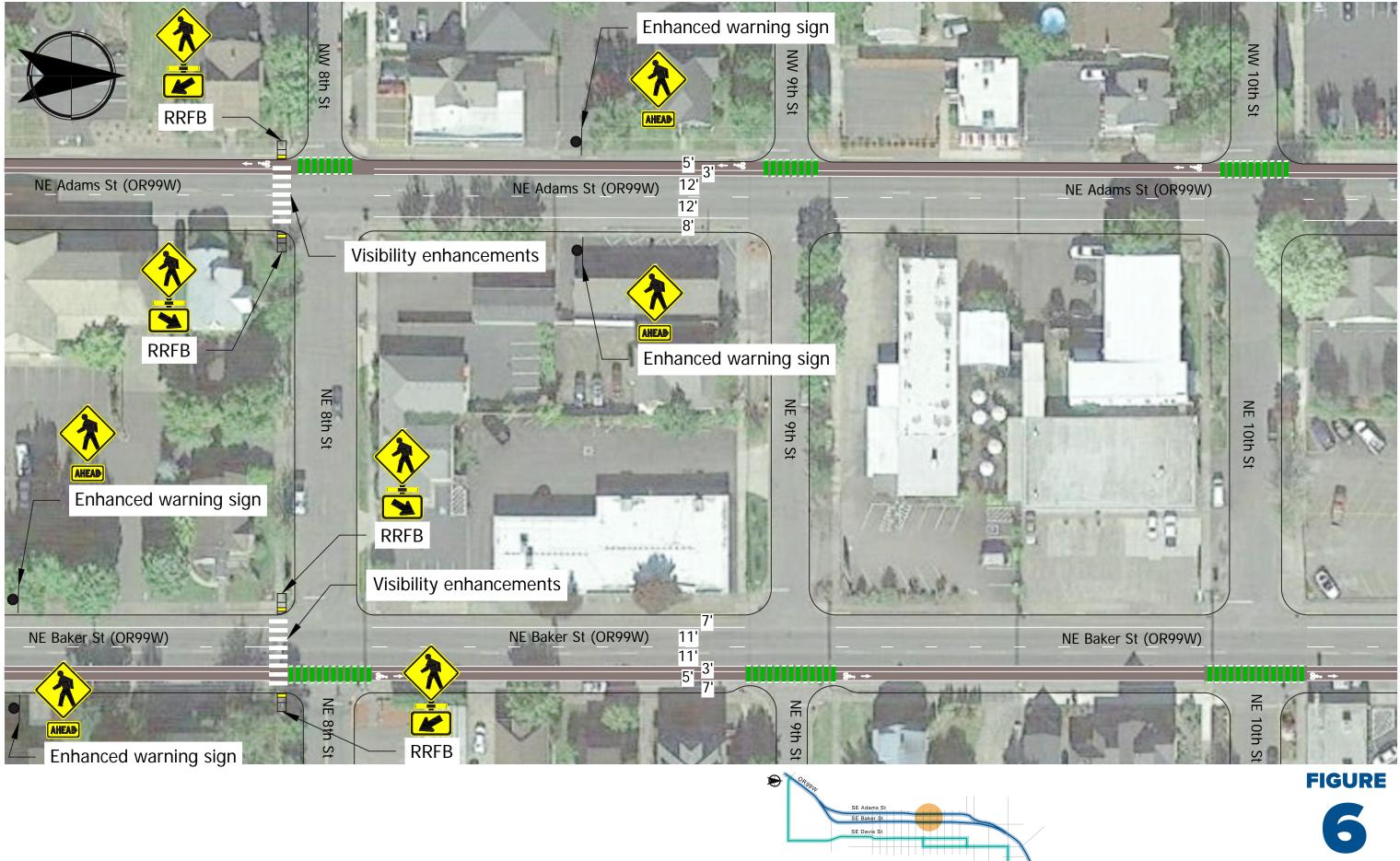


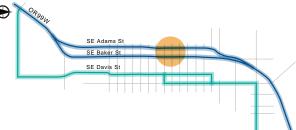




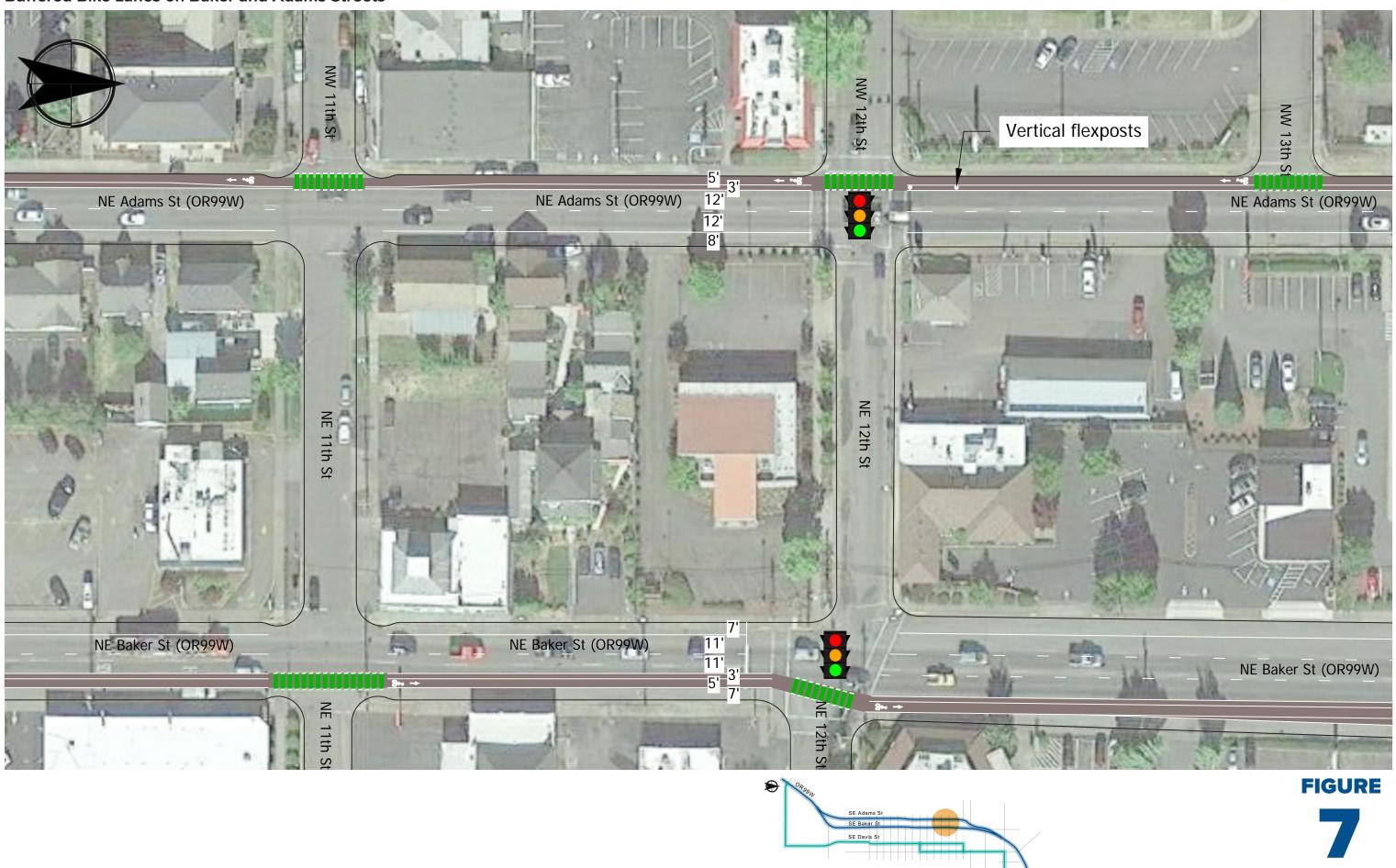






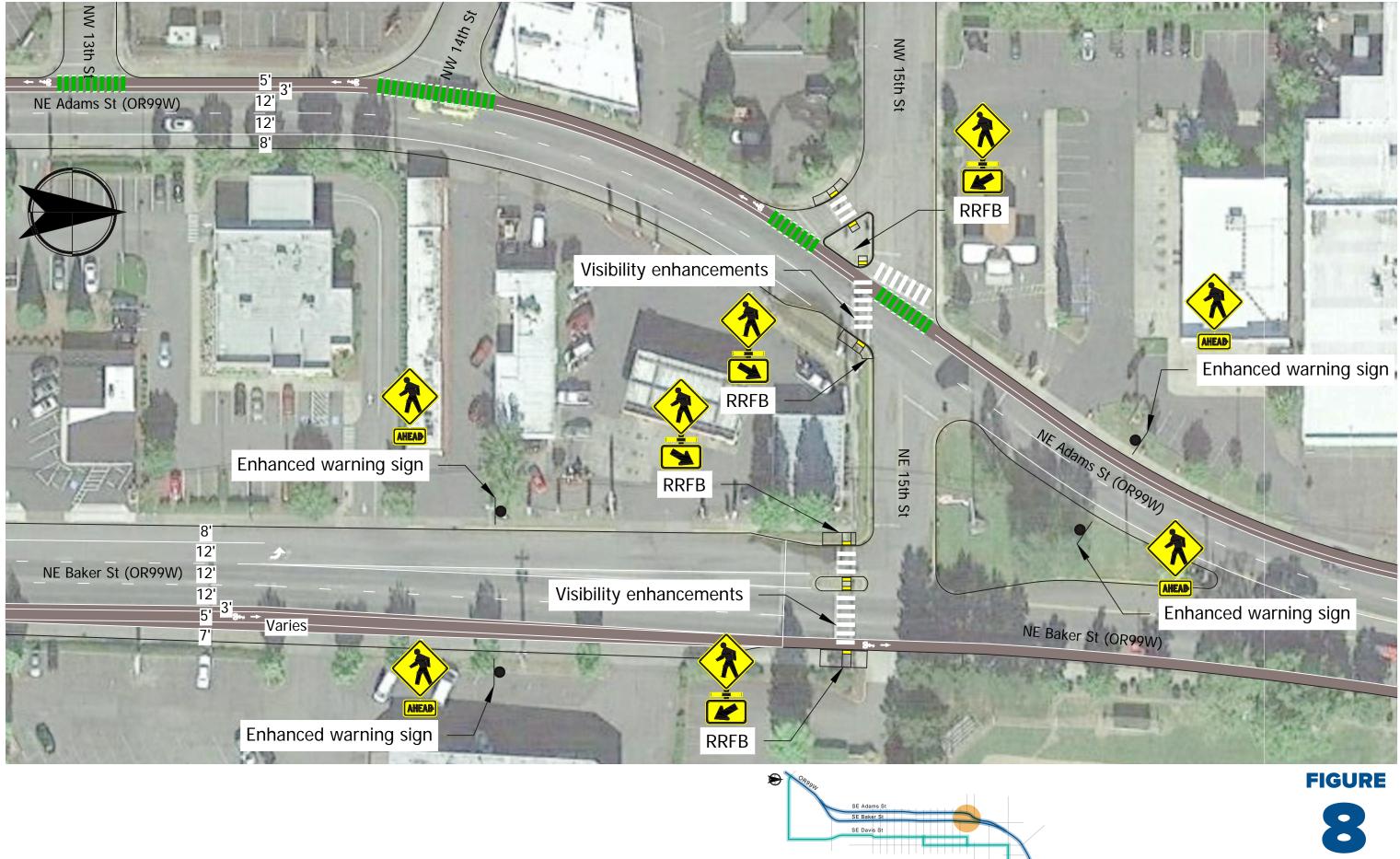


Buffered Bike Lanes on Baker and Adams Streets





Buffered Bike Lanes on Baker and Adams Streets



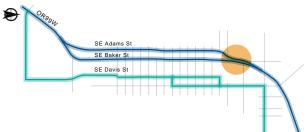


Buffered Bike Lanes on Baker and Adams Streets





The N Baker Street/OR 99W intersection is recommended to be realigned to reduce exposure for people walking and biking through the intersection and add delineation to vehicle movements. This concept uses paint and vertical flexposts to realign the intersection approach as a near-term option with raised concrete recommended as a long-term option. The final design of this intersection will be determined in the design process.



Construct median to prevent overlapping left-turns OR99W (Pacific Highway W) FIGURE

1





signs to increase driver awareness of people walking and biking and direct people walking and biking to the greenway route. The speed limit will be maintained through the corridor at 20 mph, consistent with residential streets in the area.

SE Baker S SE Davis St

Speed humps are included to provide traffic calming, making the environment more comfortable to bike and share the roadway.















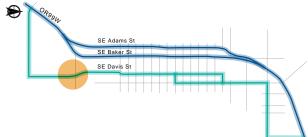




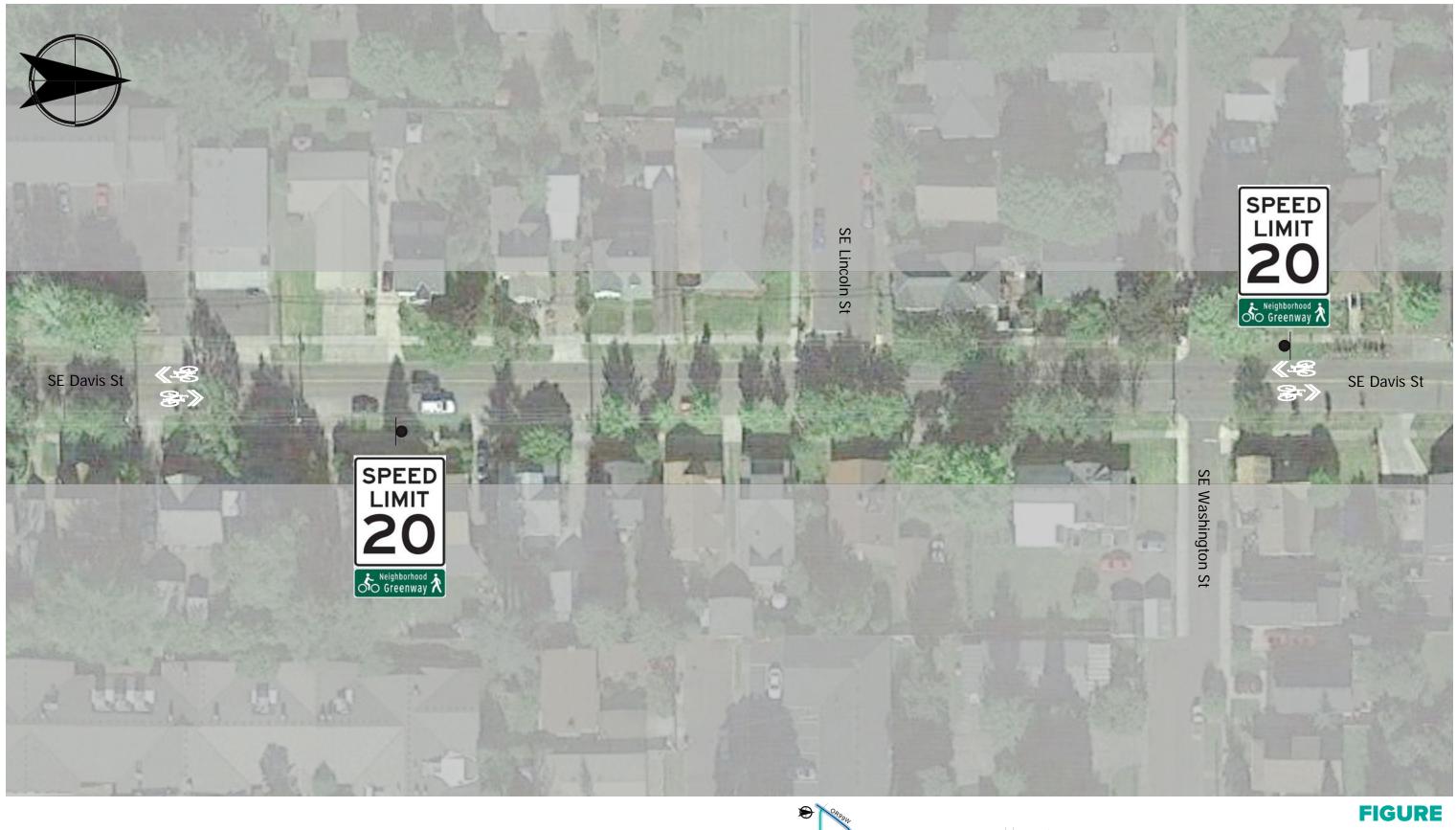


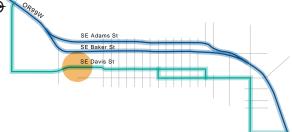






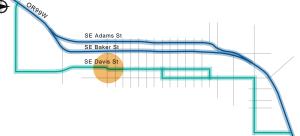




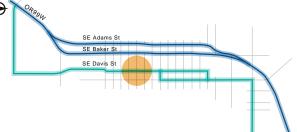












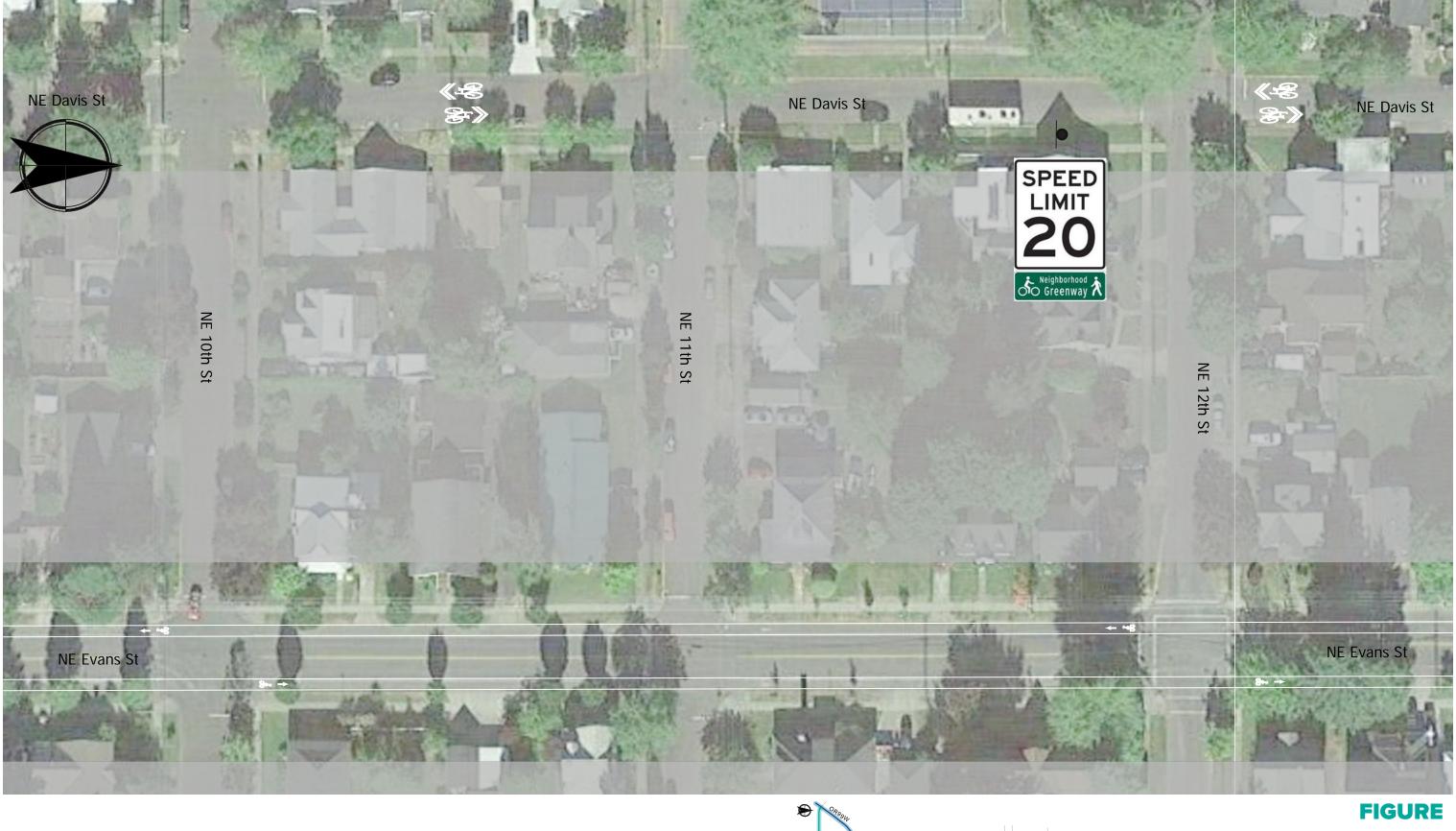
MCMINNVILLE ACTIVE TRANSPORTATION CONCEPT PLAN

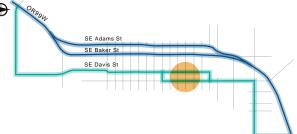
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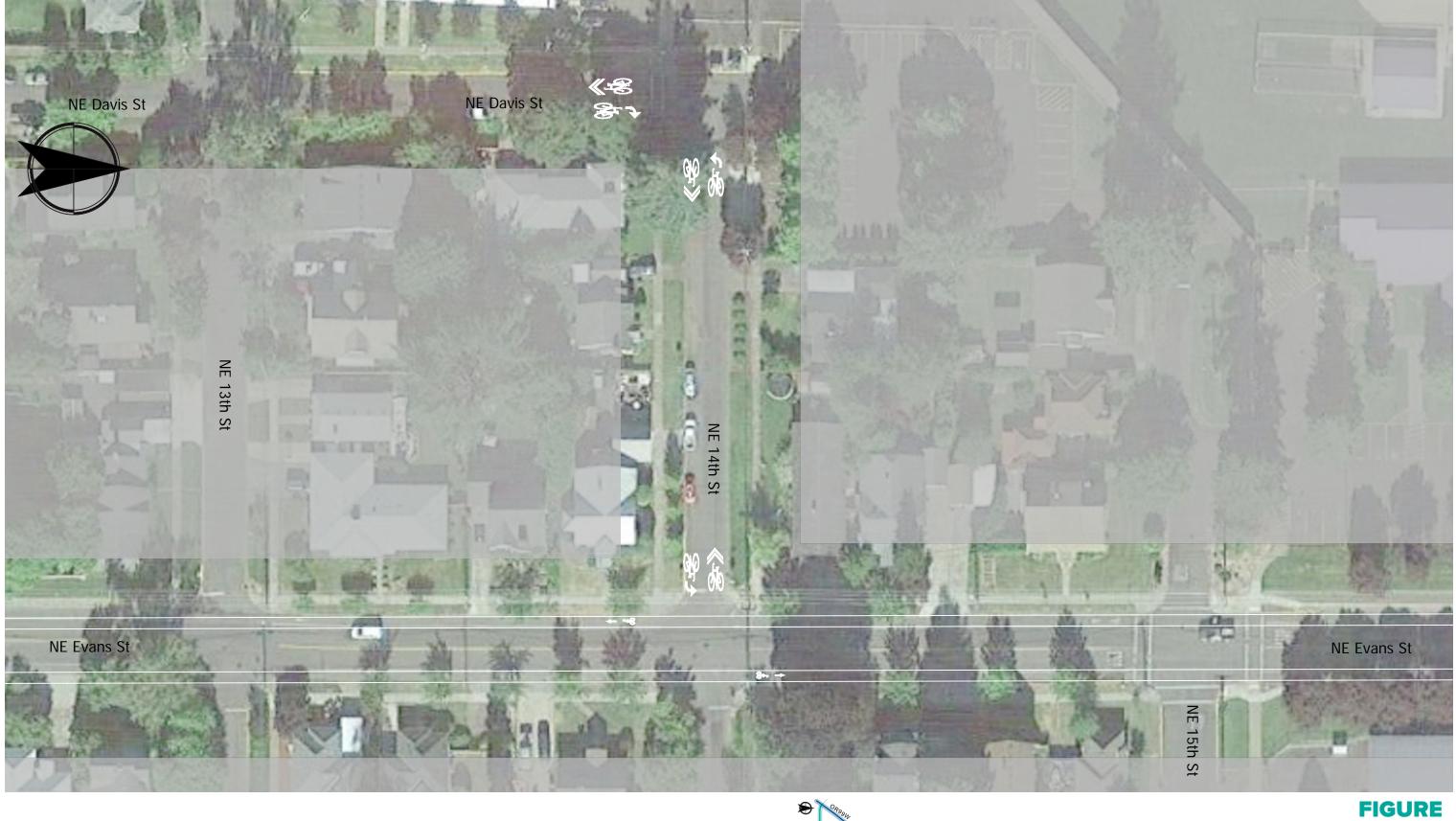








OREGON DEPARTMENT OF TRANSPORTATION | CITY OF McMINNVILLE **65**







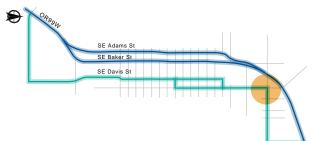








A **shared-use path** is recommended along the east side of NE Evans Street to connect people walking and biking to OR 99W. This concept will require further refinement as part of the formal design process.



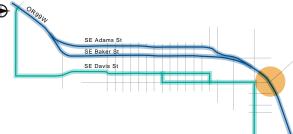






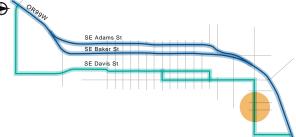








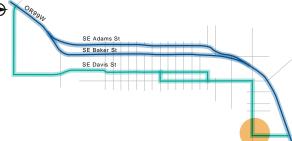




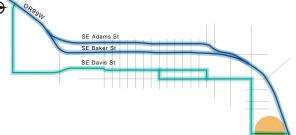


Neighborhood Greenway on Davis Street

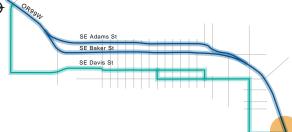












What Puts the Preferred Alternative in the Lead?

- The Davis Street Greenway provides low-stress facilities and a safe crossing at 3rd Street for users of all ages and abilities.
- The Davis Street Greenway is a low-cost option and potential diverters can be introduced as pilot projects.
- The existing character of Davis Street is more conducive to neighborhood greenway facilities; the northerly segment of Evans Street would likely require more substantial traffic calming efforts to serve as a low-stress facility due to speeds and volumes.
- The intersection of Davis Street/3rd Street is signalized, providing a more comfortable intersection crossing than the two-way, stop-controlled intersection of Evans Street/3rd Street.
- The OR 99W Buffered Bike Lanes provide direct access for people biking through the couplet and to destinations west of the couplet.
- The OR 99W Buffered Bike Lanes are a moderatecost option that can be easily added to pavement projects along the couplet.
- Concept 2 and 3A were the public's top choices in the project survey.

PEOPLE WHO PREFER CONCEPT 2, BUFFERED BIKE LANES ON ADAMS STREET AND BAKER STREET, THINK THAT:

- · It is the most intuitive and practical (due to directional flow)
- It has low maintenance requirements
- It provides direct access to businesses on OR 99W
- · People would continue biking on Baker Street even if there was a two-way facility on Adams Street

PEOPLE WHO PREFER CONCEPT 3A. NEIGHBORHOOD GREENWAY ON DAVIS STREET, THINK THAT:

- It is attractive and sensible (due to low traffic volumes and speeds)
- It supports children and beginner cyclists
- It is already used as a parallel route today
- There is no advantage to making OR 99W more bike friendly because there is no need to use it in town
- Other options on OR 99W would increase congestion

7 / Enhanced Pedestrian Crossings

Not only did the project team look at ways for all modes to travel north and south through the study area, but they also evaluated the need for safely crossing the highway—connecting people to neighborhoods and other destinations. Based on analysis, public feedback, and PAC recommendations, the project team selected the following enhanced crossing treatments at the identified crossing locations:

- Coordination with Yamhill County Transit is • High-visibility crosswalk markings, parking restrictions recommended to consider relocating existing transit on crosswalk approach, adequate nighttime lighting stops to enhanced crossing locations to facilitate transit levels, and crossing warning signs use in the area.
- Advance Stop Here For Pedestrians sign and stop line
- Rectangular rapid flashing beacon (RRFB)

Locations recommended for enhanced pedestrian crossings are shown in Figure 1 (pp 26-27), Figure 4 (pp 32-33), Figure 6 (pp 36-37), and Figure 8 (pp 40-41).

Near- and Long-Term Solutions

These concepts can be broken into near-and long-term • Expand the network of neighborhood greenway solutions to streamline construction while providing opportunities to continue making McMinnville a safer, more comfortable place to walk, bike, and roll.

The near-term solutions provide the opportunity to pilot and try out some of the design solutions, such as traffic diverters and flex-post delineators. A pilot approach can introduce McMinnville residents to lower-cost ways to calm traffic and support active modes in a temporary manner. If the "pilot" is well received, then the solutions can be left in place or installed more permanently.

NEIGHBORHOOD GREENWAY ON DAVIS STREET

Near-Term Solutions

- Sharrows
- Signage
- Traffic calming

Long-Term Solutions

• Evaluate success of traffic diverters and consider adding additional traffic calming features.

- routes in McMinnville.
- » Potential connections include a multiuse path on Evans Street between 17th Street and OR 99W and bike lanes or sharrows along Lafayette Avenue, 3rd Street, 4th Street, 5th Street, Birch Street, and Alder Street. Lafayette Avenue has existing bike lanes, and 5th Street has existing sharrows.

BUFFERED BIKE LANES ON ADAMS STREET AND BAKER STREET

Near-Term Solutions

- Construct buffered bike lanes with repaving project
- Provide vertical separation at intersections with highturn volumes along Adams Street and consistently south of 2nd Street where there are no driveway conflict points.

Long-Term Solutions

• Explore additional opportunities for vertical separation with future access consolidations associated with capital and/or redevelopment projects.



Rectangular Rapid Flashing Beacon

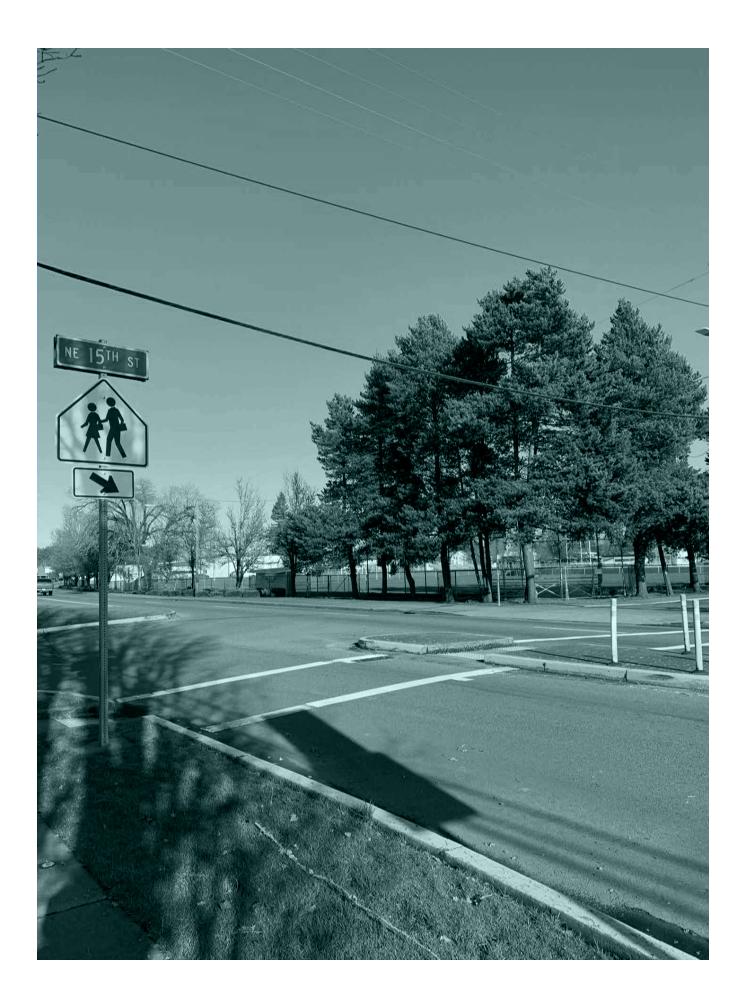


The planning-level cost associated with high visibility crosswalk markings with RRFB is \$125,000 per location. This estimate includes construction and professional fees for ADA ramp reconstruction on both sides of the roadway, striping, signage, and the RRFB. The estimate does not include right-of-way, utility relocations, or bicycle detection on approaches.

"This intersection is **not** pedestrian friendly! Cars are looking out for themselves only. I actively avoid crossing Evans or OR 99W at this corner."

> -Public comment about the corner of OR 99W and Evans Street





8 / Making the Preferred Concept a Reality

Adoption Process

The McMinnville OR 99W (Linfield to McDonald) This plan represents the project management team's preferred concepts based on information provided by Active Transportation Concept Plan solutions can be the project team, the PAC's guidance, and stakeholder separated into distinct projects to support incremental feedback received throughout the planning process. implementation as funding sources are identified. This preferred concept plan will be presented at Securing funding for construction of the Davis Street hearings with the following decision-making bodies for Neighborhood Greenway should be prioritized. If consideration in amending the City of McMinnville's funding sources are identified for any other project. Transportation System Plan: however, that project may be implemented first. Timing and potential funding sources for each project are outlined on the following page.

- McMinnville Planning Commission
- McMinnville City Council

Concept Plan design elements must be vetted through ODOT Region 2's Technical Center and, where applicable, the Oregon Mobility Advisory Committee, to ensure they meet the documented project context and goals.

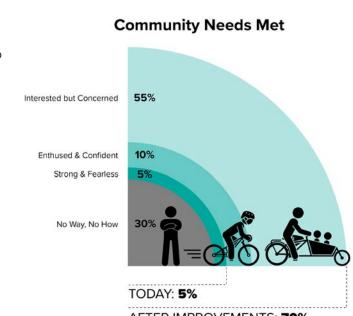
To ensure projects can be funded through ODOT preservation or enhancement programs, City capital project budgets, or private development fees, the project team has prepared an Urban Design Concurrence Document for review by the Mobility Advisory Committee and approval by the Region 2 Roadway Manager following adoption by the City of McMinnville. The subsequent steps are:

- Moving to final design and construction
- Monitoring, operating, and maintaining*

The Concept Plan and Urban Design Concurrence Document will form the basis of these subsequent steps.

If future phases differ from this Concept Plan, the project team should revisit the Corridor Vision Statement Memorandum and Urban Design Concurrence Document, and determine if the original intended outcomes for the project should change. If a change appears appropriate, then justification should be provided and documented.

Implementation and Funding



AFTER IMPROVEMENTS: 70%

Serving the Interested **but Concerned**

Facilities for people biking along the OR 99W corridor today are suitable only for 'strong and fearless' cycliststhose comfortable cycling under any conditions. Making the preferred concepts presented in this plan a reality will provide protected facilities for bicyclists, increasing the likelihood the 'interested but concerned' majority will feel safe traveling through McMinnville by bike.

Potential Funding Sources

Project	Priority Order	Timing	Preliminary Budget for Near-Term Recommendations	Potential Funding Sources				
Davis Street Neighborhood Greenway	1	As soon as funding can be made available	\$141,000	 Safe Routes to Schools 				
OR 99W Buffered Bike Lanes	2	Improvements should occur as part of the next resurfacing preservation project	\$418,000	 Safe Routes to Schools STIP Preservation funding 				
Adams Street/15th Street Enhanced Crossings	3	Construct these two crossings at the same time,* or with development	\$250,000	 Private development Transportation Safety Division grants STIP Preservation funding 				
Baker Street/ Cowls Street Enhanced Crossing	4	Time with upcoming development	\$125,000	 Upcoming private development Transportation Safety Division grants STIP Preservation funding 				
Adams Street/8th Street Enhanced Crossing Baker Street/8th Street Enhanced	5	Construct these two crossings at the same time,** or with development	\$250,000	 Private development Transportation Safety Division grants STIP Preservation funding 				
Crossing Adams Street/3rd Street Enhanced Crossing	6	Time with upcoming development	\$125,000	 Private development Transportation Safety Division grants STIP Preservation funding 				
Adams Street/ Walgreens Crossing	7	Time with upcoming development	\$125,000	 Private development Transportation Safety Division grants STIP preservation funding 				

* The priority order of enhanced crossing projects was established based on PAC input: ** Constructing enhanced crossings in pairs may reduce costs and help make the full connection across the couplet, however enhanced crossings can be designed and constructed separately if there is only available funding for one crossing.

*** A midblock enhanced crossing at Adams Street across from the Baker Street/Cowls Street Enhanced Crossing was added based on input from the PAC, PMT, Planning Commission, and City Council. Formal analysis was not conducted at that location as part of this planning effort.

SENATE BILL 408 REQUIREMENTS

Oregon Senate Bill (SB) 408 requires balancing competing interests on facility plans (e.g., Concept Plan) developed by ODOT. An example of competing interest is described in ODOT's Oregon Greenhouse Gas Reduction Toolkit: Strategy Report (Reference 2): "Preserving the economic interests of property owners (who place a high value on convenient access to their property) will require finding a balance between private property interests and the safety and operations of public roadways."

The concepts developed to address the multimodal needs along OR 99W are not anticipated to impact the access to or reduce capacity of the OR 99W corridor. The neighborhood greenway will not impact facilities along OR 99W; the buffered bike lanes maintain a minimum of 11-foot-wide travel lanes along the couplet and include flex posts along limited segments of the corridor where there are no access management or parking concerns.

9 / Supporting Documentation

- **Detailed Cost Estimates**
- **Blueprint for Urban Design Documentation** •
- **Technical Memoranda**
- **Public Involvement & PAC Meeting Notes**

89



ATTACHMENT C CITY OF MCMINNVILLE

OR 99W (Linfield to McDonald) **ACTIVE TRANSPORTATION CONCEPT PLAN Supporting Documentation**

APRIL 2021





Detailed Cost Estimates

McMinnville OR 99W Active Transportation Concept Plan Concept 1: Two-Way Separated Bike Lane (Cycle Track) ODOT



Engineer's Conceptual Estimate

Prepared By: Eric Germundson, PE	Date: April 16, 2021				
Reviewed By: Nick Gross, Amy Griffiths, and Marc Butorac					
This Estimate he	3C	(See rating scale gu	de below.)		
ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST	
MOBILIZATION	LS	ALL	\$37,000.00	\$37,000.00	
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	\$8,000.00	\$8,000.00	
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$24,000.00	\$24,000.00	
STRIPE REMOVAL	FOOT	500	\$0.50	\$250.00	
LEGEND REMOVAL	SQFT	250	\$3.00	\$750.00	
BAR REMOVAL	SQFT	500	\$3.00	\$1,500.00	
PERMANENT SURFACE MOUNTED TUBULAR MARKERS	EACH	350	\$200.00	\$70,000.00	
METHYL METHACRYLATE, EXTRUDED	FOOT	16,500	\$4.00	\$66,000.00	
PAVEMENT LEGEND, TYPE B-HS: ARROWS	EACH	10	\$20.00	\$200.00	
PAVEMENT BAR, TYPE B-HS	SQFT	2,000	\$10.00	\$20,000.00	
PAVEMENT LEGEND, TYPE B-HS: ON-STREET PARKING	EACH	10	\$250.00	\$2,500.00	
GREEN BICYCLE LANE, METHYL METHACRYLATE	SQFT	33,500	\$5.00	\$167,500.00	
REMOVE EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00	
REMOVE AND REINSTALL EXISTING SIGNS	LS	ALL	\$10,000.00	\$10,000.00	
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$10,000.00	\$10,000.00	
SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	500	\$25.00	\$12,500.00	
SIGNAL MODIFICATIONS	LS	ALL	\$100,000.00	\$100,000.00	
	UCTION COST	\$ 535,200			
	IECT SUBTOTAL	\$ 535,200			
	\$ 160,560				
	0% Contingency	\$ 160,560			
	TOTAL	ESTIMATED P	ROJECT COST	\$ 857,000	

Assumptions:

- Cycle track assumed to be painted green
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Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions;

limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

McMinnville OR 99W Active Transportation Concept Plan Concept 2: OR99W Buffered Bike Lanes



Engineer's Conceptual Estimate

Prepared By: Eric Germundson, PE	Date: April 16, 202	21			
Reviewed By: Nick Gross, Amy Griffiths, and Marc Butorac					
This Estimate he	as a Rating of:	3C	(See rating scale gu	ide below.)	
ITEM	UNIT	UNIT TOTAL UNIT P		TOTAL COST	
MOBILIZATION	LS	ALL	\$23,000.00	\$23,000.00	
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	\$5,000.00	\$5,000.00	
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$12,000.00	\$12,000.00	
STRIPE REMOVAL	FOOT	1,000	\$0.50	\$500.00	
LEGEND REMOVAL	SQFT	500	\$3.00	\$1,500.00	
BAR REMOVAL	SQFT	1,000	\$3.00	\$3,000.00	
METHYL METHACRYLATE, EXTRUDED	FOOT	33,500	\$4.00	\$134,000.00	
PAVEMENT LEGEND, TYPE B-HS: ARROWS	EACH	20	\$20.00	\$400.00	
PAVEMENT BAR, TYPE B-HS	SQFT	4,000	\$10.00	\$40,000.00	
PAVEMENT LEGEND, TYPE B-HS: ON-STREET PARKING	EACH	20	\$250.00	\$5,000.00	
TUBULAR MARKERS	EACH	70	\$125.00	\$8,750.00	
REMOVE EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00	
REMOVE AND REINSTALL EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00	
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$5,000.00	\$5,000.00	
SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	500	\$25.00	\$12,500.00	
	UCTION COST	\$ 260,650			
	IECT SUBTOTAL	\$ 260,650			
	trative Services	\$ 78,195			
	0% Contingency	\$ 78,200			
	TOTAL	ESTIMATED P	ROJECT COST	\$ 418,000	

Assumptions:

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Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

McMinnville OR 99W Active Transportation Concept Plan Concept 3: Neighborhood Greenway on Davis Street



Engineer's Conceptual Estimate

Prepared By: Eric Germundson, PE	Date: April 16, 2021				
Reviewed By: Nick Gross, Amy Griffiths, and Marc Butorac					
This Estimate has	3C (See rating scale guide below.)				
ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST	
MOBILIZATION	LS	ALL	\$8,000.00	\$8,000.00	
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	\$2,000.00	\$2,000.00	
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$4,000.00	\$4,000.00	
PAVEMENT BAR, TYPE B-HS	SQFT	50	\$10.00	\$500.00	
PAVEMENT LEGEND, TYPE B-HS	EA	94	\$300.00	\$28,200.00	
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$5,000.00	\$5,000.00	
TRAFFIC SEPARATOR	EA	1	\$5,000.00	\$5,000.00	
SPEED HUMPS	EA	3	\$10,000.00	\$30,000.00	
SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	200	\$25.00	\$5,000.00	
	\$ 87,700				
	\$ 87,700				
3	\$ 26,310				
	\$ 26,310				
	\$ 141,000				

Assumptions:

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Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

McMinnville OR 99W Active Transportation Concept Plan Concept 3: Neighborhood Greenway on Evans Street



Engineer's Conceptual Estimate

Prepared By: Eric Germundson, PE	Date: April 16, 2021				
Reviewed By: Nick Gross, Amy Griffiths, and Marc Butorac					
This Estimate has	3C	(See rating scale gu	iide below.)		
ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST	
MOBILIZATION	LS	ALL	\$8,000.00	\$8,000.00	
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	\$2,000.00	\$2,000.00	
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$4,000.00	\$4,000.00	
PAVEMENT BAR, TYPE B-HS	SQFT	50	\$10.00	\$500.00	
PAVEMENT LEGEND, TYPE B-HS	EA	94	\$300.00	\$28,200.00	
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$5,000.00	\$5,000.00	
TRAFFIC SEPARATOR	EA	1	\$5,000.00	\$5,000.00	
SPEED HUMPS	EA	3	\$10,000.00	\$30,000.00	
SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	200	\$25.00	\$5,000.00	
	\$ 87,700				
	\$ 87,700				
3	\$ 26,310				
	\$ 26,310				
	\$ 141,000				

Assumptions:

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Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

Blueprint for Urban Design Documentation

OREGON DEPARTMENT OF TRANSPORTATION Urban Design Concurrence CONTEXT AND MODAL INTEGRATION

Date: April 22, 2021

Project/Corridor Title: McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan

Key Number: NA

EA: 21PF220/721

Planning Document Summary

City of McMinnville Transportation System Plan (2010): The Goal and Policy Guidance established in the City of McMinnville Transportation System Plan (TSP) were used as the basis for developing the Corridor Vision Statement for the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan (Concept Plan). The TSP identifies a list of prioritized projects including active transportation (AT) recommendations along OR 99W to improve safety for people walking and biking within the project study area.

City of McMinnville Comprehensive Plan (Volume II) (2004): The transportation system policies identified in Chapter VI of the Comprehensive Plan were reviewed when developing the Corridor Vision Statement to ensure consistency. Relevant policies identified in Chapter VI include, but are not limited to:

- Complete Streets
- Multi-Modal Transportation System
- Connectivity and Circulation
- Transportation Safety
- Transportation Sustainability
- Pedestrian Programs
- Bicycle System Plan

City of McMinnville Downtown Strategic Parking Management Plan (2018): The qualitative and quantitative data provided in the Downtown Strategic Parking Management Plan, most notably along OR 99W, was reviewed and analyzed as part of the existing conditions and future needs assessment. The analysis was incorporated as part of the alternative development considering the recommendations identified in the Downtown Strategic Parking Management Plan to inform decision making for alternative development located along OR 99W.

McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan Project Vision: Identify improvements in the OR 99W corridor that will result in a safer, more comfortable, and attractive place to walk, bike, roll and facilitate transit use. It is anticipated that the Concept Plan will be adopted into the City's TSP Update, scheduled to begin in Summer 2021.

OREGON DEPARTMENT OF TRANSPORTATION Urban Design Concurrence CONTEXT AND MODAL INTEGRATION

General Project Information											
	Rt. No.	Hwy No.	NHS	Functional Classification	State Classifica		Reduction Review Rt	Truck %		Posted Speed	Current ADT
Route Information	OR 99W	091	Yes 🛛 No 🗆	Other Urban Principal Arterial	Regior		Yes ⊠ No □	16.37 (Baker)	Not Spee (7/ nor	30-35 e: School ed zone 20 A-5P) @ th end of ouplet	13,000 (Adams) 12,600 (Baker)
	Fun Cate	-	City and County				Begin MP	End MP	Speed		Future ADT (20 Years)
Project Information	SPR/PI	PR/Planning McMinnville, Yamhill County					36.36 (north)	38.46 (south)	Design: 30 Target: 25		13,500 – 14,100 (Adams) 14,600 – 16,300 (Baker)
	Set None Shallor Mediu	ne 🗌 Comm/Industrial 🗌 allow 🗍 Retail 🖾 edium 🖾 Residential 🖾			ng Future	C Spaci Type: unma cross	Marked & walks/signals	On-Str Parki Yes ⊠	ng No	# Accesses Per Block Average of 0-3 per block	
Defining Character	Large				None Share Std. L Widtl Othe No bi in cou Mark from 38.46 of cou from	ed Lane 🗌 ane 🔲 h: r: 🛛 🖾 ke facilities	Parallel Most ~350 Diagonal U "double" k		lock Size J' with a few blocks of ~750' on side of the		

	Project Goals and Outcomes
	A repaving "preservation" project along the Baker/Adams Couplet (OR 99W) from MP 37.04 to MP 38.13 was proposed for the 2021-2024 STIP cycle but was not selected for funding. This project is not currently slated for the 2024-2027 STIP cycle, but an ADA ramp project is scheduled for 2024 and could potentially be combined with a repaving preservation project. The goal of the Concept Plan is to advance the "readiness" of active transportation investments and elements to be incorporated into the future preservation project. The solutions identified in this Concept Plan can also comprise a standalone active transportation project or portions could be funded through the Safe Routes to School construction program.
Brief Project Description	The primary purpose of the McMinnville OR 99W Active Transportation Concept Plan is to identify improvements in the OR 99W corridor that will result in a safer, more comfortable, and attractive place to walk, bike, roll and facilitate transit use. This Concept Plan identified specific multimodal elements that could be added to future projects based on the context and guiding principles from the BUD. All concepts/alternatives were vetted extensively through public outreach and approved by the City of McMinnville as an amendment to their Transportation System Plan.
	 Through this planning process, the project team addressed the following needs. Preserved two northbound and two southbound lanes to accommodate traffic demand Addressed bicycle facility needs by providing on-street buffered bicycle lane facilities along OR 99W and a low-stress, neighborhood parallel route Ensured connectivity and access for all users in McMinnville Addressed OR 99W safety issues for people walking and rolling (wheelchairs, hover boards, skateboards, etc.)

Describe There	was on-going coordination with the City throughout the project as they							
Community were	were active participants on the Project Management Team (PMT). Specific							
Outreach comm	community outreach engagement and strategies are described below:							
Summarize								
Commitments, 1)	The PMT formed a Project Advisory Committee (PAC), made up of citizens							
Expectations 2)	representing diverse modal perspectives as well as representation from local business owners, emergency service providers, the school district, and a member from the City Planning Commission and Council. The PAC also included ODOT District/Maintenance representatives. The PAC met three times, at key project milestones, to provide input on the project material and the Concept Plan. The PMT hosted a virtual public meeting to solicit broad input on analysis, alternatives/concepts, and preferred alternative concept development. The virtual meeting included a live presentation and several weeks for people to add comments through email, a survey, or an interactive map. 76 community comments were received. An "information only" presentation was provided to ODOT's Mobility Advisory Committee (MAC) Stakeholder Forum. Alternatives/concepts were presented since they could potentially impact the OR 99W cross- section which is a Reduction Review Route. The MAC responded positively regarding the buffered bike lane concept as well as the neighborhood greenway. City of McMinnville held a joint Planning Commission/City Council Work Session and conducted Planning Commission and City Council hearing resulting in the adoption on the Concept Plan into the city's TSP on XXXX							

Modal Integration								
	Existing Mo	dal Integr	ation		Future Moda	l Integra	tion	
Determine	Pedestrians	🗆 High	🛛 Medium	🗆 Low	Pedestrians	🛛 High	🗆 Medium	□ Low
Modal	Bicycles	🗆 High	□ Medium	🛛 Low	Bicycles	🛛 High	🗆 Medium	□ Low
Integration	Transit	🗆 High	🗵 Medium	□ Low	Transit	🛛 High	🗆 Medium	□ Low
	Freight/Moto Vehicles	or 🛛 High	🗌 🗆 Medium	Low	Freight/Motor Vehicles	🛛 High	□ Medium	🗆 Low

	Context		
Traditional Downtown/CBD			
Residential Corridor 🗆	Suburban Fringe	Rural Community 🗆	

Context Discussion

STUDY AREA: The McMinnville Active Transportation Concept Plan study area is contained to the 2.1 mile segment of OR 99W between NE McDonald Road (MP 36.36) and SW Linfield Avenue (MP 38.46). Just north of NE 15th Street (MP 37.12), OR 99W splits into a couplet configuration with northbound travel along NE Baker Street and southbound travel along NW Adams Street. The couplet merges back at SW Edmunston Road (MP 38.22).

CONTEXT OVERVIEW: North of the couplet, the adjacent land uses of OR 99W primarily consist of commercial with shallow setbacks, off-street parking, and medium block sizes. Throughout the couplet, the adjacent land uses consist of a mix of residential and commercial with minimal setbacks, on-street parking, consistently spaced small blocks, and buildings orientated towards the roadway. At SE 1st Street (MP 37.81), the context of OR 99W changes as the couplet prepares to merge back. The adjacent land uses of OR 99W between SE 1st Street and SW Linfield Avenue are less defined, similar to the northern portion of the corridor, with shallow setbacks, off-street parking, and medium block sizes.

CONTEXT SELECTION: The project team selected two contexts for the project area – **Traditional Downtown/CBD** and **Urban Mix**. The urban context recommendations for OR 99W considered the existing and future desired contexts of the corridor and surrounding land uses.

NE McDonald Lane (MP 36.36) to NW 15th Street (MP 37.12):

Between NE McDonald Lane and NW 15th Street, adjacent zoning is primarily C-3 (General Commercial) with one M-1 (Light Industrial) parcel and one R-2 (Single-Family Residential) parcel. Building setbacks are primarily medium to large with off-street parking typically located between business frontages and the roadway. The majority of building orientation does not face the roadway, but rather the parking areas serving the respective businesses. Building coverage adjacent to the right-of-way is medium to low. Block sizes are not well defined and vary between large and medium.

 Based on the existing and future desired context as well as the envisioned modal priorities, Urban Mix is recommended as the BUD context that is most appropriate and best aligns with the corridor vision within this segment.

NW 15th Street (MP 37.12) to SE 1st Street (MP 37.81):

Between NW 15th Street and SE 1st Street, adjacent zoning is entirely C-3 (General Commercial) with R-4 (Multi-Family Residential) located behind. Building setbacks are shallow and the majority of building facades are orientated toward the roadway. On-street parking exists throughout this segment with occasional off-street parking areas. Building coverage adjacent to the right-of-way is medium with a mix of parking and commercial frontages. Block sizes are well defined, consistent, and relatively small.

 Based on the existing and future desired context as well as the envisioned modal priorities, Traditional Downtown/Central Business District is recommended as the BUD context that is most appropriate and best aligns with the corridor vision within this segment.

SE 1st Street (MP 37.81) to SW Linfield Avenue (MP 38.46):

Between SE 1st Street and SW Linfield Avenue, adjacent zoning is a primarily R-4 (Multi-Family Residential); however, a small mix of C-3 (General Commercial) and O-R (Office/Residential) is present. The Cozine Creek, zoned F-P (Flood Plain) runs along the west side of OR 99W within this segment resulting in little to no development north of SW Edmunston Street. Building setbacks are shallow to medium with

most buildings orientated towards the roadway. On-street parking is present between SE 1st Street and SE Handley Street, with private driveways providing residential off-street parking. Building coverage adjacent to the right-of-way is medium to low. Block sizes are not well defined and vary between large and medium.

• Based on the existing and future desired context as well as the envisioned modal priorities, **Urban Mix** is recommended as the BUD context that is most appropriate and best aligns with the corridor vision within this segment.

	McMinnville Couplet: OR 99W (NE McDonald Lane to						
Section Name:	Linfield Av	/enue)	·			Route No.:	OR 99W
Highway Name:	Pacific Hig	ghway West	nway West Highway No.:				
County Name:	Yamhill	Region:	2 Key No.: NA			EA No.:	NA
Begin MP:	36.36	RDWY ID:	1 2 Mileage T			Гуре:	0 🛛 Z 🗌
End MP:	38.46	Mileage Overlap Code: 0 🛛 1] 2 🗌		

PROJECT DATA

Functional Classification:		Urban Principal Arterial			State Classification: Regional						
Current ADT (Year):		13,000 (west side), 12,600 (east side)			Design ADT (Year):						
% Trucks:	16.37		Vartical Clearance /			⊠Yes □No					
Posted Speed:	30 MPH, 35 MPH on the west side, south of 2 nd St.	Design Speed:			30	Target Speed:					
	Funding:	NA									
Current Estimate:				Context		Urban Mix					
Federal Highway Approval (PODI) Required:	Yes 🗌 No 🗌	Design Category	3R [4R [1R 🗌 SF 🗌	NHS: Non NHS:		Top 10% SPIS Site	:	Yes	⊠No □

	Design Element Summary Table	Width (ft.) **
	Frontage Zone	1'
Pedestrian	Pedestrian Zone	5′
Realm	Buffer Zone	7'-8'
	Curb/Gutter	.5'
	Separated Bicycle Lane (Curb Constrained Facility)	NA
_	On-Street Bicycle Lane (Not Including Buffer)	5′
Transition Realm	Bicycle/Street Buffer	3'
	Right Side Shoulder (If Travel Lane Directly Adjacent to Curb	NA
	On-street Parking	7-8′
Travelway	Travel Lane	11'-12' (Adams St. stays at 12' while Baker St. narrows slightly to 11')
Realm	Right Turn Lane (Including Shy)	NA
	Left Turn Lane	NA

Left Side/Right Side Shy Distance	NA
Two-Way Left Turn Lane	14
Raised Median – No Turn Lane (Including Shy Distances) NA
Left-Turn Lane with Raised Curbed Median/Separator (Includes 16" Separator and Shy Distance	NA

**For dimensions less than range defined in the Blueprint for Urban Design, a design exception is required

	Modal Integration					
Appropriate Modal Integration	Pedestrians Bicycles Transit Freight/Motor Vehicles	□ High □ High □ High ⊠ High	⊠ Medium ⊠ Medium ⊠ Medium □ Medium	□ Low □ Low □ Low □ Low		
Briefly Discuss Final Modal Integration Decisions	2.2.2 highlights other roa Review Route, therefore the primary goals of the I improve connectivity, saf freight access must be ma priority. A future repaving	dway char freight mc McMinnvil Tety, and tr aintained, g and/or A ment while	acteristics to obility is impor le Active Tran ransportation pedestrian ar DA project wi	esigning for multimodal users. Section consider. OR 99W is a Reduction rtant to maintain. At the same time, sportation Concept Plan is to options for active modes. While ad bicycle access and safety is a high ill provide the opportunity to update ing pavement conditions and		

	Pedestrian Realm
Discuss final Dimensions of Pedestrian Realm Elements	Chapter 3, Table 3-4 provides general guidance for the Pedestrian Realm. Tables 3-11 and 3-12 provide specific guidance (based on the context) for the Pedestrian Realm design. This realm includes sidewalks as well as buffer zones.
	The McMinnville OR99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan does not include changes to the pedestrian/buffer zones since it was focused on curb-to-curb improvements. The Concept Plan therefore maintains the existing 6' sidewalk (5' sidewalk plus 1' frontage zone in CBD) with a 7'-8' buffer with on-street parking. The curb zone is 0.5.'
	 The project team also evaluated the need for safely crossing the highway – connecting people to neighborhoods and other destinations. Based on the analysis, public feedback, and PAC recommendations, the project team selected the following enhanced crossing treatments at the identified crossing locations: High visibility crosswalk markings Parking restrictions on crosswalk approach Adequate nighttime lighting levels

•	Crossing warning signs
•	Advance Stop Here For Pedestrians sign and stop line
•	Rectangular rapid flashing beacon (RRFB)
The ide	entified locations include:
•	15th Street / NE Adams Street
•	15th Street / NE Baker Street
•	8th Street / NE Adams Street
•	8th Street / NE Baker Street
•	3rd Street / NE Adams Street
•	SE Cowls Street / SE Baker Street
	procept Plan proposes removing parking on the west side of Adams St. due to
	nely low utilization rates (peak use of the 208 parking spaces was at 10%)
	ned with BUD guidance and strong City/community desire for bicycle facilities on
	W. This parking space will be replaced with a buffered bike lane which will
continu	ue to serve (like the parking did) as an 8' buffer for pedestrians.

	Transition Realm
Discuss final Dimensions of Transition Realm Elements	Chapter 3, Table 3-5 provides general guidance for the Transition Realm. Tables 3-11 and 3-12 provide specific guidance (based on the context) for the Transition Realm design. This realm includes the bicycle facility design, parking space, and maintenance. The Concept Plan looked at several alternatives for this realm including a two-way separated bike lane, buffered bike lanes, and neighborhood greenways (on the local roadway system). The preferred plan includes buffered bike lanes on OR 99W as well as a local, parallel neighborhood greenway route . The buffered bike lane option for OR 99W was selected based on evaluation criteria as well as extensive outreach which included early input from the MAC. This option was selected in part because it is more cost effective, has lower maintenance costs/challenges, and has less impacts on freight movements than the two-way separated bike lane concept. The community also liked that people riding bikes are still going with the direction of traffic (more intuitive) that that it would connect people directly to businesses along both corridors. The MAC stakeholders verbally supported the buffered bike lanes combined with the neighborhood route, and made several positive comments about vertical flexposts which are proposed along select segments. In order to get buffered bike lanes on Adams St. (southbound), parking will be removed on the west side of the highway. A parking utilization study was completed to assess this option and parking demand was found to be extremely low. When presented to the City, the PAC, the MAC, and the general public, adding buffered bike lanes where there is currently parking was strongly supported.

The buffered bike lane design concept includes a 5' lane with a 3' buffer space on both Adams St. and Baker St. The Concept Plan recommends vertical flexposts and green pavement markings at key locations.

Note: Region 2 Traffic Operations Engineer vetted the concept and preliminarily agreed to the 7' parking with 11' travel lanes since there is a buffered bike lane (5' and 3') immediately adjacent to the parking and travel lanes. Region Traffic and District 3 also reviewed and agreed to the proposed use of green pavement markings and vertical flexposts, however final design approval is still needed as well as an agreed upon maintenance plan.

Travelway Realm					
	Chapter 3, Table 3-6 provides general guidance for the Travelway Realm. Tables 3-11 and 3-12 provide specific guidance (based on the context) for the Travelway Realm design. This realm includes travel lane widths and turning lane widths.				
Discuss final Dimensions of Travelway Realm Elements	The Plan's preferred alternative includes maintaining two lanes of travel for both the northbound and southbound directions with the travel lanes ranging from 11'-12' due to the existing width variations and other design elements. Both directions (Adams St. and Baker St.) will have buffered bike lanes. On the north end of the couplet where the roadways are wider, the travel lanes are at 12' with a 14' middle turn lane. When you get into the couplet, Adams St. maintains 12' travel lanes throughout, but Baker St. narrows down (south of NE 12th St.) to 11' travel lanes , which allows the corridor to maintain both parking and provide for buffered bike lanes.				

Design Element Less Than Approved Range				
Final Design Elements Less Than Approved Range Dimension	Are Any Final Design Elements Less Than the Approved Dimension Range? No ⊠ Yes □ If yes, list the elements below and attach an approved design exception for each			

<u>Signatures</u> Prepared By:		Date:	
- y -	Prepare By		
	Company Name: Kittelson & Associates, In	าC.	
Concurred By:		Date:	
	(ODOT Region Maintenance Manager or Region Maintenance Operations Manager)		

(Print Name)

Approved By:

Date:

(Region Technical Center Manager)

(Print Name)

Technical Memoranda



851 SW 6th AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 F 503.273.8169

MEMORANDUM

Date:	October 7, 2020	Project #: 23021.020
To:	Project Management Team	
	Project Advisory Committee	
From:	Nick Gross, Amy Griffiths, Marc Butorac, PE, PTOE, PMP	
Project:	McMinnville Active Transportation Concept Plan	
Subject:	Final Corridor Vision Statement	

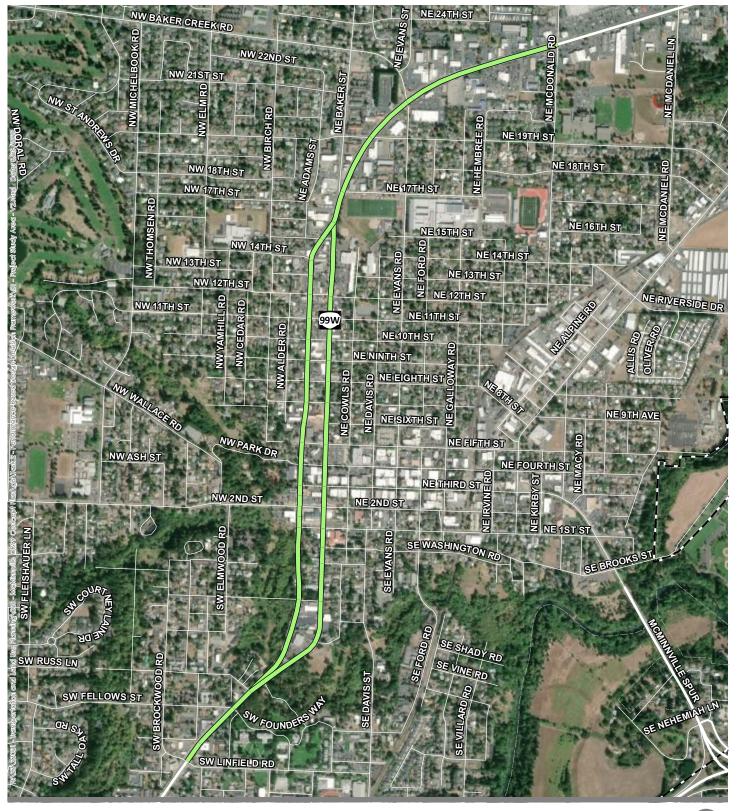
PURPOSE

The purpose of this memorandum is to identify the corridor vision statement of the McMinnville Active Transportation Concept Plan by establishing the existing and future desired urban contexts of OR99W within the study area. Establishing the urban context(s) helps better understand the anticipated users of OR99W, identify appropriate modal prioritization, and provides general guidance on design direction for various elements of the roadway design including bicycle facility selection, pedestrian crossings, and target speeds.

PROJECT STUDY AREA

The McMinnville Active Transportation Concept Plan study area is contained to the 2.1 mile segment of OR99W between NE McDonald Road (mile point [MP] 36.36) and SW Linfield Avenue (MP 38.46). Just north of NE 15th Street (MP 37.12), OR99W splits into a couplet configuration with northbound travel along NE Baker Street and southbound travel along NW Adams Street. The couplet merges back at SW Edmunston Road (MP 38.22). Figure 1 illustrates the project study area.

North of the couplet, the adjacent land uses of OR99W primarily consist of commercial with shallow setbacks, off-street parking, and medium block sizes. Throughout the couplet, the adjacent land uses consist of a mix of residential and commercial with minimal setbacks, on-street parking, consistently spaced small blocks, and buildings orientated towards the roadway. At SE 1st Street (MP 37.81), the context of OR99W changes as the couplet prepares to merge back. The adjacent land uses of OR99W between SE 1st Street and SW Linfield Avenue are less defined, similar to the northern portion of the corridor, with shallow setbacks, off-street parking, and medium block sizes. Figure 2 illustrates the City of McMinnville Zoning and Figure 3 illustrates the City of McMinnville Comprehensive Plan.



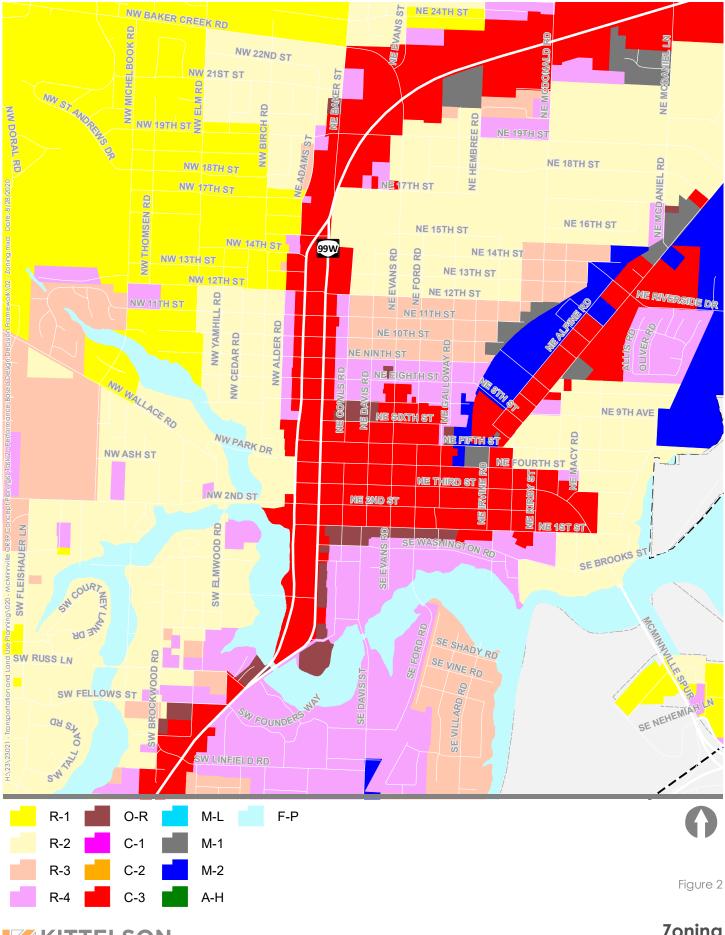
OR99W Project Extents

UGB

Figure 1

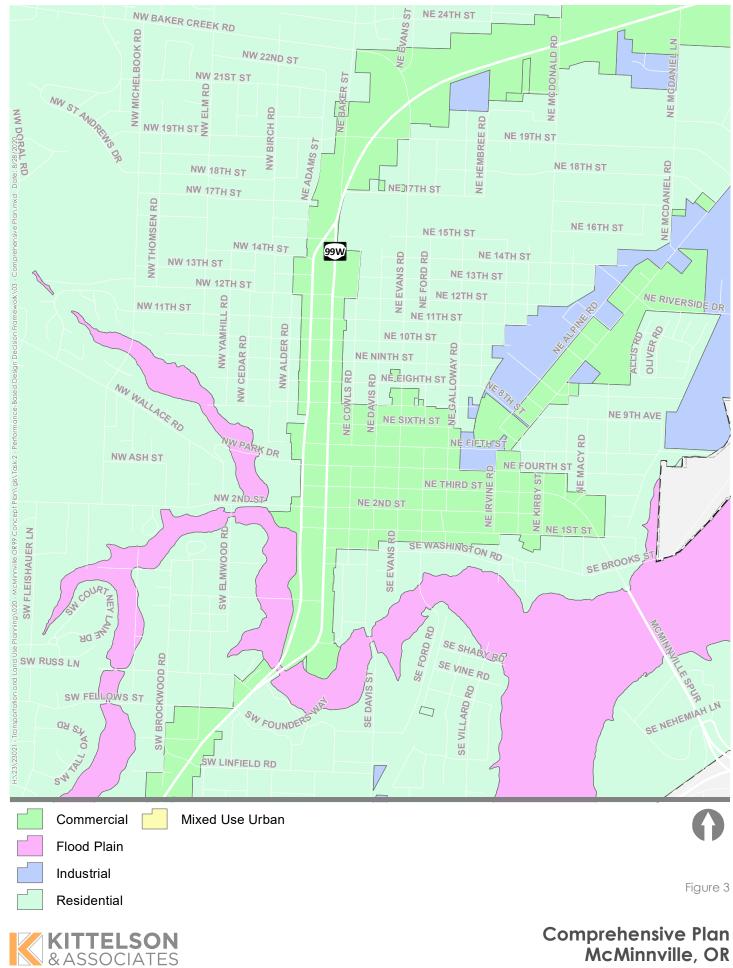
Project Study Area McMinnville, OR





Zoning McMinnville, OR

KITTELSON & ASSOCIATES



McMinnville, OR

ESTABLISHING THE URBAN CONTEXT

The Oregon Department of Transportation (ODOT) Blueprint for Urban Design (BUD) establishes a framework for determining the urban context along state roadways. Identifying the context helps understand the relative need of each type of users and the "intensity of use" that can be expected within each urban context. Table 1 summarizes the six types of land use contexts as described in the BUD.

Building **Building Coverage** Orientation Percent of area Parking **Block Size** Land Use Setbacks **Buildings** with adiacent to right-Location of parking Average size of Land Use Distance from front doors that Existing or of-way with in relation to the blocks the building to Context can be accessed future mix of buildings, as building along the adjacent to the opposed to the property line from the land uses right-of-way right-of-way sidewalks along a parking, landscape pedestrian path or other uses Mixed On-street/ Small, Traditional (residential Shallow/None Yes High garage/shared in consistent Downtown/CBD Commercial, back block structure Park/Recreation) Commercial Mostly offstreet/Single row in Small to fronting, Urban Mix Shallow Medium Some residential front/In back/ On medium blocks behind or above side Commercial. Large blocks, Commercial Off-street/In front Medium to Large Sparse Institutional, Low not well Corridor defined Industrial Residential Small to Shallow Some Residential Medium Varies Corridor medium blocks Varied. Large blocks, Suburban Varies Varies interspersed Low Varies not well Fringe development defined Mixed (Residential, Rural Single row in front/In Small to Shallow/None Some Commercial, Medium Community back/ On side medium blocks Institutional,

Table 1: ODOT Urban Context Matrix

The following section provides urban context recommendations for OR99W based on a review of the existing OR99W corridor within the study area and local implementation-oriented plans including the City of McMinnville Transportation System Plan (TSP – Reference 1), the City of McMinnville Comprehensive Plan (Reference 2), and the City of McMinnville Downtown Strategic Parking Management Plan (Reference 3). The urban context recommendations for OR99W consider the existing and future desired contexts of the corridor and surrounding land uses. Identifying an urban context that is reflective of a desired outcome rather than an existing condition will help decision-makers and practitioners achieve the overall corridor vision.

Park/Recreation)

NE McDonald Road (MP 36.35) to NW 15th Street (MP 37.12)

Between NE McDonald Road and NW 15th Street, adjacent zoning is primarily C-3 (General Commercial) with one M-1 (Light Industrial) parcel and one R-2 (Single-Family Residential) parcel. Building setbacks are primarily medium to large with off-street parking typically located between business frontages and the roadway. The majority of building orientation does not face the roadway, but rather the parking areas serving the respective businesses. Building coverage adjacent to the right-of-way is medium to low. Block sizes are not well defined and vary between large and medium.

 Based on the existing and future desired context as well as the envisioned modal priorities, Urban Mix is recommended as the BUD context that is most appropriate and best aligns with the corridor vision within this segment.

NW 15th Street (MP 37.12) to SE 1st Street (MP 37.81)

Between NW 15th Street and SE 1st Street, adjacent zoning is entirely C-3 (General Commercial) with R-4 (Multi-Family Residential) located behind. Building setbacks are shallow and the majority of building facades are orientated toward the roadway. On-street parking exists throughout this segment with occasional off-street parking areas. Building coverage adjacent to the right-of-way is medium with a mix of parking and commercial frontages. Block sizes are well defined, consistent, and relatively small.

 Based on the existing and future desired context as well as the envisioned modal priorities, Traditional Downtown/Central Business District is recommended as the BUD context that is most appropriate and best aligns with the corridor vision within this segment.

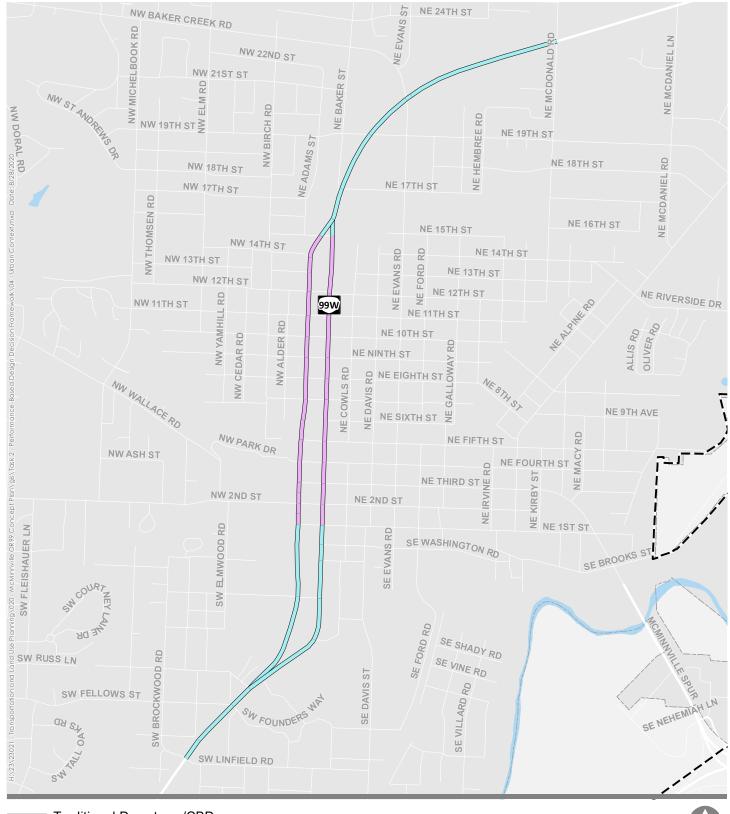
SE 1st Street (MP 37.81) to SW Linfield Avenue (MP 38.46)

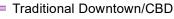
Between SE 1st Street and SW Linfield Avenue, adjacent zoning is a primarily R-4 (Multi-Family Residential); however, a small mix of C-3 (General Commercial) and O-R (Office/Residential) is present. The Cozine Creek, zoned F-P (Flood Plain) runs along the west side of OR99W within this segment resulting in little to no development north of SW Edmunson Street. Building setbacks are shallow to medium with most buildings orientated towards the roadway. On-street parking is present between SE 1st Street and SE Handley Street, with private driveways providing residential off-street parking. Building coverage adjacent to the right-of-way is medium to low. Block sizes are not well defined and vary between large and medium.

 Based on the existing and future desired context as well as the envisioned modal priorities, Urban Mix is recommended as the BUD context that is most appropriate and best aligns with the corridor vision within this segment.

Recommended Urban Contexts

Figure 4 illustrates the recommended urban contexts for the study area based on the ODOT BUD contexts described in Table 1.





Urban Mix

City Boundary



Figure 4

Proposed Urban Contexts McMinnville, OR



CORRIDOR VISION STATEMENT

The primary purpose of the McMinnville Active Transportation Concept Plan is to identify improvements in the OR99W corridor that will result in a safer, more comfortable, and attractive place to walk, bike, roll and facilitate transit use. A supplemental memorandum establishing the draft goals, policies, and evaluation criteria is included in Attachment "A".

Table 2 summarizes the relative importance for considering the need of each user type to drive planning and design decisions. As summarized previously, the recommended land use contexts for the OR99W corridor within the project study area are **Traditional Downtown/CBD** and **Urban Mix**. Based on these contexts, the general modal considerations for transit, bicyclist, and pedestrians are "High", consistent with the project purpose and vision.

Land Use Context	Motorist	Freight	Transit	Bicyclist	Pedestrian
Traditional Downtown/CBD	Low	Low	High	High	High
Urban Mix	Medium	Low	High	High	High
Commercial Corridor	High	High	High	Medium	Medium
Residential Corridor	Medium	Medium	Low	Medium	Medium
Suburban Fringe	High	High	Varies	Low	Low
Rural Community	Medium	Medium	Varies	High	High

Table 2: General Modal Consideration in Different Urban Contexts

High: Highest level facility should be considered and prioritized over other modal treatments.

Medium: Design elements should be considered; trade-offs may exist based on desired outcomes and user needs. **Low**: Incorporate design elements as space permits.

Designing Based on Context and Classification

The following section describes the guiding principles and design considerations based on the guidance provided in the ODOT BUD. These guiding principles and design considerations align with the project purpose, goals, and vision.

"Traditional Downtown/Central Business District: To best serve all users, vehicle speeds should be 25 mph or below, and higher levels of congestion are expected. Transit stops should be placed at frequent intervals, and transit priority treatments can help with transit mobility, even in congested conditions. Bicycle and pedestrian facilities should be relatively wide and comfortable to serve anticipated users. Curbside uses are important and may include loading/unloading, parking (vehicles, bicycles, etc.), and other uses. Landscaping and street trees, following ODOT placement and spacing guidelines, are appropriate in this context." "Urban Mix: To best serve all users, vehicle speeds are typically 25 to 30 mph, and higher levels of congestion are acceptable. Transit stops should be placed in proximity to origins and destinations. Bicycle and pedestrian facilities should be relatively wide and comfortable to serve anticipated users. Where low speeds cannot be achieved, practitioners must consider a buffer between travel lanes and bicycle and pedestrian facilities. Curbside uses are important and may include loading/unloading, parking (vehicles, bicycles, etc.), and other uses. Landscaping and street trees, following ODOT placement and spacing guidelines, are appropriate in this context."

Table 3 summarizes the consistencies and inconsistencies between the guiding principles and modal considerations described above for *Traditional Downtown/Central Business District* and *Urban Mix within the study area.* Understanding the inconsistencies between the guiding principles and the existing characteristics of the OR99W segments helps to establish the gaps and deficiencies and eventual alternative development.

Table 3: Modal Consideration Comparison

OR99W Segment	Recommended Context	Vehicular Speeds Comparison	Bicyclist Facility Comparison	Pedestrian Facility Comparison
NE McDonald Road to NW 15th Street	Urban Mix	Existing: 30 - 35 MPH Recommended: 25 – 30 MPH	Existing: Standard on-street bike lanes/None Recommended: Wide, comfortable, buffered facilities	Existing: Standard sidewalks, no buffer Recommended: Wide, comfortable, buffered facilities
NW 15th Street to SE 1st Street	Traditional Downtown/CBD	Existing: 30 MPH Recommended: 25 MPH	Existing: None Recommended: Wide, comfortable facilities	Existing: Standard sidewalks, no buffer Recommended: Wide, comfortable, buffered facilities
SE 1st Street to SW Linfield Avenue	Urban Mix	Existing: 35 MPH Recommended: 25 – 30 MPH	Existing: Standard on-street bike lanes/None Recommended: Wide, comfortable, buffered facilities	Existing: Standard sidewalks, no buffer Recommended: Wide, comfortable, buffered facilities

NEXT STEPS

The Corridor Vision has been reviewed by the project management team (PMT) and updated to produce the Final Corridor Vision. The urban contexts established within this document will be used to inform the performance-based design decision making framework and ultimate conceptual design alternative development.

REFERENCES

- 1. City of McMinnville. *Transportation System Plan, 2010*.
- 2. City of McMinnville. *Comprehensive Plan, 2018.*
- 3. City of McMinnville. *Downtown Strategic Parking Management Plan, 2018*.



851 SW 6th AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 F 503.273.8169

MEMORANDUM

Date:	October 7, 2020	Project #: 23021.020
To:	Project Management Team	
	Project Advisory Committee	
From:	Nicholas Gross, Nick Gross, Marc Butorac, PE, PTOE, PMP	
Project:	McMinnville Active Transportation Concept Plan	
Project: Subject:	McMinnville Active Transportation Concept Plan Final Evaluation Criteria and Performance Measures	

INTRODUCTION

The purpose of this document is to articulate the goals and objectives, evaluation criteria, and performance measures to fulfill the Corridor Vision Statement for the McMinnville Active Transportation Concept Plan. Understanding and executing a performance-based approach with clear, actionable, and measurable evaluation criteria enables project teams to make informed decisions about the performance trade-offs of alternative solutions to best suit the project goals based on the corridor context and needs of the intended users. The corridor context and relative need of the intended users are set according to the Oregon Department of Transportation (ODOT) Blueprint for Urban Design (BUD – Reference 1) and the Draft Corridor Vision (Reference 2).

GUIDING GOALS AND POLICIES

The primary purpose of the McMinnville Active Transportation Concept Plan is to identify improvements along the OR99W corridor in the City of McMinnville that will result in a safer, more comfortable, and attractive place to walk, bike, roll and facilitate transit. The City of McMinnville Transportation System Plan (TSP – Reference 3) identifies guiding goals and policies for the transportation vision for the City. The goals and policies relevant to the McMinnville Active Transportation Concept Plan are included in Table 1 on the following page.

Table 1: TSP Goal and Policy Guidance

TSP Goals and Supplemental Policies					
Complete Streets	"The safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and balanced in all types of transportation and development projects and through all phases of a project so that even the most vulnerable McMinnville residents – children, elderly, and persons with disabilities – can travel safely within the public right of way."				
Multi-Modal Transportation System	"The transportation system for the McMinnville planning area shall consist of an integrated network of facilities and services for a variety of motorized and non-motorized travel modes."				
Connectivity and Circulation	"The vehicle, pedestrian, transit, and bicycle circulation systems shall be designed to connect major activity centers in the McMinnville planning area, increase the overall accessibility of downtown and other centers, as well as provide access to neighborhood residential, shopping and industrial areas, and McMinnville's parks and schools."				
Transportation System and Energy Efficiency	"The implementation of transportation system and transportation demand management measures, provision of enhanced transit service, and provision of bicycle and pedestrian facilities in the McMinnville planning area shall be embraced by policy as the first choice for accommodating travel demand and relieving congestion in a travel corridor, before street widening projects for additional travel lanes are undertaken. The McMinnville Transportation System Plan shall promote alternative commute methods that decrease demand on the transportation system" including "walking and bicycling."				
Transportation Safety	"The City of McMinnville shall make the design, construction, and operation of a safe transportation system for all modes of travel a high priority."				
Accessibility for Persons with Disabilities	"The McMinnville transportation system shall be designed with consideration of the needs of persons with disabilities by meeting the requirements set forth in the Americans with Disabilities Act (ADA)."				
Livability	"Transportation facilities in the McMinnville planning area shall be, to the degree possible, designed and constructed to mitigate noise, energy consumption, and neighborhood disruption, and to encourage the use of public transit, bikeways, sidewalks, and walkways."				
Health and Welfare	"Through implementation of its Complete Streets policy and the TSP by enhancing its pedestrian and bicycle systems, the City of McMinnville will help encourage greater physical activity and improved health and welfare of its residents."				
Transportation Sustainability	"Through implementation of the TSP and the Comprehensive Plan, the City of McMinnville will, to the extent possible, seek measures that simultaneously help reduce traffic congestion, pollution, crashes and consumer costs, while increasing mobility options for non-drivers, and encouraging a more efficient land use pattern."				
Aesthetics and Streetscaping	"Aesthetics and streetscaping shall be a part of the design of McMinnville's transportation system. Streetscaping, where appropriate and financially feasible, including public art, shall be included in the design of transportation facilities. Various streetscaping designs and materials shall be utilized to enhance the livability in the area of a transportation project."				

EVALUATION CRITERIA AND PERFORMANCE MEASURES

The goals and policy guidance from the TSP have been converted into draft evaluation criteria for the Active Transportation Concept Plan. These criteria align with the Draft Corridor Vision for OR99W. The performance measures provide a performance-based decision framework for the selection of a preferred alternative. Aligning with guidance from the BUD, the performance measures are designed to be understandable, consistent, measurable, able to differentiate between alternatives, and specific to this project.

Table 2 provides the draft evaluation criteria and performance measures for the McMinnville Active Transportation Concept Plan.

- **Evaluation Criteria** are derived from the goal and supplemental policies from the McMinnville TSP and will be used to evaluate draft alternatives.
- Description includes the purpose and general explanation of the evaluation criteria, connecting the criteria to the specific community or agency values (based on the TSP) goals and desired outcomes for the project.
- **Performance Measures** are the measurements used to assess the evaluation criteria.
- Proposed Methodology describes how the criterion will be measured, whether it is qualitative or quantitative, and the data needed to evaluate the criteria.

Table 3 provides a scoring scale from -1 to +2, reflecting the extent to which a project achieves the prioritization measure and describes the data required to complete the scoring. Performance measure sub-categories within each evaluation criterion are scored individually, and then averaged to provide an overall score for the evaluation criterion. Each evaluation criteria score can result in a range between -7 (worst possible score) to +14 (best possible score) based on the seven evaluation criteria listed in Table 2.

Appendix A provides a sample evaluation of potential projects.

Table 2: Evaluation Criteria and Performance Measures

Evaluation Criterion	Description	Proposed Performance Measures
Complete Streets	The alternative provides comfortable facilities for people walking and biking, regardless of age and ability. The "complete streets" criterion addresses the "Complete Streets" goal and supplemental policy identified in the TSP.	 Bicycle Level of Traffic Stress (BLTS) Pedestrian Level of Traffic Stress (PLTS)
Multi-Modal Transportation System	The alternative provides integrated network of facilities and services for a variety of motorized and non-motorized travel modes based on the appropriate relative priority given the corridor context. The multi-modal transportation system criterion addresses the "Multi-Modal Transportation System" goal and supplemental policy identified in the TSP.	 Type and presence of pedestrian, bicycle, transit, motor vehicle, and freight facilities align with the recommendations from the Blueprint for Urban Design (provided in Appendix B)
Connectivity	The alternative provides comprehensive connectivity and circulation to existing active transportation facilities in the City of McMinnville. The alternative encourages walking and biking to essential destinations within the City of McMinnville. The "connectivity" criterion addresses the "Connectivity and Circulation", "Transportation System and Energy Efficiency", and "Transportation Sustainability" goals and supplemental policies identified in the TSP.	 Connection of alternative to the existing and planned bicycle and pedestrian network Barriers to walking and biking (including an unsafe crosswalk or facilities in poor condition) removed by the alternative Facility gap filled by alternative Proximity of alternative to essential destinations Proximity of alternative to activity generators
Safety	The alternative provides safety countermeasures that reduce the number of fatal and severe injury crashes. The "safety" criterion addresses the "Transportation Safety" and "Transportation Sustainability" goals and supplemental policies identified in the TSP.	 Percentage (%) of anticipated crash reduction based on crash reduction factor (CRF) scaled by planning-level cost of project Bicyclist and pedestrian crash history Pedestrian Risk Factor Bicyclist Risk Factor
Equity	The project meets the requirements set forth in the Americans with Disabilities Act (ADA) and provides transportation options to transportation disadvantaged populations. The "equity" criterion addresses the "Accessibility for Persons with Disabilities" and "Health and Welfare" goals and supplemental policies identified in the TSP.	 This will use the Transportation Disadvantaged Population (TDP) Index from the ODOT Active Transportation Needs Inventory (ATNI). The index considers the following characteristics of a census block: elderly populations (65 and older), youth populations (under 18), non-white and Hispanic populations, low-income populations (households earning less than 200% of the poverty level as determined by the census), limited English proficiency population (aggregate of census populations who speak English "not well" or "not at all"), households without access to a vehicle, and people with a disability (severe or non-severe disability) This criterion will also consider impacts to ADA compliance.
Livability	The alternative minimizes impacts to adjacent property owners and encourages the use of public transit, bikeways, sidewalks, and walkways. The project provides equity and receives public support. The "livability" criterion addresses the "Livability" and "Aesthetics and Streetscaping" goals and supplemental policies identified in the TSP.	 Right-of-way acquisition needs Neighborhood street modification, business access and parking Anticipated public support based on Open House and Public Advisory Committee Comments
Design Feasibility	The alternative has no major design feasibility concerns. The "design feasibility" criterion does not directly address any goals or supplemental policies identified in the TSP.	• Constructability (including, but not limited to, right-of-way availability, existing terrain, utility location, visibility concerns, etc.)

Table 3: Evaluation Criteria Scoring

Evaluation			Scoring	g Scale		
Criterion	Performance Measure	-1	0	+1	+2	Resources
Complete Streets	Quantitative: BLTS	Project degrades existing BLTS	Project makes no change to existing BLTS	Project improves existing BLTS by 1 point	Project improves existing BLTS by 2 or 3 points	Posted speed, traffic volumes, number of lanes, and bicycle facility type
	Quantitative: PLTS	Project degrades existing PLTS	Project makes no change to existing PLTS	Project improves existing PLTS by 1 point	Project improves existing PLTS by 2 or 3 points	Posted speed, traffic volumes, number of lanes, and pedestrian facility type
Multi-Modal Transportation System	Qualitative: Type and presence of pedestrian, bicycle, transit, motor vehicle, and freight facilities align with the recommendations from the Blueprint for Urban Design (provided in Appendix B)	Project degrades modal priorities based on urban context.	Project has no impact on modal priorities based on urban context.	Project improves modal priorities for urban context.	Project significantly improves modal priorities for urban context.	Posted speed, travel lane characteristics, shy distance, median, bicycle facility type and characteristics, pedestrian facility type and characteristics, parking type and characteristics The urban context was determined to be Traditional Downtown/CBD and Urban Mix in the Corridor Vision (Reference 2). Based on recommendations from the Blueprint for Urban Design, Transit, Bicyclist, and Pedestrian are "High" priority modes (reference table provided in Appendix B)
Connectivity	Qualitative: Project is identified by the City of McMinnville Transportation System Plan (TSP) or is located on the Safe Routes to School (SRTS) Network.	N/A	The project is not identified by the TSP or located on the SRTS Network	The project is identified by the TSP or is located on the STRS Network	The project is identified by the TSP and is located on the SRTS Network	City of McMinnville Transportation System Plan, Safe Routes to School Network
	Qualitative: Project removes barrier to walking and biking or fills gap in the walking and biking transportation network	Project creates barriers or gaps in the walking and biking transportation network	Project has no impacts to barriers or gaps in the walking and biking transportation network	Project indirectly addresses barriers or gaps in the walking and biking transportation network	Project directly addresses barriers or gaps in the walking and biking transportation network	Existing conditions inventory
	Quantitative: Proximity to activity generators and essential destinations	N/A	Project would serve no active generators or essential destinations in ¹ / ₄ mile radius	Project would serve some active generators or essential destinations in ¼ mile radius	Project would serve many active generators or essential destinations in 1/4 mile radius	Count of active generators and essential destinations within ¼ mile of the project location.
	Quantitative: Crash Reduction Factor C/Planning Level Project Cost	N/A	The project is not anticipated to reduce crashes at a location.	The project provides a moderate value crash reduction factor given the project cost.	The project provides a high value crash reduction factor given the project cost.	This is a quantitative measurement based on crash countermeasures and planning-level cost estimates.
Safety	Quantitative: Crash History	N/A	There were no bicyclist or pedestrian crashes reported in the 5-year crash history within 250 feet of the project.	There were 1 or 2 bicyclist or pedestrian crashes reported in the 5-year crash history within 250 feet of the project.	There were 3 or more bicyclist or pedestrian crashes reported in the 5-year crash history within 250 feet of the project.	5-Year Crash History
	Quantitative: Pedestrian Risk Factor Scoring	N/A	The project is not located on, or perpendicular to a Medium or High risk factor location.	The project is located on, or perpendicular to a Medium risk factor location.	The project is located on, or perpendicular to a High risk factor location.	This is a quantitative measure based on the ODOT Statewide Pedestrian and Bicycle Safety Plan's
	Quantitative: Bicyclist Risk Factor Scoring	N/A	The project is not located on, or perpendicular to a Medium or High risk factor location.	The project is located on, or perpendicular to a Medium risk factor location.	The project is located on, or perpendicular to a High risk factor location.	established risk factor scoring for systemic safety.

Table 3: Evaluation Criteria Scoring

Evaluation	Derformence Mercure	Scoring Scale			Decourses	
Criterion	Performance Measure	-1	0	+1	+2	Resources
Equity	Quantitative: Project impact to transportation disadvantaged populations based on the ODOT Transportation Disadvantaged Population (TDP) Index	Project degrades transportation options and facilities for transportation disadvantaged populations	Project has no impact on transportation options and facilities for transportation disadvantaged populations	Project indirectly improves transportation options and facilities for transportation disadvantaged populations	Project directly improves transportation options and facilities for transportation disadvantaged populations	Census block data
	Qualitative: Project impact to ADA compliance	Project degrades ADA compliance	Project makes no improvements to ADA compliance	Project makes moderate improvements to ADA compliance	Project makes significant improvements to ADA compliance	ODOT ADA Inspection Summary, ADA Standards for Accessible Design
Livability	Quantitative: Right-of-way acquisition needs	The project requires significant right-of- way acquisition	The project requires minor right-of-way- acquisition	The project requires no right-of-way acquisition	N/A	Right-of-way maps
	Qualitative: Neighborhood street modification, business access and parking	The project degrades access and/or mobility to residential and commercial areas	The project has no impact to access and/or mobility to residential and commercial areas	The project indirectly improves access and/or mobility to residential and commercial areas	The project directly improves access and/or mobility to residential and commercial areas	Parking inventories, locations of residential and commercial properties in study area
	Qualitative: Public response based on Open House and Public Advisory Committee Comments	The project has (or is expected to have) significant negative public response	The project has (or is expected to have) a neutral public response	The project has (or is expected to have) a positive public response	The project has (or is expected to have) strong support from the public	Open House and Public Advisory Committee Comments
Design Feasibility ¹	Qualitative: High-level feasibility of constructing the intended project at the location.	The project poses significant design challenges	The project poses moderate design challenges	The project poses minor design challenges	The project poses no notable design challenges	Constructability (including, but not limited to, right-of-way availability, existing terrain, utility location, visibility concerns, etc.)

¹ ADA design requirements will be considered but not included as a precluding factor to design feasibility.

NEXT STEPS

The Evaluation Criteria and Performance Measures has been reviewed by the project management team (PMT) and updated to produce the Final Evaluation Criteria and Performance Measures. The Evaluation Criteria will be used to compare the alternatives developed as part of Task 5: Alternatives Development, Analysis, and Preferred Alternative Concept.

REFERENCES

- 1. Oregon Department of Transportation. Blueprint for Urban Design, 2020.
- 2. Kittelson & Associates, Inc. Corridor Vision, 2020.
- 3. City of McMinnville. *Transportation System Plan, 2010.*

Appendix A Sample Evaluation

Bulb-Out Improvements at NE 8 th Street / NE Baker Street Intersection ¹			
Evaluation Criterion	Score	Methodology ¹	
Complete Streets	1	Posted speed: 30 mph Number of Lanes: 2 AADT: 14300 Change in LTS: 1 point	
Multi-Modal Transportation System	1	The project improves facilities for people walking and biking, improving modal priorities for the urban context.	
Connectivity	1.3	The TSP recommended that new curb extensions should be installed at the NE 8 th Street / NE Baker Street Intersection. The project is not on a SRTS network. There are some essential destinations and active transportation generators within ¼ mile of the intersection. The project directly addresses a barrier in the walking transportation network.	
Safety	1.8	Two crashes involving pedalcyclists within a 5-Year Period: 1 serious injury crash and 1 minor injury crash. Install Curb Ramps and Extensions with a Marked Crosswalk and Pedestrian Warning Signs (BP12) has a Crash Reduction Factor of 37% for pedestrian crashes. This is a high value crash reduction factor given the project cost. Project is located on a high risk factor location for bicyclists and pedestrians.	
Equity	2	Project highly improves ADA compliance at a location. Project directly improves transportation options and facilities for transportation disadvantaged populations.	
Livability	0.3	The project requires no right-of-way acquisition. The project indirectly improves access to residential and commercial areas. The project is expected to have a negative public response.	
Feasibility	2	The project has no significant design challenges	
Total Score	9.4		

¹ The scoring provides an example of the evaluation criteria and performance metrics, however the methodology includes incomplete data and analysis. The scoring for this particular project would need to be refined in the project development process if it is considered in Task 5 of this project.

RRFB at NE 8th Street / NE Baker Street Intersection ²					
Evaluation Criterion	Score	Methodology ¹			
Complete Streets	2	Posted speed: 30 mph Number of Lanes: 2 AADT: 14300 Change in Crossing LTS: 2 points			
Multi-Modal Transportation System	2	The project significantly improves modal priorities for urban context, as it provides an enhanced crossing for people walking and biking.			
Connectivity	1.3	The TSP recommended that new curb extensions should be installed at the NE 8th Street / NE Baker Street Intersection. The project is not on a SRTS network. There are some essential destinations and active transportation generators within ¼ mile of the intersection. The project directly addresses a barrier in the walking transportation network.			
Safety	1.5	 Two crash involving pedalcyclists in 5-year period: 1 minor injury crash and 1 fatal injury crash Install Rectangular Rapid Flashing Beacon (2-Lane Road) (BP8) has a Crash Reduction Factor of 10% for pedestrian crashes. This is a moderate value crash reduction factor given the project cost. Project is located on a high risk factor location for bicyclists and pedestrians. 			
Equity	2	Project highly improves ADA compliance at a location. Project directly improves transportation options and facilities for transportation disadvantaged populations.			
Livability	0.7	The project requires no right-of-way acquisition. The project indirectly improves access to residential and commercial areas. The project is expected to have a neutral public response.			
Feasibility	2	The project has no significant design challenges.			
Total Score	11.5				

² The scoring provides an example of the evaluation criteria and performance metrics, however the methodology includes incomplete data and analysis. The scoring for this particular project would need to be refined in the project development process if it is considered in Task 5 of this project.

Bike Lane along Baker Street between NE 1st Street and 5 th Street ³					
Evaluation Criterion	Score	Methodology			
Complete Streets	1.5	Posted speed: 30 mph Number of Lanes: 2 AADT: 14300 Change in BLTS: improve by 2 points Change in PLTS: improve by 1 point			
Multi-Modal Transportation System	1	Based on the context the BUD recommends buffered facilities. Therefore, although this project improves modal priorities for urban context, it does not provide ideal facilities.			
Connectivity	1.3	The project is not identified by the TSP or located on the SRTS Network. The project directly addresses a gap in the biking transportation network. The project would serve many active generators and essential destinations in a 1/4 mile radius.			
Safety	1.8	There were 3 or more crashes involving pedalcyclist in a 5- year period. Install Bike Lanes (BP18) has a Crash Reduction Factor of 36% reduction for crashes involving bicyclist. This is a high value crash reduction based on project cost. Project is located on a medium pedestrian risk factor location and high bicyclist risk factor location.			
Equity	1	Does not impact ADA compliance. Project directly improves transportation options and facilities for transportation disadvantaged populations.			
Livability	1.3	The project requires no right-of-way acquisition. The project directly improves mobility to residential and commercial areas. The project is expected to have a positive public response.			
Feasibility	2	The project has no anticipated design challenges.			
Total Score	9.9				

³ The scoring provides an example of the evaluation criteria and performance metrics, however the methodology includes incomplete data and analysis. The scoring for this particular project would need to be refined in the project development process if it is considered in Task 5 of this project.

Appendix B Blueprint for Urban Design

Urban Context	Target Speed (MPH)4	Travel Lanes ²	Turn Lanes ^{1,2}	Shy Distance ^{1,3}	Median ^{1,2}	Bicycle Facility ^{1,2, 5}	Sidewalk	Target Pedestrian Crossing Spacing Range (feet)6	On-street parking ¹
Traditional Downtown/ CBD	20-25	Start with minimum widths, wider by roadway characteristics	Minimize additional crossing width at intersections	Minimal	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility	Ample space for sidewalk activity (e.g., sidewalk cafes, transit shelters)	250-550 (1-2 blocks)	Include on- street parking if possible
Urban Mix	25-30	Start with minimum widths, wider by roadway characteristics	Minimize additional crossing width at intersections	Minimal	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility, consider roadway characteristics	Ample space for sidewalk activity (e.g., sidewalk cafes, transit shelters)	250-550 (1-2 blocks)	Consider on- street parking if space allows
Commercial Corridor	30-35	Start with minimum widths, wider by roadway characteristics	Balance crossing width and operations depending on desired use	Consider roadway characteristics, desired speeds	Typically used for safety/ operational management	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks, with space for transit stations	500-1,000	Not Applicable
Residential Corridor	30-35	Start with minimum widths, wider by roadway characteristics	Balance crossing width and operations depending on desired use	Consider roadway characteristics, desired speeds	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks	500-1,000	Generally Not Applicable, Consider roadway characteristics
Suburban Fringe	35-40	Start with minimum widths, wider by roadway characteristics	Balance crossing width and operations depending on desired use	Consider roadway characteristics, desired speeds	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks	750-1,500	Not typical
Rural Community	25 - 35	Start with minimum widths, wider by roadway characteristics	Balance crossing width and operations depending on desired use	Consider roadway characteristics, desired speeds	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks, sized for desired use	250-750	Consider on- street parking if space allows

Designing based on urban context, considering roadway designations and activity of different modes

Source: ODOT Blueprint for Urban Design, Volume 1 Orange box indicates Urban Contexts considered as part of this project.

General Modal Considerations in Different Urban Concepts

Land Use Context	Motorist	Freight	Transit	Bicyclist	Pedestrian
Traditional Downtown/CBD	Low	Low	High	High	High
Urban Mix	Medium	Low	High	High	High

Source: ODOT Blueprint for Urban Design, Volume 1



FINAL TECHNICAL MEMORANDUM #1

Date:	October 30, 2020	Project #: 23021.020
To:	Project Management Team Project Advisory Committee	
From: Project:	Amy Griffiths, Nick Gross, Marc Butorac, PE, PTOE, PMP McMinnville OR 99W (NE McDonald Lane to Linfield Av	enue) Active Transportation
Subject:	Concept Plan Final TM#1: Performance-Based Design Decision Framewor	k

PURPOSE

The purpose of this memorandum is to document the performance-based design approach and guiding framework for the success of the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan.

PERFORMANCE BASED APPROACH

As stated in the Oregon Department of Transportation's recently published Blueprint for Urban Design (BUD), identifying the desired project outcomes and understanding the urban context and primary roadway users can guide the Project Management Team (PMT) and Project Advisory Committee (PAC) in determining appropriate performance measures to evaluate the trade-offs of various design decisions.

Figure 4-5 in the BUD identifies the existing processes and project types based on ODOT's Design Decision Framework. The McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan most closely reflects the project type of Facility Planning and will therefore be taken through the Program Development phase of ODOT's Transportation System Lifecycle Process. Figure 1 illustrates the performance-based design decision framework for the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan.

Figure 1: McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan – Performance-Based Approach



Documentation is a key component throughout each step of the Performance-Based Design Decision Framework. After each step is completed, project outcomes and decision making must be vetted against the documented project goals and desired outcomes. The overview and order of deliverables is provided in the "Overview of Deliverables" section of this memorandum.

PERFORMANCE BASED PROJECT FLOW

The following section identifies the key steps in relation to project deliverables and schedule that will be incorporated into the project flow. Understanding how to integrate practical design strategies and a performance-based approach into the project flow can help guide the PMT in setting up a PAC, documenting decisions, and identifying solutions that serve the intent of the urban context and users within that context (BUD). All decision making throughout the project development process will be tied back to the established project goals, context, and desired outcomes identified in Step 1 below.

Step 1 – Establish Project Goals, Context & Desired Outcomes

Establishing project goals and desired outcomes is completed early in the project flow. The goals and vision should be linked to the existing and future desired land uses and developed to be easily understood by community members. Key components to documenting the project context and goals include identifying the *Vision of Place, Desired Role of the Facility,* and *Major Users of the Facility*.

The McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan will accomplish Step 1 through the **Corridor Vision Statement Memorandum**. The Corridor Vision identifies the urban contexts: Urban Mix and Traditional Downtown/Commercial Business District (CBD). These contexts serve as the basis for all decision making based on the project vision, envisioned modal priorities, and anticipated users of the OR 99W facility. This decision-making framework is rooted in the existing and future desired urban contexts and has been informed by the **Evaluation Criteria and Performance Measures Memorandum** and **TM#2: Plan and Policy Review** deliverables.

Step 2 – Evaluate Performance of Alternatives & Develop Concept Design and Estimate

The project needs identified in the TM#4: Existing and Future Needs, Planned Improvements, Alternatives, and Recommendations deliverable will inform the development of the TM#5: Alternatives Development and Preferred Alternative Concept deliverable.

The project-level performance measures established as part of the **Evaluation Criteria and Performance Measures Memorandum** will be used to evaluate the alternatives and will be tied back to the project goals and desired outcomes. If PMT and PAC discussions or alternative evaluations lead to changes in the performance measures or project goals, this information and subsequent decisions should be clearly documented. The range of alternatives should meet the original intended outcomes of the project documented as part of the **Corridor Vision Statement Memorandum**.

Step 3 – Select and Develop Preliminary Design

The selection and development of a preferred alternative will be identified in the **Draft Concept Plan** deliverable and further refined through feedback from the PAC to develop the **Final Concept Plan** deliverable.

Subsequent Steps

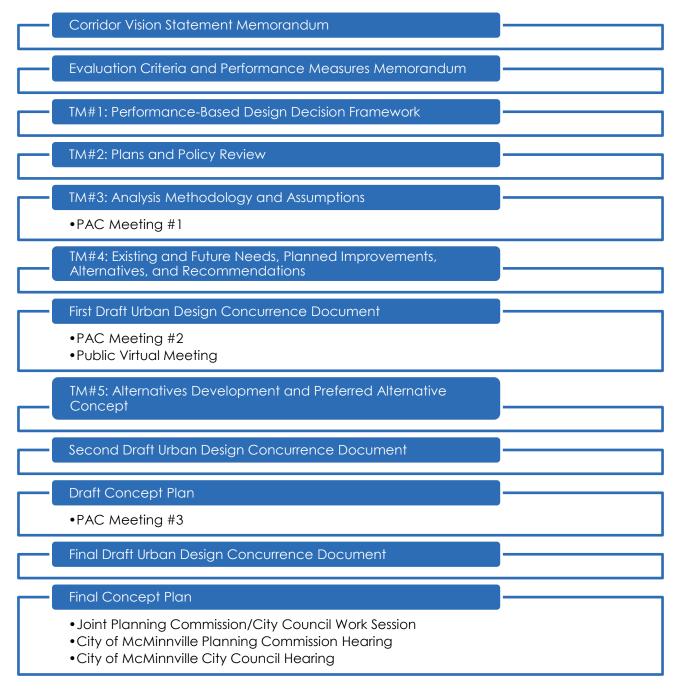
The design phases for implementing projects identified within the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan must be vetted through the ODOT's Region 2's Technical Center and where applicable the Oregon Mobility Advisory Committee to ensure designs meet the documented project context and goals. To further ensure the ability to implement projects through either ODOT preservation or enhancement project, City of McMinnville capital projects, or private development projects, the PMT will prepare an **Urban Design Concurrence Document** for review by the Mobility Advisory Committee and approval by the Region 2 Roadway Manager. These subsequent steps are:

- Step 4 Moving to Final Design and Construction
- Step 5 Monitoring, Operating, and Maintaining

The **Final Concept Plan** and **Urban Design Concurrence Document** will form the basis during these subsequent steps. If future phases differ from the Final Concept Plan, then the PMT should revisit the **Corridor Vision Statement Memorandum** and **Urban Design Concurrence Document**, and determine if the original intended outcomes for the project should change. If a change appears appropriate, then justification should be provided and documented.

OVERVIEW OF DELIVERABLES

The McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan will be guided by a series of technical memorandums cited in the previous section, following the performance-base design decision framework outlined in the BUD. The initial technical memorandums provide the building blocks for the success of the project outcome and adoption by the City of McMinnville into its Transportation System Plan (TSP), and will be prepared in coordination with the PMT, PAC, and feedback received during the public virtual meeting. The general chronology of activities is summarized below.



Note: The final Urban Design Concurrence Document will be part of the Design Acceptable Package (DAP).

PROPOSED MEETING SCHEDULE

A proposed meeting schedule is summarized in Table 1. For each meeting, the date and time, and key deliverables to be discussed are listed. The schedule of meetings will be finalized based on input from the PMT. PAC members are asked to notify ODOT, the City, and the consultant team of potential conflicts based on the proposed schedule. The meeting locations and times are subject to change based on participant availability.

Meeting	Date, Time, & Location	Deliverables	
PAC #1	December 10, 2021 3:00-5:00 PM Virtual Meeting	Final Corridor Vision Statement Memorandum Final Evaluation Criteria and Performance Measures Memorandum Final TM #1: Performance-Based Design Decision Framework Final TM #2: Plans and Policy Review Final TM #3: Analysis Methodology and Assumptions Draft TM#4: Existing and Future Needs, Planned Improvements, Alternatives, and Recommendations	
PAC #2	February 18, 2021 3:00-5:00 PM Virtual Meeting	Draft TM#5: Alternatives Development and Preferred Alternative Concept	
Public Virtual Meeting	First week of March 2021 (Exact date to-be Determined)	Draft TM#5: Alternatives Development and Preferred Alternative Concept	
PAC #3	April 15, 2021 3:00-5:00 PM Virtual Meeting	Draft Concept Plan	
Planning Commission/ City Council Work Session	May 11, 2021 7:00 PM McMinnville Civic Hall 200 NE 2nd Street	Final Draft Concept Plan	

Table 1: McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan Meeting Schedule

NEXT STEPS

This document will serve as a public-facing document outlining the project development process, timeline, and deliverables.



851 SW 6th AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 F 503.273.8169

FINAL TECHNICAL MEMORANDUM #2

Date:	October 30, 2020	Project #: 23021.020
To:	Project Management Team Project Advisory Committee	
From: Project: Subject:	Nick Gross, Amy Griffiths, Marc Butorac, PE, PTOE, PMP McMinnville OR 99W (NE McDonald Lane to Linfield Av Concept Plan Final TM#2: Plan and Policy Review	enue) Active Transportation

OVERVIEW

This memorandum summarizes the existing plans, regulations, and policies that are relevant to the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan and broader planning-level efforts within the City of McMinnville. The summary explains the relationship between each document reviewed and its relevance to the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan, identifying potential issues and considerations that will factor into the planning process.

This memorandum is also intended to guide development of preferred active transportation concept alternatives and identify potential amendments to pertinent documents and regulations needed to implement these alternatives. It is oriented as a literature review of state and local documents. A summary of the documents reviewed and their application to this effort is provided in Table 1.

Table 1: Documents Reviewed

	Document	Key Applications for Active Transportation Concept Plan
State	Oregon Highway Plan (1999, last amended 2018)	Includes policies to guide proposed improvements, modifications, or policies that could affect OR 99W in the city.
	Oregon Administrative Rule for Access Management (2014)	Guidance on state requirements for OR 99W, including access management
	Oregon Freight Plan (2011, last revised 2017)	Guidance on maintaining and enhancing efficiency of the truck and rail freight system
	Oregon Transportation Safety Action Plan (2016)	Guidance on local goals, policies, and strategies to improve safety in Oregon
	Oregon Bicycle and Pedestrian Plan (2016)	Bicycle and pedestrian policies and design guidance that apply to state highway facilities in McMinnville
	Statewide Planning Goal #12 (1974)	Guides the goals of local comprehensive planning.
	Statewide Transportation Improvement Program (2018-2021 and 2021-2024)	The current 2018-2021 STIP does not include any projects within the City of McMinnville. The 2021-2024 STIP includes a project with signal improvements along OR 99W from MP 21.46 to MP 39.06. A repaving "preservation" project along the Baker/Adams Couplet from MP 37.04 to MP 38.13 is proposed for the 2021-2024 STIP cycle but has not yet been selected for funding. The recommendations of this plan will be used as a reference when selecting key locations to evaluate enhanced crossings.
	Oregon Intersection Safety Implementation Plan (2012)	Guidance on intersection-related safety measures, crash trends, cost effective countermeasures.
	Oregon Bicycle and Pedestrian Safety Implementation Plan (2016)	Guidance on countermeasures and risk factor implementation
	Oregon Resilience Plan (2013)	Guidance and priorities to maintain the seismic integrity of Oregon's multi-modal transportation system.
	Oregon Blueprint for Urban Design (2020)	Guidance and framework for determining the appropriate alternatives and facility selection based on the established urban context and corridor vision.
	Oregon Department of Transportation (ODOT) American's with Disability Act (ADA) Inspection Summary	Informs investment and prioritization along OR 99W within the project study area.
Local	City of McMinnville Transportation System Plan (2010)	Informs the Corridor Vision Statement and is a reference for identifying projects within the project study area.
	City of McMinnville Comprehensive Plan (2004)	Provides overarching transportation policies and guidance for the Corridor Vision Statement and alternatives development.
	City of McMinnville Downtown Strategic Parking Management Plan (2020)	Provides qualitative and quantitative parking data along OR 99W to inform decision making and alternatives evaluation.

State Plans

Oregon Highway Plan (1999, last amended 2018)

The Oregon Highway Plan (OHP) is a modal plan of the Oregon Transportation Plan (OTP) that guides planning, operations, and financing for ODOT's Highway Division. Policies in the OHP encourage the 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. These policies also link land use and transportation, set standards for highway

performance and access management, and emphasize the relationship between state highways and local road, bicycle, pedestrian, transit, rail, and air systems.

The following policies are relevant to the Active Transportation Concept Plan process.

Policy 1A: State Highway Classification System

The OHP classifies the state highway system into four levels of importance: Interstate, Statewide, Regional, and District. ODOT uses this classification system to guide management and investment decisions regarding state highway facilities. The classification system also guides facility plan development and ODOT's review of local plan and zoning amendments, highway project selection, design and development, and facility management decisions including road approach permits.

Pacific Highway West (OR 99W) is classified as a Regional Highway in the study area. The purpose and management objectives of these highways are provided in Policy 1A, as summarized below.

 Regional Highways (OR 99W) typically provide connections and links to regional centers, Statewide or Interstate Highways, or economic or activity centers of regional significance. The management objective is to provide safe and efficient, high-speed, continuous-flow operation in rural areas and moderate- to high-speed operations in urban and urbanizing areas. A secondary function is to serve land uses in the vicinity of these highways.

Policy 1C: State Highway Freight System

The primary purpose of the State Highway Freight System is to facilitate efficient and reliable interstate, intrastate, and regional truck movement through a designated freight system. This freight system made up of the Interstate Highways and select Statewide, Regional, and District Highways, and includes routes that carry significant tonnage of freight by truck and serve as the primary interstate and intrastate highway freight connection to ports, intermodal terminals, and urban areas. Highways included in this designation have higher highway mobility standards than other statewide highways.

- Pacific Highway West (OR 99W) is <u>not</u> designated as a Freight Route within the study area according to the OHP.
- Pacific Highway West (OR 99W) is designated as a Reduction Review Route¹, subject to ORS 366.215.

Policy 1G: Major Improvements

This policy requires maintaining performance and improving safety on the highway system by improving efficiency and management on the existing roadway network before adding capacity. The state's highest

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¹Per OAR Rule 731-012-0030 Reduction Review Routes "include all parts of the state highway(s) that must be travelled to complete the prescribed route and/or connect with other state highway."

priority is to preserve the functionality of the existing highway system. Tools that could be employed to improve the function of the existing interchanges include access management, transportation demand management, traffic operations modifications, and changes to local land use designations or development regulations.

After existing system preservation, the second priority is to make minor improvements to existing highway facilities, such as adding ramp signals, or making improvements to the local street network to minimize local trips on the state facility.

The third priority is to make major roadway improvements such as adding lanes to increase capacity on existing roadways.

 As part of this Active Transportation Concept Plan development, ODOT will work with the City to determine appropriate bicycle and pedestrian strategies and improvements that can be implemented through ODOT preservation or enhancement projects, City capital projects, and/or development related project and consistent with this policy.

Policy 2B: Off-System Improvements

This policy recognizes that the state may provide financial assistance to local jurisdictions to make improvements to local transportation systems if the improvements would provide a cost-effective means of improving the operations of the state highway system.

 As part of this Active Transportation Concept Plan development process, ODOT will work with the City to identify improvements to the local road system that support the planned land use designations in the study area and that will help enhance the safety, preserve capacity and ensure the long-term efficient and effective operation of OR 99W.

Policy 2F: Traffic Safety

This policy emphasizes the state's efforts to improve safety of all users of the highway system. Action 2F.4 addresses the development and implementation of the Safety Management System to target resources to sites with the most significant safety issues.

 The Active Transportation Concept Plan development process will include a crash analysis along OR 99W to identify sites with a history of fatal and serious injury crashes and identify potential countermeasures to reduce existing and future crashes.

Policy 3A: Classification and Spacing Standards

State policy seeks to manage the location, spacing, and type of road intersections on state highways in a manner that ensures the safe and efficient operation of state highways consistent with their highway classification.

Action 3A.2 calls for spacing standards to be established for state highways based on highway classification, type of area, and posted speed. Tables in the OHP Appendix C present access spacing

standards which consider urban and rural highway classification, traffic volumes, speed, safety, and operational needs. The access management spacing standards established in the OHP are implemented by OAR 734, Division 51.

OR 99W within the study area is a regional highway with annual average daily traffic (AADT) over 5,000 vehicles in an urban area with a posted speed of 30 & 35 mph. Therefore, based on Table 15 of OHP Appendix C, the access management spacing standards for unsignalized approaches is along OR 99W within the study area is 350 feet.

Policy 4B: Alternative Passenger Modes

Policy 4B encourages the development of alternative passenger services and systems as part of broader corridor strategies. The policy promotes the development of alternative passenger transportation services located off the highway system to help preserve the performance and function of the state highway system. Yamhill County Transit provides public transportation service in McMinnville.

 Improving safety, access, and mobility for pedestrians and bicyclists and enhanced connections to transit are objectives of the Active Transportation Concept Plan development process.

Project Relevance:

OHP policies provide guidance related to the accessibility, mobility, and function of state highways. The Active Transportation Concept Plan development process will consider policies in the OHP to guide proposed improvements, modifications, or policies that could affect any of the state facilities in the City. The Active Transportation Concept Plan is being developed in coordination with ODOT and the City of McMinnville so that projects, policies, and regulations proposed as part of the Concept Plan will be consistent with the standards and targets established in the OHP related to safety, access, and mobility.

Oregon Administrative Rule for Access Management (OAR 734-051) (2014)

Oregon Administrative Rule (OAR) 734-051 defines the State's role in managing access to highway facilities to maintain functional use and safety and to preserve public investment. OHP Policy 3A and OAR 734-051 set access spacing standards for driveways and approaches to the state highway system. The most recent amendments presume that existing driveways with access to state highways have written permission from ODOT as required by ORS 734. The standards are based on state highway classification and differ depending on posted speed and average daily traffic volume.

Project Relevance:

Analysis for the Active Transportation Concept Plan development and final project recommendations will need to reflect state requirements for state facilities; the Active Transportation Concept Plan will comply or move in the direction of meeting access management standards for state facilities. Implementation measures that will be developed for the Active Transportation Concept Plan may entail amendments to the development code to ensure its requirements are consistent with these access management requirements as well as the draft Active Transportation Concept Plan recommendations related to access management.

Oregon Freight Plan (2011, last revised 2017)

The Oregon Freight Plan (OFP) is a modal plan of the OTP that implements the state's goals and policies related to the movement of goods and commodities. Its purpose statement identifies the intent to "improve freight connections to local, Native America, state, regional, national and global markets in order to increase trade-related jobs and income for workers and businesses." The objectives of the plan include prioritizing and facilitating investments in freight facilities (including rail, marine, air, and pipeline infrastructure) and adopting strategies to maintain and improve the freight transportation system. The plan defines a statewide strategic freight network. OR 99W is not designated as a strategic corridor in the OFP.

The segment of OR 99W between MP 34.7 and MP 37.0 is identified in by the OHP under Freight Highway Delay as a Tier 3 need to address delay because it is on a Seismic Phase 1 & 2 Route.

Project Relevance:

Maintaining and enhancing the efficiency of truck and rail freight system along OR 99W between MP 36.4 and MP 37.0 will be an objective of the Active Transportation Concept Plan.

Oregon Bicycle and Pedestrian Plan (2016)

The intent of the Oregon Bicycle and Pedestrian Plan (OBPP) is to create a policy foundation that supports decision-making for walking and biking investments, strategies, and programs that help to develop an interconnected, robust, efficient, and safe transportation system. The OBPP establishes the role of walking and biking as essential modes of travel within the context of the entire transportation system and recognizes the benefit of these modes to the people and places in Oregon.

The OBPP provides direction for what needs to be achieved, including 20 policies and associated strategies designed to help develop, sustain, and improve walking and biking networks. It identifies nine goals based upon the broader goals of the Oregon Transportation Plan (OTP) that reflect statewide values and desired accomplishments relating to walking and biking:

- Goal 1: Safety
- Goal 2: Accessibility and Connectivity
- Goal 3: Mobility and Efficiency
- Goal 4: Community and Economic Vitality
- Goal 5: Equity
- Goal 6: Health
- Goal 7: Sustainability

- Goal 8: Strategic Investment
- Goal 9: Coordination, Cooperation, and Collaboration

The OBPP also provides background information related to state and federal law, funding opportunities, and implementation strategies proposed by ODOT to improve bicycle and pedestrian transportation. It outlines the role that local jurisdictions play in the implementation of the Plan, including the development of local pedestrian and bicycle plans as stand-along documents within Concept Plans and Transportation System Plans (TSPs).

The Oregon Bicycle and Pedestrian Design Guide is the technical element of the plan that guides the design and management of bicycle and pedestrian facilities on state-owned facilities. It is an appendix to the HDM and provides best practices and design guidelines for bicycle and pedestrian facilities.

Project Relevance:

The policies and design guidance in the OBPP apply to OR 99W in McMinnville. State policy and design guidance will be considered in evaluating and planning for the bicycle and pedestrian elements as part of the Concept Plan development. Through the development of the Concept Plan, the project team will identify gaps in the regional walking and biking network within the study area and prioritize projects accordingly.

Oregon Transportation Safety Action Plan (2016)

An element of the OTP, the Oregon Transportation Safety Action Plan (TSAP) provides long-term goals, policies and strategies and near-term actions to eliminate deaths and life-changing injuries. The TSAP addresses all modes on all public roads in Oregon. Over the long term, the goals of the TSAP are:

- Infrastructure Develop and improve infrastructure to eliminate fatalities and serious injuries for users of all modes.
- Healthy, Livable Communities Plan, design, and implement safe systems. Support
 enforcement and emergency medical services to improve the safety and livability of
 communities, including improved health outcomes.
- Technology Plan, prepare for, and implement technologies (existing and new) that can affect transportation safety for all users.

The plan identifies actions that jurisdictions can take to increase transportation safety. They include adopting a Safe Communities Program and Safe Routes to School, which is a collaborative partnership with the National Highway Traffic Safety Administration and ODOT to promote safety. The Safe Routes to School program is a local initiative supported by grant funding that targets safety improvements to encourage walking and biking to school. In addition, the TSAP also identifies activities and roles for local jurisdictions that can improve safety. They include:

 Evaluate local spot-specific systemic safety needs; develop plans and programs to address needs.

- Collaborate with the state and stakeholder partners to educate the public about transportation safety-related behavioral issues.
- Integrate safety programming, planning, and policy into local planning.

Project Relevance:

The TSAP will be used as a resource while developing the Active Transportation Concept Plan to develop local goals, policies, and strategies to improve safety in McMinnville.

Statewide Planning Goal #12 (Transportation) (1974)

This goal is to provide and encourage a safe, convenient, and economic transportation system. It requires that a transportation plan, amongst other things, consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle, and pedestrian.

Project Relevance:

The Statewide Planning Goal #12 will be used as a resource while developing the Active Transportation Concept Plan to develop local goals, policies, and strategies to improve safety in McMinnville.

Statewide Transportation Improvement Program (2018-2021 and 2021-2024)

The Statewide Transportation Improvement Program (STIP) is the Oregon Department of Transportation's (ODOT's) capital improvement program for state and federally funded projects. The Oregon Transportation Commission (OTC) and ODOT developed the STIP in coordination with a wide range of stakeholders and general public. The STIP is divided into two broad categories: "Fix-It" and "Enhance." The "Enhance" category will fund activities that enhance, expand, or improve the transportation system. The "Fix-It" category will fund activities that fix or preserve the transportation system. The STIP identifies funding for, and scheduling of, transportation improvement projects and programs. Bicycle and pedestrian improvements receiving federal funds must be identified in the STIP.

- The Final 2018-2021 STIP was released in December 2017.
- The Final 2021-2024 STIP was adopted July 15, 2020.

Project Relevance:

The current 2018-2021 STIP does not include any projects within the study area.

The 2021-2024 STIP identifies a project to install reflectorized signal backplates, countdown pedestrian timers, and advanced dilemma zone protection at various signals along OR 99W between MP 21.46 to MP 39.06 in McMinnville, Newberg, and Dundee (Project number: 20130).

A repaving "preservation" project along the Baker/Adams Couplet from MP 37.04 to MP 38.13 is proposed for the 2021-2024 STIP cycle but has not yet been selected for funding. This pavement

resurfacing project will repair cracking, improve smoothness, and reduce long-term maintenance costs. The project recommends ADA ramp upgrades, which are assumed to require new curb construction for the entire length of the project. The project proposal evaluated the bicycle and pedestrian crash history and recommends bulb-outs at the intersections 1st Street, 3rd Street, 5th Street, 8th Street, and 12th Street within the couplet. Rectangular Rapid Flash Beacons (RRFBs) are recommended for consideration at the Baker Street and Adams Street intersections with 15th Street. The total funding cost is estimated to be \$16 million. The recommendations of this plan will be used as a reference when selecting key locations to evaluate enhanced crossings.

Oregon Intersection Safety Implementation Plan (2012)

The Oregon Intersection Safety Implementation Plan (ISIP) was also developed in conjunction with the TSAP and provides for intersection-related safety measures to reduce fatal crashes. The ISIP requires an analysis of crash trends, cost effective countermeasures, and for pairing low cost improvements with education and enforcement.

Project Relevance:

The intersection-related safety measures, crash trends, cost effective countermeasures will be reviewed and applied as part of the safety analysis in addition to the safety procedures and guidance outlined in ODOT's All Roads Transportation Safety (ARTS) program.

Oregon Bicycle and Pedestrian Safety Implementation Plan (2016)

The Oregon Bicycle and Pedestrian Safety Implementation Plan was developed in conjunction with the TSAP with the intent of reducing the frequency and severity of pedestrian and bicycle related crashes. Like the Intersection Safety Implementation Plan, the Bicycle and Pedestrian Safety Implementation Plan identifies priority locations and countermeasure options.

Project Relevance:

No priority locations in the City of McMinnville were identified in the Bicycle and Pedestrian Safety Implementation Plan.

Oregon Resilience Plan (2013)

The Oregon Resilience Plan provides policy guidance and recommendations to mitigate risks, accommodate emergency response and recovery, and support the resilience of government and business before, during, and after a Cascadia earthquake and tsunami. The plan includes an assessment of the seismic integrity of Oregon's multi-modal transportation system, including bridges and highways, rail, airports, water ports, and public transit systems.

The plan classifies highway lifeline routes as Tier 1, 2, and 3, where Tier 1 routes are those that make up the transportation backbone system, which is considered to provide the greatest benefits for short-term rescue and longer-term economic recovery. Targets for recovery in all mode categories fall into three levels: minimal, operational, and functional.

Project Relevance:

OR 99W identified as a Tier 1 Route. Resiliency targets for Tier 1 Routes are to have a minimum level of service restored within one to three days, a functional level of service within three to seven days, and to restore the facility to 90% capacity within one to four weeks.

The Oregon Resilience Plan provides guidance and priorities to maintain the seismic integrity of Oregon's multi-modal transportation system. Policies and standards adopted by the City of McMinnville should consider additional guidance, concepts, and strategies for design related to facility resiliency in the event of seismic activity.

Oregon Blueprint for Urban Design (2020)

The Blueprint for Urban Design (BUD) serves as a "bridging document" to the Highway Design Manual (HDM) and establishes an approach for designing state facilities in Oregon communities. The HDM is the design guidance required for all projects on state facilities. The BUD applies to urban land use contexts that broadly identify the various built environments along ODOT roadways.

The urban context is based on existing and future land use characteristics, development patterns, and roadway connectivity of an area. The BUD provides planning and design principles and guidance focused on all roadways within the urban content except for interstates and limited-access freeways (expressways) with interchanges.

Project Relevance:

The McMinnville Active Transportation Concept Plan will follow the guidance and framework outlined in the BUD for determining the appropriate alternative and facility selection based on the agreed upon urban context and corridor vision. The McMinnville Active Transportation Concept Plan will develop and seek approval of Urban Design Concurrence documentation based on a performance-based design decision framework used to ultimately select a preferred alternative.

Oregon Department of Transportation American's with Disabilities Act Inspection Summary

Oregon Department of Transportation (ODOT) American's with Disabilities Act (ADA) Inspection Summary provides an assessment of the ADA ramps, push buttons, and corners along the state highway system. The assessment provides a condition rating for each ADA element on a scale of Poor, Fair, and Good.

Project Relevance:

The ODOT ADA Inspection Summary will help to inform investment and prioritization along OR 99W within the project study area. The ADA will be followed in recommending any and all improvements within the study area.

Local Plans

City of McMinnville Transportation System Plan (2010)

The TSP guides the development and management of transportation facilities in the city, reflecting the community goals and objectives and providing consistency with state, regional, and local plans. The current plan was adopted in 2010 and is approaching the mid-way point of its planning horizon.

The 2010 TSP includes goals and objectives, which are used in conjunction with transportation goals and policies in the Comprehensive Plan to evaluate land use and transportation actions. The TSP identifies a list of prioritized projects including recommendations along OR 99W within the project study area for the Active Transportation Concept Plan.

Project Relevance:

The Goal and Policy Guidance established in the City of McMinnville TSP were used as the basis for developing the Corridor Vision Statement (Reference 1). Projects identified within the TSP that are located within the project study area for the McMinnville Active Transportation Concept Plan will be referenced as the starting point for alternative development.

City of McMinnville Comprehensive Plan (Volume II) (2004)

The City of McMinnville Comprehensive Plan (Volume II) contains the goal, policy, and proposal statements which shall be applied to all land use decisions within the urban growth boundary (UGB). Its goals and policies work collaboratively with the goals and policies stated in the City's TSP to provide direction on transportation system and land use decision-making in the City.

Project Relevance:

The transportation system policies identified in Chapter VI of the Comprehensive Plan were reviewed when developing the Corridor Vision Statement (Reference 1) to ensure consistency. Relevant policies identified in Chapter VI include but are not limited to:

- Complete Streets
- Multi-Modal Transportation System
- Connectivity and Circulation
- Transportation Safety

- Transportation Sustainability
- Pedestrian Programs
- Bicycle System Plan

City of McMinnville Downtown Strategic Parking Management Plan (2018)

Rick Williams Consulting completed the Downtown Strategic Parking Management Plan in 2018 analyzing the existing downtown off-street parking supply and developing an objective data set for recommendations. The findings of the study create the foundation for a comprehensive strategic parking management plan that responds to the unique environment, goals, and objectives of downtown McMinnville.

Project Relevance:

The qualitative and quantitative data provided in the Downton Strategic Parking Management Plan, most notably along OR 99W, will be reviewed and analyzed as part of the alternative analysis development. Recommendations identified in the Downton Strategic Parking Management Plan will be considered and reviewed to inform decision making for alternatives located along OR 99W.

NEXT STEPS

The information provided in this memorandum will guide development of preferred active transportation concept alternatives and identify potential amendments to pertinent documents and regulations needed to implement these alternatives.

REFERENCES

1. Kittelson & Associates, Inc. Corridor Vision Statement, 2020.



851 SW 6th AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 F 503.273.8169

TECHNICAL MEMORANDUM #3

Date:	October 30, 2020	Project #: 23021.020
To:	Project Management Team Project Advisory Committee	
From: Project: Subject:	Nick Gross, Amy Griffiths, Marc Butorac, PE, PTOE, PMP McMinnville OR 99W (NE McDonald Lane to Linfield Av Concept Plan Final TM #3: Analysis Methodologies and Assumptions	enue) Active Transportation

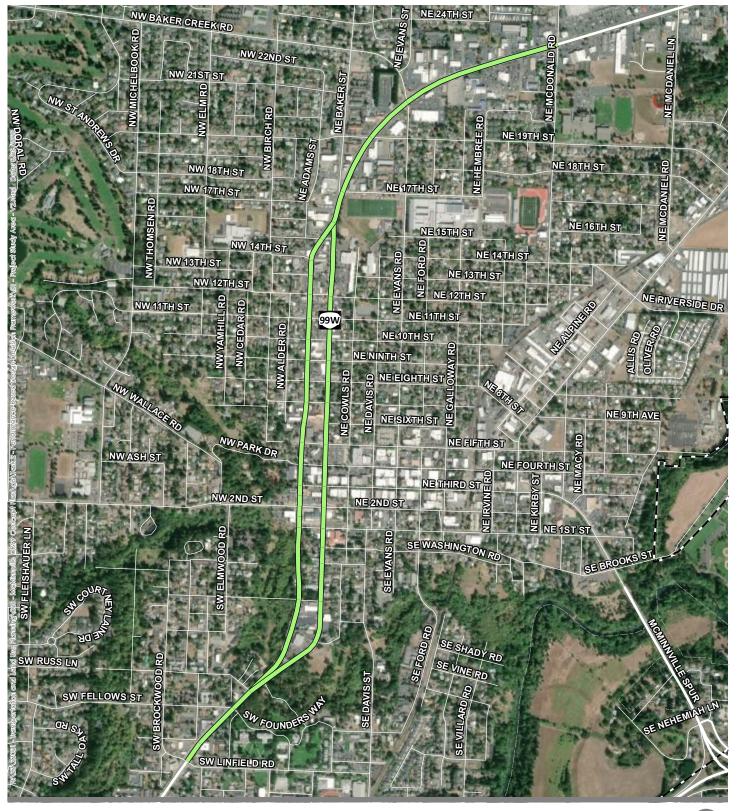
PURPOSE

This memorandum documents the safety and multimodal analysis methodologies and assumptions for the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan (Plan). The methodologies and assumptions will rely primarily on the Oregon Department of Transportation (ODOT) Analysis Procedures Manual (APM – Reference 1) to evaluate the existing and future multimodal conditions within the project study area.

The methodologies and assumptions identified in this memorandum focus on pedestrian and bicycle multimodal analyses, consistent with the project vision of identifying improvements in the OR 99W corridor that will result in a safer, more comfortable, and attractive place to walk, bike, roll and facilitate transit use (Corridor Vision – Reference 2). The project Evaluation Criteria and Performance Measures (Reference 3) have been developed with the multimodal analyses and procedures identified in the ODOT APM in mind (e.g., pedestrian and bicycle level of traffic stress). Motor vehicle traffic volumes and crash data will be used to inform the multimodal analysis; however, a traditional motor vehicle operational and safety analysis will not be performed. When necessary, 2040 will be the assumed horizon year as part of the multimodal analysis.

PROJECT STUDY AREA

The McMinnville OR 99W Active Transportation Concept Plan project study area is contained to the 2.1mile segment of OR 99W between NE McDonald Lane (mile point [MP] 36.36) and SW Linfield Avenue (MP 38.46).. Intersections along the OR 99W couplet will be evaluated to determine potential enhanced crossing locations and potential modifications to intersection geometry to increase safety for people walking and biking. The project study area and multimodal analysis will be generally contained to the area located between Adams Street and Evans Streets, with the parallel side streets considered for potential alternative bicycle routes. Figure 1 illustrates the project study area.



OR99W Project Extents

UGB

Figure 1

Project Study Area McMinnville, OR



SAFETY ANALYSIS

Safety analyses will include reviewing historical crash data and examining roadway crossings for the active transportation modes including bicyclists and pedestrians, as described in the following sections.

Crash Analysis

The five most recent years of crash data will be obtained from ODOT's Crash Analysis and Reporting Unit and reviewed to gain an understanding of multimodal crash history within the project study area, consistent with the methodologies outlined in the ODOT APM.

According to the APM, "when analysis has few records of crashes involving pedestrians and bicyclists, reporting the details of those crashes with a narrative may be the only option available." Therefore, critical crash rate will not be calculated throughout the corridor, and the HSM Predictive method will not be used to calculate expected crash frequency. The crash analysis will consider the project study area holistically rather than evaluate each intersection in the study area individually. The crash data will be analyzed for a variety of factors including severity, crash type and characteristics, crash rates, and location to identify potential crash patterns or area-wide trends. Additional attention will be directed toward locations with multiple pedestrian and bicyclist crashes and locations along the corridor identified as top 5% or 10% locations from the most recent three (3) Safety Priority Index System (SPIS) site listings.

Potential countermeasures (and resulting crash percentage reduction) will be identified from the All Roads Transportation Safety (ARTS) Crash Reduction Factors (CRF) listing or the CRF Appendix when available (ARTS—Reference 4). The countermeasures will be ranked by benefit/cost.

Crossing Analysis

Key crossings will be evaluated to determine whether the type of crossing currently presented may meet minimum criteria for an enhancement. This review will include assessing the crossing using *NCHRP Report 562: Improving Pedestrian Safety at Unsignalized Crossings* (NCHRP—Reference 5) procedures. These crossings will be identified based on the crash analysis and the Statewide Transportation Improvement Program (STIP). In addition, the ODOT American's with Disabilities Act (ADA) ramp inventory will be reviewed to understand which ramps within the OR 99W corridor are not ADA compliant.

Per the scope, ODOT and the City will provide crosswalk locations, treatments, dimensions, and conditions. Where needed, the Consultant will supplement this data using satellite imagery to identify existing marked and unmarked crossings as well as existing bulb-out locations. The pedestrian and bicycle crossing analysis will use available data provided by ODOT TransGIS including average annual daily traffic (AADT) and posted speed to determine appropriate levels of crosswalk protection at uncontrolled crossing locations.

PEDESTRIAN AND BICYCLE NETWORK ANALYSIS

The existing pedestrian and bicycle network will be reviewed to identify gaps and deficiencies in the project study area. A gap is defined as a missing link in the network, such as an identified key walking or biking route that is missing sidewalk or bicycle facility. A deficiency is defined as a pedestrian or bicycle facility that does not meet the standard or is insufficient to meet the users' needs. Examples of deficiencies include, but are not limited to:

- On-street connection that has a Bicycle Level of Traffic Stress rating greater than 2.
- On-street connection that has a Pedestrian Level of Traffic Stress rating greater than 2.
- Roadway crossings where minimum criteria may be met for an enhanced crossing facility according to the Crossing Analysis described previously.
- A sidewalk which has inefficient width for a wheelchair to pass due to a utility pole placed in the sidewalk.

The review will include an inventory and general condition of sidewalks and bike lanes, a feasibility assessment of potential roadway reorganizations along the OR 99W couplet (identified in the McMinnville TSP – Reference 6) in order to provide bicycle facilities in the project study area, and a level of traffic stress analysis for pedestrians and bicyclists. Focus will be placed on potential crossing improvements and on-street facility connections along identified Safe Routes to School (SRTS) walking routes.

Level of Traffic Stress

Pedestrian Level of Traffic Stress (PLTS) and Bicycle Level of Traffic Stress (BLTS) intersection and segment analyses will be performed on key roadway crossings and any necessary on-road routes required within the project study area as they relate to the active transportation system. The analyses will be conducted in accordance with the procedures outlined in the ODOT APM. The target level of traffic stress for the bicycle system is an LTS 2 as this target most closely appeals to most of the potential bicycle riding population and maximizes the available bicycle mode share. The target level of traffic stress for the pedestrian system is also LTS 2 as this target will generally be acceptable to the majority of users. Within ¼-mile of schools, the desirable level of level of traffic stress is LTS 1, since it is targeted at 10-year-old children (5th grade) or parents of younger children.

Bicycle and Pedestrian Network Connectivity

Per the scope, ODOT and the City will provide the consultant with the location and trip characteristics of major bicycle and pedestrian generators. Multimodal activity generators will be assessed and utilized in the development of the concept alternatives and facility selection. Connectivity improvements to the existing and planned bicycle and pedestrian networks, SRTS routes, and transit stops will be assessed from a gaps and deficiencies perspective.

MOTOR VEHICLE VOLUMES AND ANALYSIS

An assessment of potential roadway reorganizations along OR 99W, as identified in the City's TSP, will be conducted to determine the feasibility of installing bicycle facilities. Geometric (lane numbers and arrangements, cross-section elements, etc.) and operational (posted speeds, intersection control, parking, etc.) data will be collected through a combination of Google Earth satellite imagery and field data observation. Guidance on cross section elements including dimensions will rely on the Blueprint for Urban Design (BUD) recommendations based on the identified urban context. This roadway reorganization may include adjusting roadway widths or removing a parking lane; no vehicle travel lanes will be removed as part of a project recommendation. Therefore, the feasibility of the roadway reorganization will be conducted with respect to parking, not motor vehicle volumes.

Motor vehicle traffic volumes and crash data will be used to inform the multimodal analysis; however, a traditional motor vehicle operational and safety analysis will not be performed.

Parking

An assessment of potential consolidation of on-street parking to improve sight distance and accommodate enhanced crossing facilities will be performed along the OR 99W corridor within the project study area. *The City of McMinnville Downtown Strategic Parking Management Plan* (Reference 7) and the Parking Demand Data Collection conducted and provided by ODOT as part of this plan effort will be reviewed to determine the feasibility of potential on-street parking removal or relocation along the OR 99W corridor within the project study area. Removal of on-street parking will be assumed feasible if existing on-street parking demand can be accommodated within a two-block radius either through off-street public parking or alternative on-street parking locations while remaining below 85% peak occupancy.

Freight

Major freight routes within the project study area will be identified and evaluated to determine the potential impacts including accessibility mobility, safety, and freight passage through, into, and from the project study area. Pacific Highway West (OR 99W) is designated as a Reduction Review Route¹, subject to ORS 366.215. A qualitative assessment of potential impacts to freight will be performed and concept alternatives will be developed to not preclude freight mobility standards according the *Oregon Freight Plan*.

¹ Per OAR Rule 731-012-0030 Reduction Review Routes "include all parts of the state highway(s) that must be travelled to complete the prescribed route and/or connect with other state highway."

EVALUATION CRITERIA, DATA NEEDS, AND METHODOLOGIES

Table 1 summarizes the evaluation criteria, performance measures from the Evaluation Criteria and Performance Measures Memorandum. It also provides the methodologies proposed to assess these criteria and the data needs required for the methodologies.

Table 1: Evaluation Criteria, Performance Measures, Methodology, and Data Needs

Evaluation Criterion	Performance Measures	Methodology	Data Needs
Complete Streets	 Bicycle Level of Traffic Stress (BLTS) Pedestrian Level of Traffic Stress (PLTS) 	ODOT APM Chapter 14 LTS criteria	 BLTS provided by ODOT for OR 99W Sidewalk condition and width, buffer type and width, bike lane width, parking width, number of lanes and posted speed, land use, presence of lighting, sidewalk ramps, median refuge, functional class, ADT, lane configuration
Multi-Modal Transportation System	• Type and presence of pedestrian, bicycle, transit, motor vehicle, and freight facilities align with the recommendations from the BUD	Recommendations from the Blueprint for Urban Design	 Speed limit, travel lane characteristics, shy distance, median, bicycle facility type and characteristics, pedestrian facility type and characteristics, parking type and characteristics
Connectivity	 Connection of alternative to the existing and planned bicycle and pedestrian network Barriers to walking and biking (including an unsafe crosswalk or facilities in poor condition) removed by the alternative Facility gap filled by alternative Proximity of alternative to essential destinations Proximity of alternative to activity generators 	• Map review of existing plans, existing conditions, and proximity to generators	 City of McMinnville TSP maps SRTS network map PLTS and BLTS maps Existing conditions inventory Location of active generators and essential destinations
Safety	 Percentage (%) of anticipated crash reduction based on crash reduction factor (CRF) scaled by planning-level cost of project Bicyclist and pedestrian crash history Pedestrian Risk Factor Bicyclist Risk Factor 	 ODOT APM Chapter 4 ARTS Countermeasures 	 5-year crash history ARTS countermeasures Planning-level project cost Pedestrian Risk Factor Bicyclist Risk Factor
Equity	 Transportation Disadvantaged Population (TDP) Index Impacts to American's with Disabilities Act (ADA) compliance 	 ODOT Active Transportation Needs Inventory TDP Index ADA Standards for Accessible Design 	 TDP Index includes the following characteristics of a census block: elderly populations (65 and older), youth populations (under 18), non- white and Hispanic populations, low-income populations (households earning less than 200% of the poverty level as determined by the census), limited English proficiency population (aggregate of census populations who speak English "not well" or "not at all"), households without access to a vehicle, crowded households, and people with a disability (severe or non-severe disability) ODOT ADA Inspection Summary
Livability	 Right-of-way acquisition needs Neighborhood street modification, business access and parking Anticipated public support 	Qualitative review of livability and anticipated public support	 Right-of-way maps, parking inventories, locations of residential and commercial properties in the project study area, open house, and public advisory committee comments
Design Feasibility	Constructability	Qualitative review of constructability	Right-of-way availability, existing terrain, utility location, visibility concerns, roadway reorganization feasibility

NEXT STEPS

The analysis methodologies and assumptions presented in this memorandum will be used to conduct the existing conditions and future needs analysis and the alternatives development and analysis for the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan.

REFERENCES

- 1. Oregon Department of Transportation. Analysis Procedures Manual, 2020.
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- 3. Kittelson & Associates, Inc. Evaluation Criteria and Performance Measures, 2020.
- 4. Oregon Department of Transportation. *All Roads Transportation Safety Crash Reduction Factors*.
- 5. National Cooperative Highway Research Program. *NCHRP Report 562: Improving Pedestrian Safety at Unsignalized Crossings,* 2006.
- 6. City of McMinnville. McMinnville Transportation System Plan, 2018.
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851 SW 6th AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 F 503.273.8169

TECHNICAL MEMORANDUM #4

Date:	December 18, 2020	Project #: 23021.020
To:	Project Management Team	
	Project Advisory Committee	
From:	Nick Gross, Amy Griffiths, Marc Butorac, PE, PTOE, PMP	
Project:	McMinnville OR 99W (NE McDonald Lane to Linfield Av	venue) Active Transportation
	Concept Plan	
Subject:	TM #4: Existing Conditions and Future Needs	

PURPOSE

This memorandum summarizes the bicycle and pedestrian network, including existing facilities, network connectivity, and gaps and deficiencies along OR 99W between McDonald Lane and Linfield Avenue in McMinnville, Oregon. This memorandum also summarizes the findings of current safety and active transportation conditions and identifies safety and active transportation needs and deficiencies, based on TM #1: Final Performance-Based Design Decision Framework.

PROJECT STUDY AREA

The McMinnville OR 99W Active Transportation Concept Plan ("Concept Plan") project study area is contained to the 2.1-mile segment of OR 99W between McDonald Lane (mile point [MP] 36.36) and Linfield Avenue (MP 38.46). Just north of 15th Street (MP 37.12), OR 99W splits into a couplet configuration with southbound travel along Adams Street and northbound travel along Baker Street. The couplet merges back at Edmunston Road (MP 38.22).

While the project study area focuses on the OR 99W corridor, parallel route opportunities were explored as potential low-stress alternatives to traveling along the highway. No continuous north-south connections are located on the west side of OR99W due to the natural features and topography associated with Cozine Creek. For that reason, parallel routes were explored east of OR 99W with a focus on Cowls Street, Davis Street, and Evans Street.

The following sections summarize the existing conditions of OR 99W within the project study area and explore the characteristics along the potential parallel routes. Figure 1 illustrates the project study area.



Project Study Area McMinnville, OR

Active Transportation Generators

Certain land uses are associated with generating walking and biking trips. Mapping these active transportation generators helps inform the location and priority of investment in walking and biking facilities. Generators of walking and biking activity in the area include transit stops, schools, libraries, gyms, grocery stores, health clinics, municipal buildings, community centers, places of worship, bike shops, and parks. The map of active transportation generators is provided in Figure 2.

As shown in Figure 2, there is a cluster of active transportation generators, including transit stops, places of worship, health clinics, the community center, the court house, and a library, along Evans Street. Baker Street and Adams Street both have a greater number of generators south of Park Drive, including parks, libraries, health clinics, a bike shop, and a grocery store. Throughout the couplet there are also restaurants and coffee shops, which are not included as active transportation generators but could be expected to generate pedestrian and bicyclist activity.

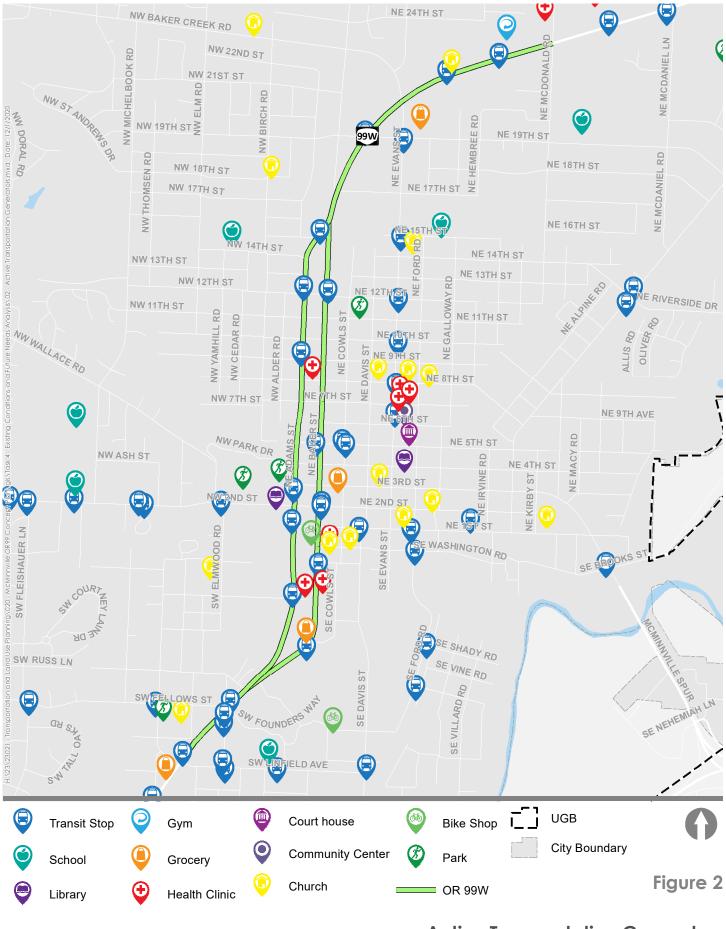
Demographics

The Transportation Disadvantaged Population (TDP) Index is based on census data characteristics, designed to help prioritize improvements that serve areas with high numbers of transportation disadvantaged residents and environmental justice communities that have been traditionally underserved. This index was calculated according to the Oregon Department of Transportation (ODOT) Active Transportation Needs Inventory Assessment. The index converts household statistics from the American Community Survey to a per capita index. It is calculated at the census block group level as the sum of people 65 and older, 17 and younger, non-white or Hispanic, speak English "not well" or "not at all", low-income, with a disability, living in crowded households, or living in households without vehicle access. That sum is divided by total block population. People fitting into multiple vulnerability categories are counted multiple times. The higher the index number the more disadvantaged the population is with respect to transportation.

The TDP Index is also useful because the characteristics measured by the index correspond to characteristics of transportation system users with a greater propensity to walk or bike (e.g. individuals under 18, over 65, and without access to a vehicle). A map of the Transportation Disadvantaged Population (TDP) index is shown in Figure 3.

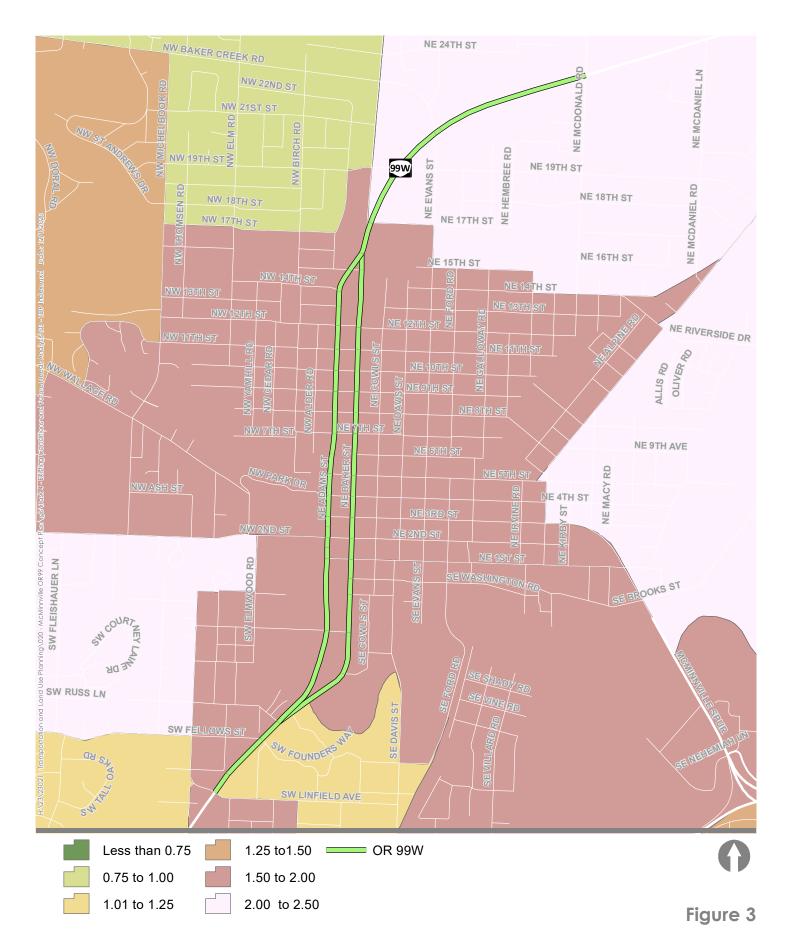
Most of the study area has a TDP Index between 1.25 to 1.5. This means that on average individuals are in one to two of the disadvantaged groups. The TDP Index is similar across the study area, however the average number of transportation disadvantaged characteristics (e.g. low-income, elderly) a person has is slightly lower near Linfield University and slightly higher surrounding OR 99W at the northern portion of the corridor.

The full methodology behind the calculation is included in Appendix A.





Active Transportation Generators McMinnville, OR





Transportation Disadvantaged Population Index McMinnville, OR

EXISTING PEDESTRIAN AND BICYCLE NETWORK

The following section provides an inventory and assessment of the active transportation facilities along OR 99W and potential parallel facility routes. This section includes a review of existing walking and biking activity within the project study area, as well as existing facility types, locations, geometries, and conditions, as they relate to state and local standards.

Pedestrian Facilities

The following section describes the existing walking system. Information on the type and location of sidewalks was obtained from ODOT GIS data. The GIS data was updated to include information based on Google Earth Aerial views. Figure 4 illustrates the existing pedestrian facilities along OR 99W and potential parallel routes in the study area.

Sidewalks

Sidewalks are the most fundamental element of the pedestrian system. Sidewalks are typically constructed of concrete and separated from the roadway by a curb and gutter, landscaping strip, and/or on-street parking. The unobstructed travel way for people walking on a sidewalk should be clear of utilities, signposts, fire hydrants, vegetation, and street furnishings. Typically, a buffering of the pedestrian space and vehicular travel lane increases the comfort of the pedestrian experience.

Sidewalks are provided along both sides of OR 99W within the project study area except for the segment of Adams Street between 1st Street and Edmunston Street. This segment has intermittent sidewalks creating a non-continuous facility for people walking on the east or west side of Adams Street.

Facility Guidance

Based on the guidance identified in the Blueprint for Urban Design (BUD) for Urban Mix and Traditional Downtown/Central Business District (CBD) contexts, sidewalks should provide ample space for sidewalk activity (e.g. sidewalk cafes, transit, shelters). According to the ODOT Highway Design Manual (HDM), the standard width for sidewalks is six feet, and the minimum clear width of a pedestrian access route within a sidewalk is four feet. In constrained areas around obstacles that cannot be moved, a minimum passage of four feet must be maintained for a maximum length of 200 feet.



Sidewalks on Adams Street (facing north)



Sidewalks on Evans Street (facing north)

Crosswalks

Marked crosswalks serve as a designated space for people to cross the roadway. There are two main forms of marked crosswalks: "transverse" crosswalks and "continental" or "zebra" crosswalks. In Oregon, every intersection is a legal crossing, whether it is marked or unmarked.

There are currently marked "transverse" crossings at all signalized intersections along OR 99W within the project study area as well as the Adams Street/3rd Street and Adams Street – Baker Street/15th Street intersections. There are no marked crosswalks along OR 99W between 5th Street and 12th Street, which is a distance of approximately 1,850 feet (0.35 miles). There are also no marked crosswalks along OR 99W between 2nd Street and Fellows Street, which is a distance of approximately 2,640 feet (0.5 miles).

Enhanced Crossings

Enhanced crossings provide additional safety for people walking at mid-block or unsignalized crossings by alerting motorists that a person is crossing the roadway. Common enhanced crossing treatment types include "ACTIVE OR ENHANCED", "RED" facilities treatments, and bulb-outs. "ACTIVE OR ENHANCED" facilities provide a flashing yellow indication and may include rectangular rapid flashing beacons (RRFBs) or pedestrian hybrid beacons (PHBs). "RED" facilities provide a red indication and are more commonly located on facilities with high speeds and traffic volumes. "RED" facility treatments may include pedestrian half signals or a traditional full signal. Bulb-outs, which are described in the following section extend the sidewalk to narrow the crossing distance for people walking across a roadway.

There are currently no enhanced crossing facilities located within the project study area other than the signalized intersections.

Facility Guidance

Based on the guidance identified in the BUD for Urban Mix and Traditional Downtown/CBD contexts, the target pedestrian crossing spacing range is 250 to 550 feet (one-two blocks). According to the HDM, developed, urban state highways should provide a safe and convenient pedestrian crossing no less frequent than every quarter mile. Crossing improvements should also be no closer than 300 feet from the nearest signalized crosswalk. Determining the facility treatment type of potential enhanced crossing facilities will rely on the methodologies outlined in the NCHRP Report 562 and will be performed as part of TM #5: Alternatives Development, Analysis, and Preferred Alternative Concept.







Crosswalk at Adams Street/5th Street (facing north) Crosswalk at Baker Street/15th Street (facing south)



Existing Pedestrian Facilities McMinnville, OR

Bulb-Outs

Bulb-outs or "curb extensions" extend the sidewalk into the parking or landscape strip to narrow the crossing distance for people walking across a roadway. Bulb-outs are most commonly located at corners; however, they can be installed at mid-block crossing locations. Bulb-outs enhance pedestrian safety by increasing pedestrian visibility, creating shorter crossing distances, and slow turning vehicles.

Bulb-outs are currently located at the Adams Street/3rd Street, Adams Street/5th Street, Adams Street/15th Street, Adams Street/11th Street, Baker Street/9th Street, Baker Street/11th Street, and Baker Street/15th Street intersections. Bulb-outs are planned for the northwest and southwest corners of the Baker Street/3rd Street intersection.

Facility Guidance

The BUD recommends the use of bulb-outs or "curb extensions" as a design element consideration within the transition realm (the space between the back of sidewalk and edge of parking). Curb extensions are also recommended treatments for target speed areas up to 30 mph within urban areas.

Within the project study area, the posted speed of OR 99W is 30 mph along most of the OR 99W couplet. Along Cowls Street, Davis Street, and Evans Street the posted speed is 25 mph. The posted speed is 35 mph along OR 99W north and south of the couplet and along Adams Street south of 2nd Street.

According to the HDM, bulb-outs, or curb extensions, are used in conjunction with on-street parking and reduce the pedestrian crossing distance by extending the sidewalk to the edge of the parking lane, thereby improving the visibility of pedestrians for motorists. The HDM states that crossing islands and curb extensions should be used to decrease crossing distances at signalized intersections. On streets with parking, near-side bus stops benefit from curb extensions so passengers can board or dismount the bus directly without stepping on to the street. The HDM notes that curb extensions can trigger freight mobility concerns. OR 99W is a Reduction Review Route subject to ORS 366.215; therefore, a review of potential reductions of vehicle-carrying capacity will be required at the time of project implementation.



Bulb-Outs at 3rd Street/Baker Street (facing east)



Bulb-Outs at 5th Street/Adams Street (facing west)

Pedestrian Ramps

Pedestrian curb ramps and tactile warning pads are necessary for pedestrian crossings to be compliant with American with Disabilities Act (ADA) standards. Pedestrian ramps provide access on and off streets for people walking and rolling.

Facility Guidance

ODOT has created state standards and specifications for the design and construction of ADA Curb ramps that comply with the 2011 Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way, a nationally recognized ADA compliance document. These standards and specifications set by ODOT ensure that the pedestrian curb ramps comply with ADA accessibility requirements. The ramp design must meet specific criteria related to width, length, cross-slope, running slope, warning features, and transitions.



Pedestrian Ramp at Adams Street/11th Street (Good Condition)



Pedestrian Ramp at Baker Street/1st Street (Poor Condition)

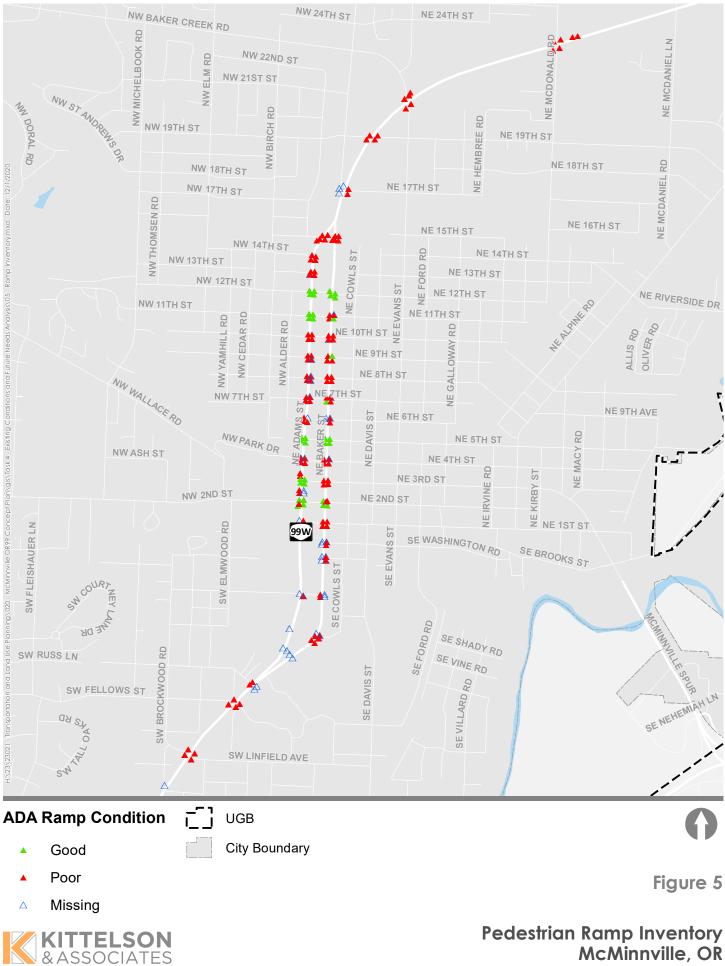
Pedestrian Ramp Inventory

The ODOT ADA ramp inventory and information the City provided about recent ramp upgrades was reviewed to understand which ramps within the project study area are not compliant with ODOT ADA standards. According to the Ramp Inventory in ODOT TransGIS and the information provided by the City, most pedestrian ramps along OR 99W between McDonald Lane and Linfield Avenue are either in 'Poor' condition or are missing. The pedestrian ramps are reported in 'Good' condition according to ODOT ADA standards at the following intersections (at all four corners unless otherwise noted):

- Adams Street/12th Street,
- Adams Street/11th Street,
- Adams Street/5th Street,
- Adams Street/3rd Street,
- Adams Street/2nd Street (except Northwest corner);

- Baker Street/12th Street
- Southeast corner of Baker Street/11th Street,
- Northwest corner of Baker Street/9th Street,
- Southwest corner of Baker Street/7th Street
- Baker Street/5th Street, and
- Baker Street/2nd Street (except Northwest corner).

Figure 5 illustrates the ODOT pedestrian ramp inventory.



Pedestrian Ramp Inventory McMinnville, OR

Existing Pedestrian Activity

To understand relative pedestrian activity in the corridor, a Strava Heatmap was developed to show the level ('heat') made by aggregated, public activities over the last two years. The data is an aggregate of people tracking their runs and walks with Strava and can be used to understand patterns of routes people are taking today. Strava data only records activity for people using the app and may be biased towards recreational activities. Exhibit 1 shows the Strava Heatmap for pedestrian activity in McMinnville. There is a relatively high amount of pedestrian activity along Birch Street, Evans Street, Davis Street, 2nd Street, and 3rd Street.

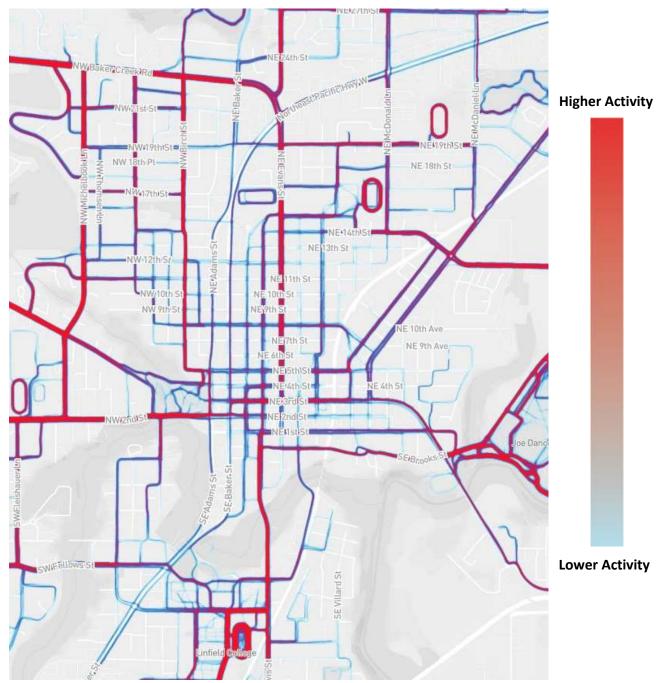


Exhibit 1: Strava Heatmap – Pedestrian Activity

Bicycle Facilities

The following section describes the existing biking system. Information on the type and location of bicycle facilities was obtained from ODOT GIS data. The GIS data was updated to include information based on Google Earth Aerial views. Figure 6 illustrates the existing bicycle facilities along OR 99W and potential parallel routes in the study area.

Bike Lanes

Bike lanes designate an exclusive space for bicyclists through the use of pavement markings and signage. They are appropriate on a wide range of roadway types. Typical bike lane design can range in width and whether or not there is an additional buffer space or vertical separation between the bike lane and motor vehicle lane. Bike lanes on local streets are appropriate where bicycle volumes are high, vehicle speeds are higher than 25 miles per hour, and/or poor sight distance exists. Bike lanes must always be wellmarked to call attention to their preferential use by bicyclists.

There are no bikes lanes along the Adams Street or Baker Street within the couplet of OR 99W; however, bike lanes are provided north and south of the couplet along OR 99W. Bike lanes are located along Evans Street between 8th Street and 17th Street; however, no bike lanes are provided south of 8th Street or north between 17th Street and OR 99W.

Facility Guidance

Based on the guidance identified in the BUD for Urban Mix and Traditional Downtown/CBD contexts, when planning for new bicycle facilities, it is recommended to start with wide, separated bicycle facilities and consider roadway characteristics to justify the width of the facilities.

The Oregon Bicycle and Pedestrian Design Guide sets the standard for bike lane widths at six feet, with a minimum width of four feet on open shoulders or five feet from the face of curb, guardrail, or parked cars.



Bike Lanes on 2nd Street (facing west)



Bike Lanes on Evans Street (facing north)

Shared Lane Markings ("Sharrows")

Typically located on neighborhood streets with low vehicular volumes and speeds, "sharrows" are pavement markings that alert motorists to expect people biking in the travel lane. Sharrows provide wayfinding for people biking on neighborhood bicycle routes and typically feature a stenciled bicyclist with two chevron symbols, denoting where people biking should share the road with motor vehicles.

Sharrows are provided along 2nd Street and 5th Street within the project study area.

Facility Guidance

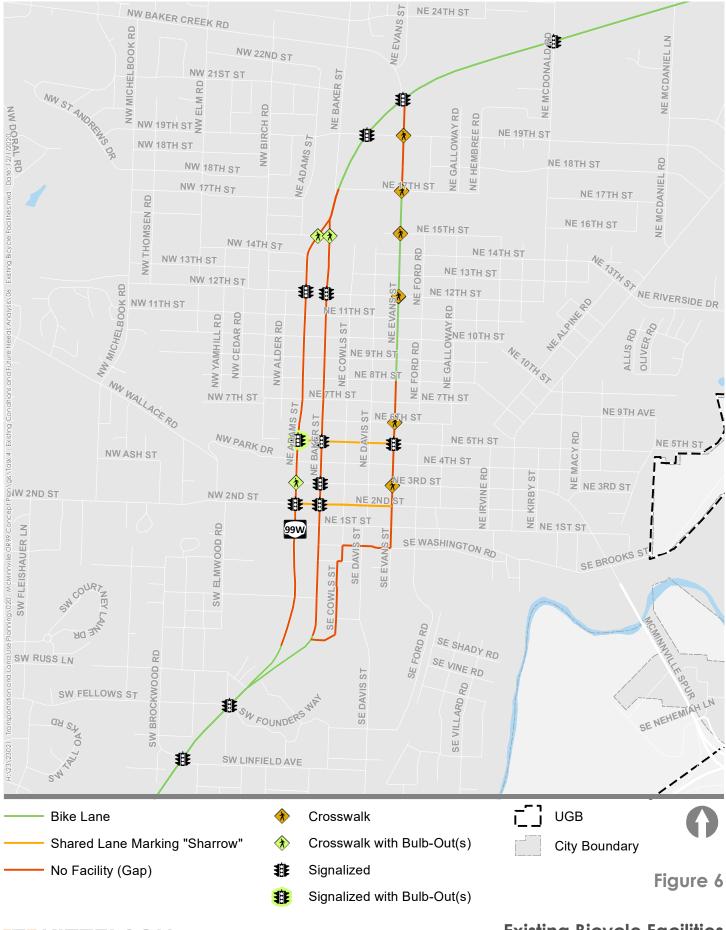
Shared lane markings or "sharrows" should only be installed along roadways with traffic volumes less than 3,000 ADT and roadways with posted speeds less than 30 mph. Shared lane markings may be appropriate on roadways with a posted speed greater than 30 mph if the ADT is less than 750. Existing sharrows in the study area are provided on streets with posted speeds less than 30 mph. The ADT along these street segments is not available on ODOT TransGIS.



Sharrows on 2nd Street (facing east)



Sharrows on 5th Street (facing east)



KITTELSON & ASSOCIATES Existing Bicycle Facilities McMinnville, OR

Existing Bicycle Activity

To better under relative bicycle activity within the study area, a Strava Heatmap was developed to show the level ('heat') made by aggregated, public activities over the last two years. The data is an aggregate of people tracking their cycling activity with Strava and can be used to understand patterns of routes people are taking today. Strava data only records activity for people using the app and may be biased towards more recreational activities. Exhibit 2 shows the Strava Heatmap for people biking in McMinnville. There is a relatively high amount of bicyclist activity along Evans Street, Davis Street, 3rd Street, 2nd Street, and Linfield Avenue.

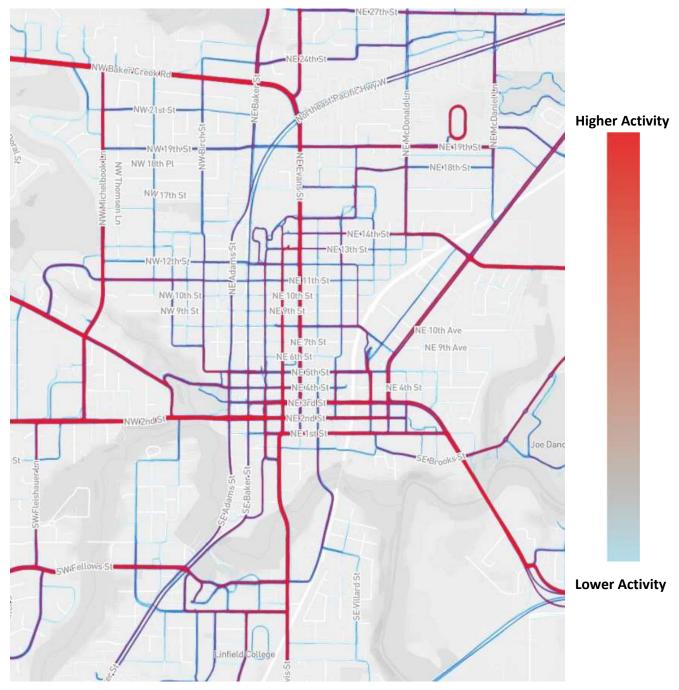


Exhibit 2: Strava Heatmap—Bicyclist Activity

Safe Routes to School

Safe Routes to School aims to create safe, convenient, and fun opportunities for children to walk, bike, and roll to and from school. Oregon's Safe Routes to School program is an effort to improve, educate, or encourage children to safely walk (by foot or mobility device) or bike to school. Routes for walking and biking to school are a key component in developing a Safe Routes to School plan. By establishing designated routes for walking and biking, investment can be prioritized to increase safety along the routes or within proximity to the school(s).

McMinnville Walk-to-School Routes Map

The McMinnville Transportation System Plan (TSP – Reference 1) Appendix J establishes Walk-To-School Route Plans for eight existing schools.

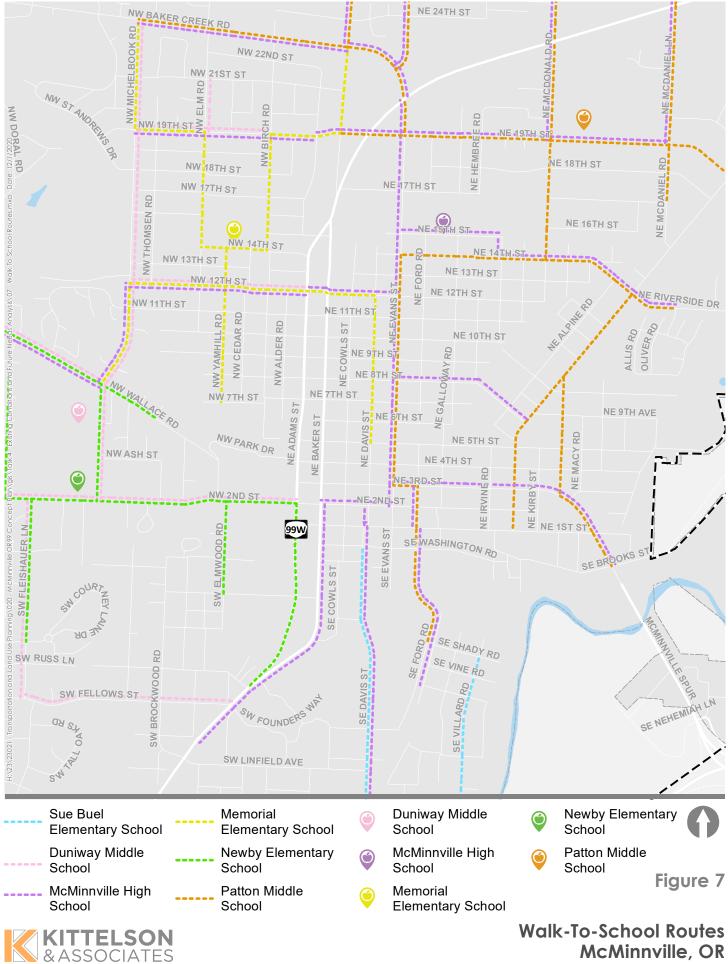
- Sue Buel Elementary
- Grandhaven Elementary
- Memorial Elementary
- Newby Elementary

- Columbus Elementary
- Patton Middle School
- Duniway Middle School
- McMinnville High School

Routes to schools listed above were developed based on recommended practices and procedures outlined in the *School Administrator's Guide to School Walk Routes and Student Pedestrian Safety.* Based on the McMinnville School District policy on walking distance for elementary (one mile) and middle schools (1.5 miles), walk routes were identified while considering the following:

- Routes that provide the greatest physical separation between walking children and traffic
- Exposure of children to the lowest vehicular speeds and volume
- Minimization of street and rail crossings, targeting designated crosswalks and traffic signals where possible
- Walk route plans do not necessarily need to cover all neighborhood streets

The schools located within proximity of the Concept Plan project study area include Sue Buel Elementary School, Duniway Middle School, Newby Elementary, Patton Middle School, and McMinnville High School. Figure 7 illustrates the location of these schools as well as the designated "Walk-To-School" routes.



McMinnville, OR

SAFETY ANALYSIS

The safety analysis included a review of historical crash data and of existing roadway crossings, as described in the following sections.

Crash Analysis

The five most recent years of pedestrian and bicyclist crash data (January 1, 2014 to December 31, 2018) were obtained from ODOT's Crash Analysis and Reporting Unit and reviewed for the study intersections and segments in the project study area, consistent with the methodologies outlined in the Analysis Procedures Manual (ODOT APM – Reference 2). The data was analyzed for a variety of factors including severity, crash type and characteristics, crash rates, and location to identify potential crash patterns or area-wide trends. Additional attention was directed toward locations with multiple pedestrian and bicyclist crashes and locations along the corridor identified as top 5% or 10% locations from the most recent three (3) Safety Priority Index System (SPIS) site listings. The results are described below.

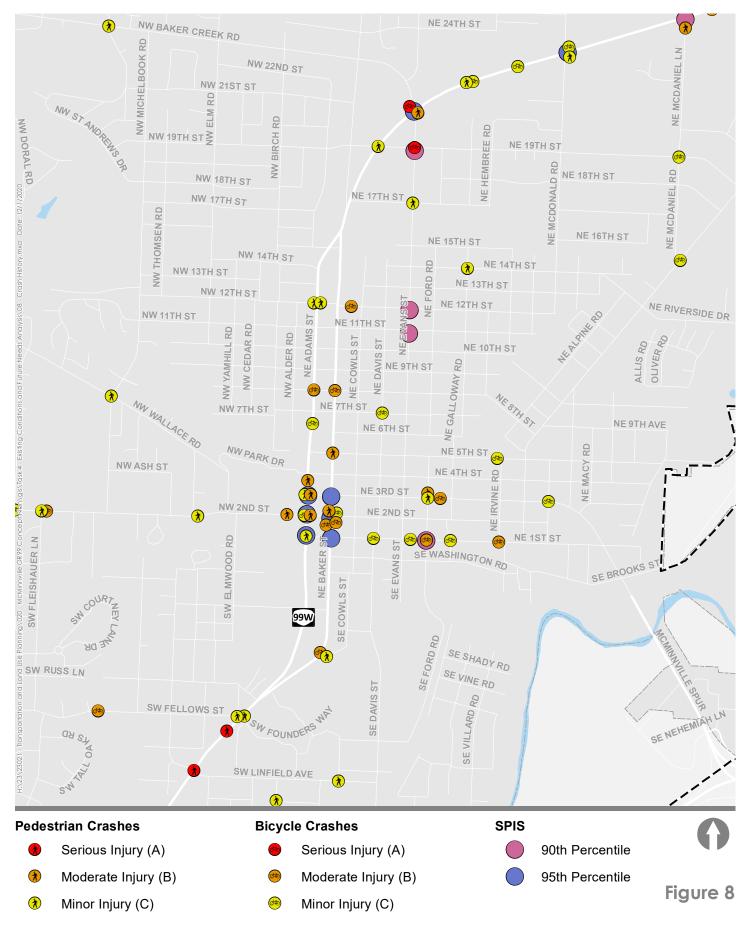
Figure 8 shows the locations of crashes involving a pedestrian or bicyclist between January 1, 2014 to December 31, 2018 within the project study area. No fatal pedestrian or bicycle crashes were reported within the project study area over the course of the five-year period. Table 1 summarizes the reported pedestrian and bicyclist crash history for this period along OR 99W in the project study area.

	Segment		(Crash Severity	Total	Crash Rate ²		
Study Segment	Length (Miles)	Crash Type	Serious Injury (A)	Moderate Injury (B)	Minor Injury (C)	Number of Crashes	(Crashes/ Mile)	
OR 99W	0 70	Pedestrian	0	1	3	4	5.71	
to McDonald Lane)	North of Couplet 0.70 to McDonald Lane)		1	0	3	4	5.71	
OR 99W	1.10	Pedestrian	0	3	4	7	6.03	
(Adams Street)	1.16	Bicyclist	0	2	1	3	2.59	
OR 99W	1.10	Pedestrian	0	2	1	3	2.59	
(Baker Street)	1.16	Bicyclist	0	4	1	5	4.31	
OR 99W		Pedestrian	2	0	2	4	16.67	
(South of Couplet to Linfield Avenue)	0.24	Bicyclist	0	0	0	0	0	

Table 1: Reported Pedestrian and Bicyclist Crash History (January 1, 2014 to December 31, 2018)

¹Project study area include crashes located along OR 99W and the potential parallel routes east of the highway.

²Crash Rate includes segment and intersection crashes.





Pedestrian and Bicycle Crash History McMinnville, OR

Bicycle Crashes

A total of 12 crashes involving people biking along OR 99W occurred over the five-year period between January 1, 2014 to December 31, 2018. Of these crashes, one was 'serious injury', six were 'moderate injury', and the remaining five were 'minor injury'.

- Four of these crashes occurred along the 0.4-mile segment of OR 99W between McDonald Lane and Evans Street.
- Three crashes occurred along Adams Street.
- Five crashes occurred along Baker Street.
- No crashes occurred along OR 99W between Fellows Street and Linfield Avenue.
- All 12 crashes involved angle or turning movements where the motorist did not yield right-of-way. Two crashes involved the motorist going straight, six involved the motorist turning right, and four involved the motorist turning left.
- Eleven crashes occurred during daylight; only one crash occurred in darkness with streetlights.
- Five crashes occurred during snow or wet conditions; the remaining seven crashes occurred in dry conditions.
- Eight crashes occurred on a Friday; the remaining four crashes occurred on other weekdays.

Additionally, there were two crashes involving people biking along Evans Street; both crashes were coded as 'serious injury'. There were two crashes along Davis Street; both crashes were coded as 'minor injury'. Additionally, there were six crashes involving people biking along 1st Street between Cowls Street and Irvine Street. These crashes were turning movement crashes, with three involving the vehicle making right turns, two involving the vehicle making left turns, and one involving the vehicle traveling straight.

Pedestrian Crashes

A total of 18 crashes involving people walking along OR 99W occurred over the five-year period between January 1, 2014 to December 31, 2018. Of these crashes, two were 'serious injury', six were 'moderate injury', and the remaining ten were 'minor injury'.

- Four crashes occurred along OR 99W between McDonald Lane and 19th Street.
- Seven crashes occurred along Adams Street.
- Three crashes occurred along Baker Street.
- Four crashes occurred along OR 99W between Fellows Street and Linfield Avenue.
- Eleven crashes involved the motorist turning left, four involved the motorist traveling straight, and the remaining three involved right turns.
- Four crashes involved the person walking illegally in roadway, twelve involved the motorist not yielding the right of way, and two crashes involved a disregard of the traffic signal.
- All crashes occurred under lit conditions: 12 crashes occurred during daylight; six crashes occurred during darkness with streetlights.

- Eight crashes occurred during wet conditions; 10 crashes occurred in dry conditions.
- Four crashes occurred on a Friday, thirteen crashes occurred on other weekdays, and one crash occurred on Saturday.

Additionally, there were two crashes involving people walking along Evans Street: one at the intersection with OR 99W, and the other at the intersection with 17th Street. In both cases the person driving failed to yield right-of-way to the person walking. There were no crashes recorded involving people walking along Cowls Street or Davis Street in the study area.

Safety Priority Index System

The ODOT Statewide Priority Index System (SPIS) identifies sites along state highways where safety issues warrant further investigation. The SPIS is a method developed by ODOT for identifying hazardous locations on state highways through consideration of crash frequency, crash rate, and crash severity. Sites identified within the top 5% are investigated by ODOT staff and reported to the Federal Highway Administration (FHWA).

The three most recent SPIS lists (SPIS 2018, SPIS 2017, and SPIS 2016) contain crash data from January 1, 2013 through December 31, 2017¹. Per SPIS 2018, SPIS 2017, and SPIS 2016 the following eight intersections were identified by ODOT as within the top 5% of statewide SPIS sites:

McDonald Lane/OR 99W

2nd Street/Adams Street

- Evans Street/OR 99W
- 1st Street/Adams Street
- 1st Street/Baker Street

- 2nd Street/Baker Street
- 3rd Street/Adams Street
- 3rd Street/Baker Street

In addition, the following four intersections were identified by ODOT as within the top 10% of statewide SPIS sites:

- Evans Street/11th Street
- Evans Street/12th Street
- Evans Street/19th Street
- Ford Street/2nd Street

These locations are mapped in Figure 8 above.

Kittelson & Associates, Inc.

¹ These dates align best with the study period. SPIS locations related to crash data collected in 2018 has not yet been released.

Pedestrian and Bicycle Systemic Safety Risk Analysis

ODOT is in the process of completing the *Oregon DOT Statewide Pedestrian and Bicycle Plan*, a systemic safety analysis aimed at identifying high risk locations for pedestrian and bicycle crashes along the state highway system.

The objective of the Oregon DOT Statewide Pedestrian and Bicycle Plan is to update the ODOT Pedestrian and Bicycle Safety Implementation Plan (ODOT, 2014) and inform future iterations of ODOT's All Roads Transportation Safety (ARTS) program. Systemic safety, opposed to the traditional crash history, allows practitioners to proactively identify high risk sites for potential safety improvements based on specific risk factors. Locations identified as top 20% based on the risk factor screening correspond to the highest risk locations throughout the state whereas locations in the lowest 20% correspond to the lowest risk locations throughout the state. A summary of the risk factors used as part of the Oregon DOT Statewide Pedestrian and Bicycle Plan is described below.

Pedestrian Risk Analysis

Figure 9 illustrates the results of the pedestrian risk analysis conducted as part of ODOT's statewide systemic safety analysis along the project extents for the Concept Plan. The segments of OR 99W outside of the couplet are in the top 20% for pedestrian risk factors. Evans Street and a majority of the OR 99W couplet are in the bottom 40% for pedestrian risk factors. The pedestrian risk factors used as part of the analysis include:

- Principal Arterial
- Number of Lanes (>=Four Lanes)
- High-Access Density
- No Sidewalks (or Only One Side)
- Posted Speed (>=35mph)

- Mixed Use Zoning
- Proximity to Schools (one mile)
- Proximity to Transit Stops (1/4 mile)
- High Population over the Age of 64

Bicycle Risk Analysis

Figure 10 illustrates the results of the bicycle risk analysis conducted as part of ODOT's statewide systemic safety analysis along the project extents for the Concept Plan. A majority of OR 99W, including the couplet, is identified in the top 40% for bicycle risk factors. The bicycle risk factors used as part of the analysis include:

- Principal Arterial
- Minor Arterials
- Number of Lanes (>=Four Lanes)
- High-access Density
- No Bike Lane

- Posted Speed (>=35mph)
- Mixed Use Zoning
- Proximity to Schools (one mile)
- Proximity to Transit Stops (1/4 mile)
- High Population over the Age of 64

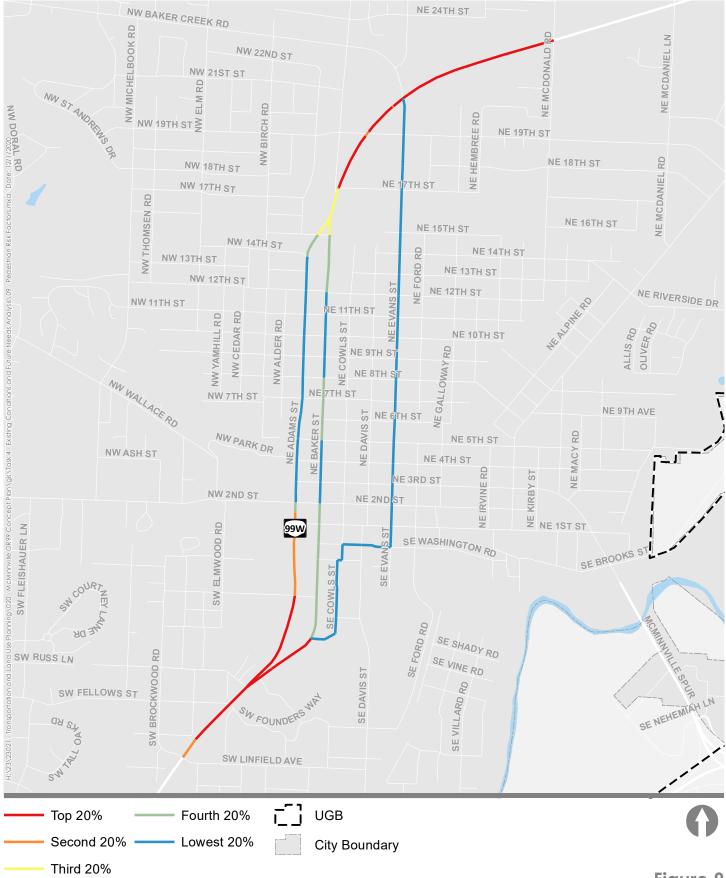


Figure 9

Pedestrian Risk Factor Screening McMinnville, OR



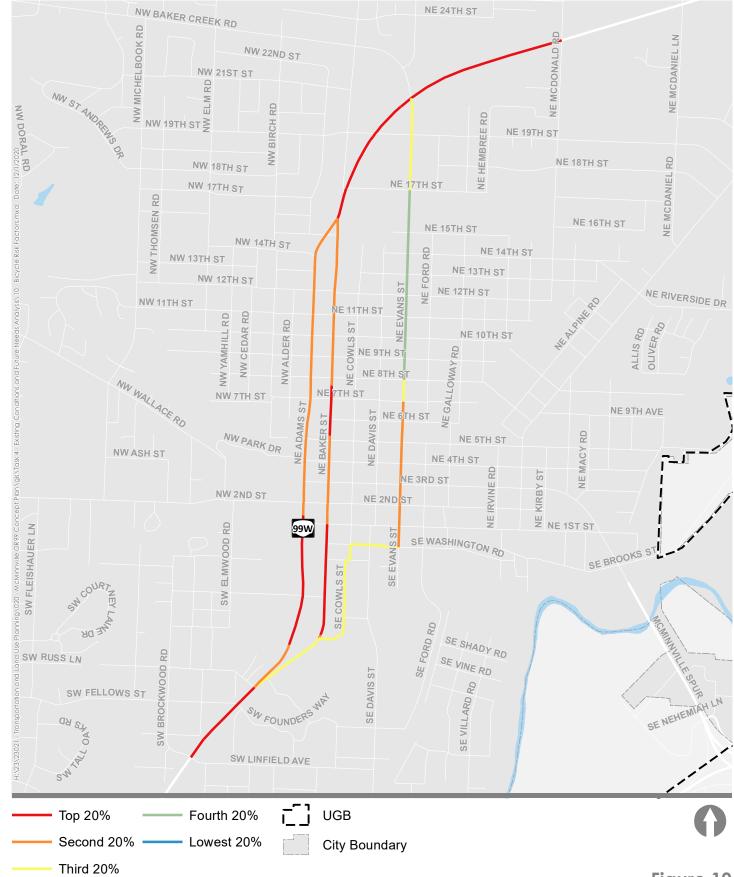


Figure 10

Bicycle Risk Factor Screening McMinnville, OR



ACTIVE TRANSPORTATION ANALYSIS

The ODOT APM provides a methodology for evaluating bicycle and pedestrian facilities within urban and rural environments called Level of Traffic Stress (LTS). As applied by ODOT, this methodology classifies four levels of traffic stress that a person walking or biking can experience on the roadway, ranging from LTS 1 (little traffic stress) to LTS 4 (high traffic stress).

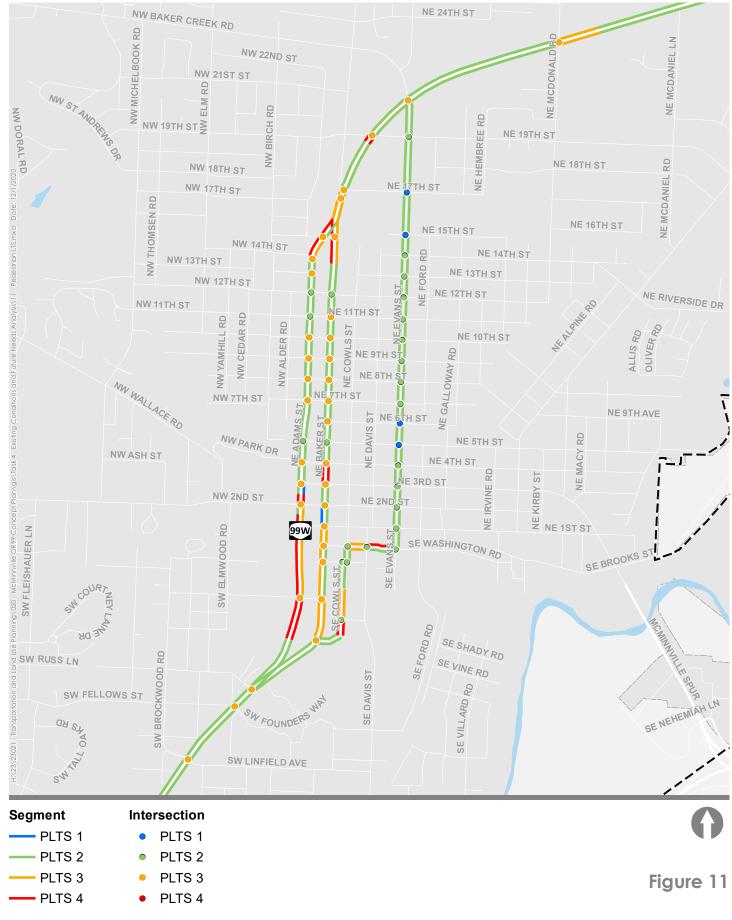
A road segment that is rated LTS 1 generally has low traffic volumes and travel speeds and is suitable for all users, including children. A road segment that is rated LTS 4 generally has high traffic volumes and travel speeds and is perceived as unsafe by most adults. Per the ODOT APM, LTS 2 is considered a reasonable target for pedestrian and bicycle facilities due to its acceptability for most adults; however, within a ¼ mile of schools, a target of LTS 1 is recommended.

Pedestrian Level of Traffic Stress Analysis

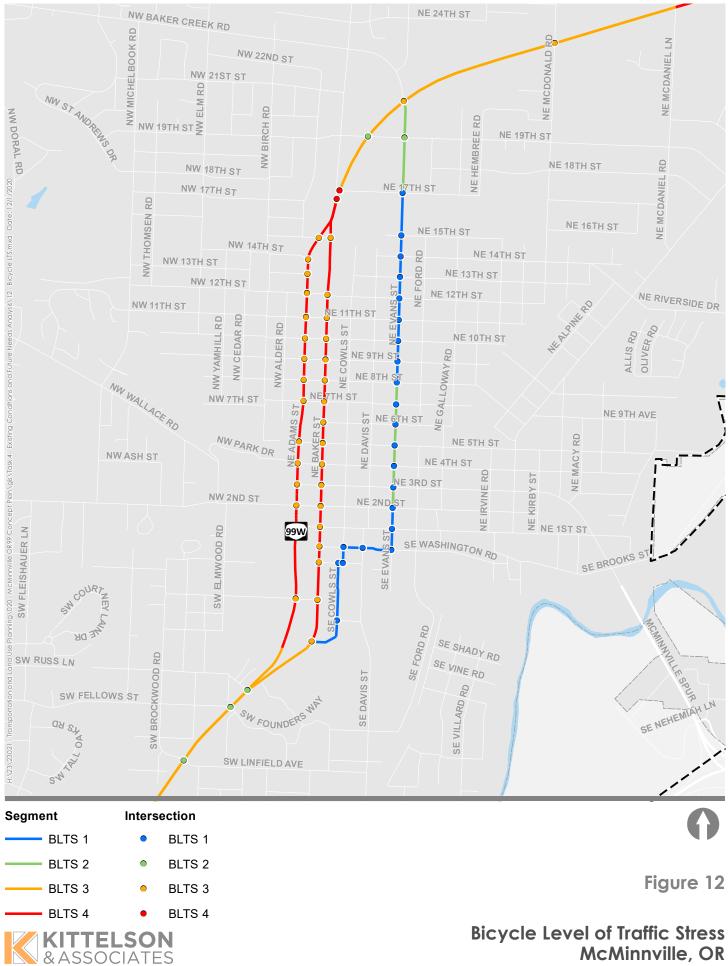
A pedestrian level of traffic stress (PLTS) analysis was performed along the segments and intersections of OR 99W and the parallel route opportunity along Evans Street within the project study area. The PLTS segment score is determined based on the speed of the roadway, number of travel lanes per direction, the presence, condition, and width of sidewalks, presence and type of buffer space, and several other factors such as lighting. The PLTS intersection score is determined based on functional class of the roadway, speed of the roadway, and number of vehicle travel lanes per direction, roadway average daily traffic, and the presence of pedestrian infrastructure such as sidewalk ramps, median refuge and illumination, and signalized intersection features. Figure 11 illustrates the results of the PLTS analysis.

Bicycle Level of Traffic Stress Analysis

ODOT provided the results of a BLTS analysis conducted along the segments and intersections of OR 99W and the parallel route opportunity along Evans Street within the project study area. The BLTS segment score is determined based on the speed of the roadway, the number of travel lanes per direction, the presence and width of an on-street bike lane and/or adjacent parking lane, and several other factors such as the presence of a centerline. The BLTS intersection criteria for unsignalized intersection crossings include consideration of the presence of a median of sufficient width to provide for a two-stage crossing, the prevailing speed or posted speed, the functional classification, and the number of through and turn lanes crossed per direction. Signalized intersections are assumed to be BLTS 1 unless people biking may have difficulty triggering the signal detection or are forced to use the crosswalk. Figure 12 illustrates the results of the BLTS analysis.



KITTELSON & ASSOCIATES Pedestrian Level of Traffic Stress McMinnville, OR



McMinnville, OR

Page 29

MOTOR VEHICLE CONSIDERATIONS

The Oregon Department of Transportation (ODOT) Blueprint for Urban Design (BUD) establishes a framework for determining the urban context along state roadways. The Urban Context for the corridor was established in the *Corridor Vision* as Traditional Downtown/CBD or Urban Mix (Reference 3). According to this designation, the general modal considerations for people walking and biking are "High" and the modal considerations for motorists and freight is "Low" to "Medium". Motor vehicle traffic volumes and crash data were used to inform the multimodal analysis. A summary of existing motor vehicle conditions—including appropriate freight considerations and parking occupancy along Adams Street—is provided in the following sections.

Motor Vehicle Facilities

Functional Classification

OR 99W is a state facility classified as *Urban Other Principle Arterial*. OR 99W is also classified as a regional highway. Cowls Street, Davis Street, and Evans Street are local facilities.

Freight Classification

OR 99W is not designated as a freight route within the project study area according to the Oregon Highway Plan (OHP). OR 99W is designated as a Reduction Review Route (RRR), subject to ORS 366.215.

Therefore, a review of potential Reduction of Vehicle-carrying Capacity (RVC) is required for all proposed actions on OR 99W. According to ODOT's ORS 366.215 Implementation Guidance, "it is best to wait until project implementation to follow the [Stakeholder Forum] review process. For these situations, the Concept Plan must identify the RRR in the plan area and provide the following statement or equivalent: *Planning concept potentially reduces vehicle-carrying capacity of the highway; further evaluation of the project design will be required at the time of implementation to ensure compliance with ORS 366.215.*"

Existing Cross Section

The existing cross section of OR 99W outside of the couplet includes five travel lanes, two in each direction with a two-way turn lane (TWTL). Within the couplet, Adams Street has two southbound travel lanes and Baker Street has two northbound travel lanes. Adams Street and Baker Street have parallel parking located on both sides of the roadway.

Adams Street and Baker Street have a curb-to-curb width of approximately 40-42 feet for most of the corridor. North of the couplet, OR 99W has a curb-to-curb width of approximately 66 feet and south of the couplet, OR 99W has a curb-to-curb width of approximately 70 feet.

The existing cross section of Evans Street includes two travel lanes (one in each direction). On-street parking is located along Evans Street on both sides of the roadway between Washington Street and 8th

Street and between 17th Street and 19th Street. Bike lanes are located along Evans Street between 8th Street and 17th Street.

The existing cross section of Cowls Street and Davis Street each includes two travel lanes (one in each direction) and street parking on both sides of the roadway. No centerline is provided along Cowls Street or Davis Street.

Posted Speed

Posted speed for Baker, Adams, and OR 99W along the corridor ranges from 30 to 35 mph. The posted speed along the surrounding roadways ranges from 20 to 25 mph.

Average Annual Daily Traffic

According to ODOT TransGIS, the Average Annual Daily Traffic (AADT) ranges from 11,700 to 13,000 along Adams Street and Baker Street. Along OR 99W north of the couplet, the AADT was 25,100. South of the couplet the AADT was 22,100. Along Evans Street, the AADT was significantly lower, ranging between 1,300 to 5,700. No AADT data was available for Cowls Street or Davis Street.

Parking

An assessment of on-street parking to improve sight distance and accommodate enhanced crossing facilities was performed along the OR 99W couplet. *The City of McMinnville Downtown Strategic Parking Management Plan* ("Downtown Strategic Parking Plan", Reference 4) and the Parking Demand Data Collection conducted and provided by ODOT were reviewed to determine the feasibility of potential on-street parking removal or relocation along OR 99W within the couplet. The findings are presented below. *Parking data collection sheets prepared by ODOT are provided in Appendix B.*

Parking data was collected by ODOT staff along both sides of Adams Street on Thursday, October 1, Friday, October 2, and Saturday, October 3, 2020 from 10 AM to 8 PM. The data was collected when school was in session and after the smoke cleared from the major fire events, but during the COVID-19 pandemic. Parking data was compared to historical data collected by Rick Williams Consulting in June 2017 for the Downtown Strategic Parking Plan, and conditions recorded in Google Street View.

Based on this comparison, it is expected that the data collected in October 2020 is reflective of typical parking conditions along the corridor. Parking data was not collected along Baker Street. The Downtown Strategic Parking study and local knowledge of the corridor have shown that there is greater demand for parking along Baker Street compared to Adams Street. *The comparison is summarized in Appendix C*. Initial analysis shows that street parking along Adams Street is underutilized: peak parking utilization for the total 208 spaces along Adams Street was 10%. The highest parking demand was observed along Adams Street south of 2nd Avenue and is likely generated by residences. Parking along the corridor could be accommodated at or below 85% occupancy during peak hours along one side of the roadway. Figure 13 illustrates the peak parking occupancy observed along Adams Street.



SUMMARY OF GAPS AND DEFICIENCIES AND OPPORTUNITIES

The project study area characteristics, safety conditions, and existing pedestrian and bicycle facilities, were reviewed to identify gaps and deficiencies. A gap is defined as a missing link in the network, such as a key walking or biking route that is missing sidewalk, crosswalk, pedestrian ramp or bicycle facility.

A deficiency is defined as a pedestrian or bicycle facility that does not meet the standard or is insufficient to meet the users' needs. Examples of deficiencies include:

- On-street connection that has a BLTS rating greater than 2, or on-street connections that has a BLTS rating equal to 2 where the connection is within ¼ mile of a school.
- On-street connection that has a PLTS rating greater than 2, or on-street connections that has a PLTS rating equal to 2 where the connection is within ¼ mile of a school.
- Locations identified in the top 40% of the statewide pedestrian or bicycle systemic safety risk analysis.

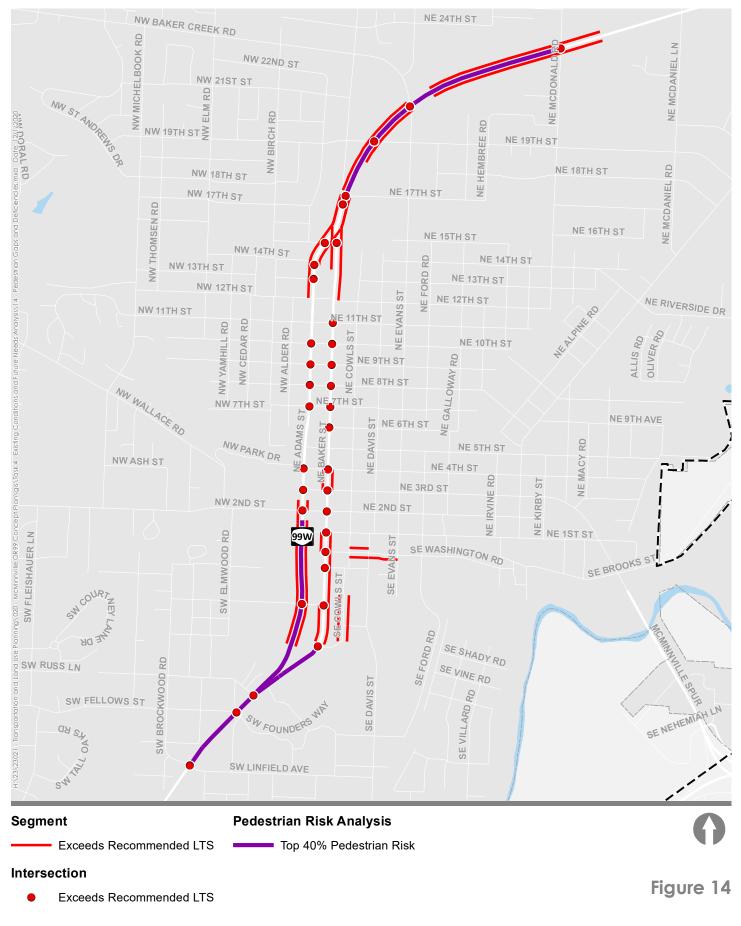
The pedestrian and bicycle gaps and deficiencies located along OR 99W and the parallel route opportunity along Evans Street are illustrated in Figure 14 and Figure 15 respectively.

Pedestrian Facility Needs

As illustrated in Figure 14, most of the OR 99W exceeds the recommended LTS targets for segments and intersections. Segment LTS deficiencies result from absent or partial sidewalks, poor condition of sidewalks, and lack of buffer space between the sidewalk and travel lane. Intersection LTS deficiencies primarily result from absent or poor pedestrian ramp conditions.

The segment of OR 99W north of 17th Street, south of 2nd Street along Adams Street and south of Cowls Street along Baker are identified as top 40% pedestrian risk locations according to the statewide pedestrian risk analysis performed on the state highway system. Safety countermeasures should be prioritized within these segments to minimize risk and increase separation for people walking.

Evans Street meets LTS targets for all segments and intersections in the study area, however potential connections between Evans Street and OR 99W at the southern end of the corridor exceed recommended LTS. No segments of Evans Street were identified as top 40% pedestrian risk locations.





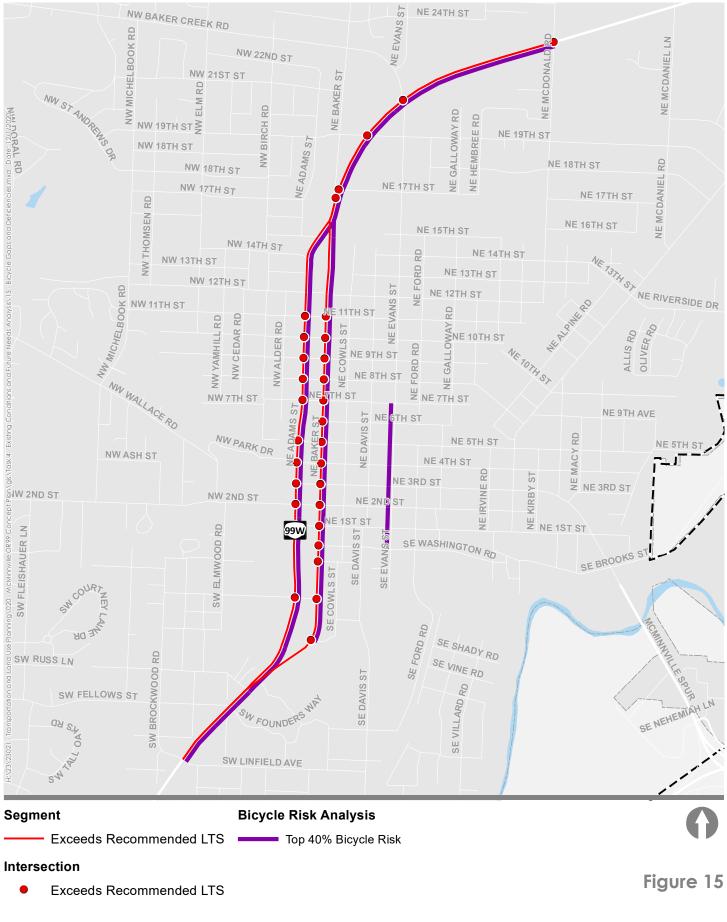
Pedestrian Gaps and Deficiencies McMinnville, OR

Bicycle Facility Needs

As illustrated in Figure 15, the entire project study area along OR 99W exceeds the recommended LTS targets for segments. Segment LTS deficiencies primarily result from an absence of bicycle facilities throughout the OR 99W couplet. At locations where bicycle facilities are provided north and south of the couplet, the facilities lack separation, resulting in high stress experiences for most users.

Intersections exceeding LTS targets result from geometric configurations (OR 99W/17th Street), traffic volume of roadway being crossed, and lack of facilities approaching and traveling through the intersection. Nearly all of OR 99W is identified as top 40% statewide risk locations for bicycles. Safety countermeasures should be prioritized within these segments to minimize risk and increase separation.

Evans Street meets BLTS targets for all segments and intersections in the project study area except at the intersection with OR 99W. The section of Evans Street between 1st Street and 7th Street is identified as top 40% statewide risk locations for bicycles.



KITTELSON & ASSOCIATES Bicycle Gaps and Deficiencies McMinnville, OR

NEXT STEPS

The findings from TM #4: Existing Conditions and Future Needs will be reviewed by the PAC and used to develop alternatives and select a preferred alternative concept in TM #5: Alternatives Development, Analysis, and Preferred Alternative Concept.

REFERENCES

- 1. The City of McMinnville. *Transportation System Plan*, 2010.
- 2. Oregon Department of Transportation. Analysis Procedures Manual, 2020.
- 3. Kittelson & Associates, Inc. Corridor Vision, 2020.
- 4. Rick Williams Consulting. *The City of McMinnville Downtown Strategic Parking Management Plan.* 2018.
- 5. Google Earth. Street View. Various Dates.

Appendix A Transportation Disadvantaged Population Index

TRANSPORTATION DISADVANTAGED POPULATION (TDP) INDEX

The Transportation Disadvantaged Population Index is an index of census data characteristics, designed to help prioritize improvements that serve areas with high numbers of transportation disadvantaged residents and environmental justice communities that have been traditionally underserved. Most recent available American Community Survey data at the block group level for the following attributes includes:

- Elderly populations (65 and older)
- Youth populations (under 18)
- Non-white and Hispanic populations
- Limited English proficiency population (aggregate of census populations who speak English "not well" or "not at all")
- Low-income populations
- Households without access to a vehicle
- People with a disability (severe or non-severe disability)
- Crowded households

This index was calculated according to the ODOT Active Transportation Needs Inventory Assessment. The index converts household statistics from the American Community Survey to a per capita index. It is calculated at the census block group level as the sum of people 65 and older, 17 and younger, non-white or Hispanic, speak English "not well" or "not at all", low-income, with a disability, living in crowded households, or living in households without vehicle access. That sum is divided by total block population. People fitting into multiple vulnerability categories are counted multiple times. The higher the index number the more disadvantaged the population is with respect to transportation. The equation used to develop the segment transportation disadvantaged score is shown below:

$$TDP \ Index = \frac{(Eld + Yth + [NH * 1.5] + LEP + Pov + Veh + Dis + Crwd)}{Pop}$$

where:

<i>Eld = # of residents over 65</i>	<i>Veh</i> ¹ = # of residents with 0 vehicles
<i>Yth = # of residents under 18</i>	<i>Dis = # of residents with a disability</i>
<i>NH = # of residents who identify as non-white or</i>	Crwd = # of households with 1.0 or more
Hispanic	occupants per room
<i>LEP</i> ¹ = # of residents that speak English "not well"	<i>Pop = Total block group population</i>
or "not at all"	
<i>Pov</i> = # of residents with income under 200% of	
poverty level	

¹Number of residents that speak English "not well" or "not at all" and number of residents with zero vehicles is provided in the census at a household level and estimated by multiplying the data at the household level by the average Oregon household size (2.51).

Appendix B Parking Data (2020)

Key Left = East Side of SE Adams St (a on route map) Right = West Side of SE Adams St (b on route map)

THURSDAY, OCTOBER 1st, 2020

				Time Slot						•				•						•			
	# of Stalls Avai	lable (Both sides)	Block	10am	1 - 11am	11am	ı - 12pm	12pm	- 1pm	1pm	- 2pm	2pm	- 3pm	3pm	- 4pm	4pm	- 5pm	5pm	1 - 6pm	6pm	- 7pm	7pm	- 8pm
	Left (EE)	Right (W)		Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
14th is a "T" intersection, parking prohibited directly across from 14th	Parking prohibited 5 SPOTS (@ 20')	Parking prohibited 4 SPOTS (2 @ 20', 2 @ 22')	15th - 14th 14th - 13th	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0
13th is a "T" intersection, parking appears to be allowed for one spot directly across	Parking prohibited	6 SPOTS (2 @ 20', 4 @ 24')	13th - 12th	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
from 13th	4 SPOTS 2 spots (@ 20') then two Driveways 2 spots (1 @ 20', 1 @ 24')	5 SPOTS 2 spots (@ 20') <i>then Driveway</i> 3 spots (1 @ 20', 2 @ 22')	12th - 11th	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	7 SPOTS 2 spots (@ 20') then two Driveways 5 spots (@ 23')	8 SPOTS (2 @ 20', 6 @ 21')	11th - 10th	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	3 SPOTS 2 spots (@ 20') <i>then two Driveways</i> 1 spot (@ 22') 5 SPOTS	6 SPOTS 2 spot (@20') <i>then Driveway</i> 4 spots (@ 20') 4 SPOTS	10th - 9th	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1	1	0	2	0	0
	2 spots (@ 27') then Driveway 3 spot (1 @ 20', 2 @ 28') 2 SPOTS	3 spots (1 @ 20', 2 @ 21') then two Driveways 1 spot (@ 26') 7 SPOTS	9th - 8th	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	0	1	0	0	0
	Parking prohibited before the first Driveway 2 spots (@ 20') 4 SPOTS	4 spots (2 @ 20', 2 @ 22') then Driveway 3 spots (1 @ 20', 2 @ 24') 3 SPOTS	8th - 7th	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
	4 spors 3 spots (1 @ 20', 2 @ 25') then Driveway 1 spot (@ 20') then Driveway	2 spots Driveway 1 spot (@ 20') then Driveway 2 spots (1 @ 20', 1 @ 24')	7th - 6th	2	0	2	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
6th is a "T" intersection, parking appears to be allowed for one spot directly across from 6th	8 SPOTS Driveway 8 spots (@ 22')	6 SPOTS 1 spot (@ 37') then driveway 5 spots (@ 21')	6th - 5th	0	0	1	0	0	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0
	5 SPOTS (1 @ 20', 4 @ 26') then Driveway	7 SPOTS 2 spots (@ 27') <i>then Driveway</i> 5 spots (@ 20')	5th - 4th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3rd is a "T" intersection,	2 SPOTS (@ 27') <i>then Driveway</i> then Parking prohibited	Parking prohibited	4th - 3rd	2	0	2	0	2	0	1	0	2	0	2	0	2	0	0	0	0	0	0	0
parking prohibited directly across from 3rd	4 SPOTS (@ 20')	Parking prohibited	3rd - 2nd	3	0	1	0	3	0	3	0	2	0	2	0	2	0	1	0	0	0	0	0
	Parking prohibited 34 SPOTS	Parking prohibited	2nd - 1st	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1st is a "T" intersection with a driveway directly across so parallel parking is not feasible through the intersection	15 spots (@20') then Driveway	37 SPOTS 31 spots (1 @ 20', 30 @ 21') <i>then Driveway</i> 6 spots (@ 24')	1st - SE Handley St	7	7	5	4	5	3	7	3	5	5	5	5	5	8	6	5	6	7	9	8
SE Handley is a "T" intersection and parking appears to be allowed through the intersection	4 cnots (1 @ 21' 2 @ 25')	26 SPOTS (1 @ 20', 25 @ 21') then Bike Lane begins	SE Handley St - Access Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		·	Sub-Totals Totals	15	7 22	12	4 16	13 1	3 .6	12	5 17	10	8 18	14	5	11	8 19	9	6 15	7	9 16	9	8 17
				Parking Lots	10am-11am	11am-12pm	<u> </u>	1pm-2pm	2pm-3pm	3pm-4pm	4pm-5pm	5pm-6pm		7pm-8pm]								
			16 spaces total 20 spaces total	4th Street 2nd Street			10 9	10 8	11 11		7 8	3	3	4									
					1	1				1		-	5	-	1								

 Baker Street Block - between 4th and 3rd (northbound, left side is eastwide, right s
 3-4
 2-2

Note: Farmers Market on Oct. 1

Key Left = East Side of SE Adams St (a on route map) Right = West Side of SE Adams St (b on route map)

FRIDAY, OCTOBER 2nd, 2020

				Time Slot																			
	# of Stalls Avai	lable (Both sides)	Block	10am	1 - 11am	11am	- 12pm	12pn	n - 1pm	1pm	- 2pm	2pm	- 3pm	3pm	- 4pm	4pm	- 5pm	5pm	- 6pm	6pm	- 7pm	7pm	- 8pm
	Left (EE)	Right (W)		Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
	Parking prohibited	Parking prohibited	15th - 14th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14th is a "T" intersection, parking prohibited directly across from 14th 13th is a "T" intersection,	5 SPOTS (@ 20')	4 SPOTS (2 @ 20', 2 @ 22')	14th - 13th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
parking appears to be allowed for one spot directly across from 13th	Parking prohibited	6 SPOTS (2 @ 20', 4 @ 24')	13th - 12th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 SPOTS 2 spots (@ 20') <i>then two Driveways</i> 2 spots (1 @ 20', 1 @ 24') 7 SPOTS	5 SPOTS 2 spots (@ 20') <i>then Driveway</i> 3 spots (1 @ 20', 2 @ 22')	12th - 11th	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0	1	0	1
	2 spots (@ 20') <i>then two Driveways</i> 5 spots (@ 23')	8 SPOTS (2 @ 20', 6 @ 21')	11th - 10th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	3 SPOTS 2 spots (@ 20') <i>then two Driveways</i> 1 spot (@ 22') 5 SPOTS	6 SPOTS 2 spot (@20') <i>then Driveway</i> 4 spots (@ 20') 4 SPOTS	10th - 9th	1	1	1	1	1	0	0	3	2	1	2	0	2	2	1	1	0	2	0	0
	2 spots (@ 27') then Driveway 3 spot (1 @ 20', 2 @ 28') 2 SPOTS	3 spots (1 @ 20', 2 @ 21') then two Driveways 1 spot (@ 26') 7 SPOTS	9th - 8th	0	0	0	1	0	0	0	0	0	1	1	1	2	1	1	0	1	0	1	0
	Parking prohibited before the first Driveway 2 spots (@ 20') 4 SPOTS	4 spots (2 @ 20', 2 @ 22') then Driveway 3 spots (1 @ 20', 2 @ 24') 3 SPOTS	8th - 7th	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	3 spots (1 @ 20', 2 @ 25') then Driveway 1 spot (@ 20') then Driveway	Driveway 1 spot (@ 20') then Driveway 2 spots (1 @ 20', 1 @ 24')	7th - 6th	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
6th is a "T" intersection, parking appears to be allowed for one spot directly across from 6th	8 SPOTS Driveway 8 spots (@ 22')	6 SPOTS 1 spot (@ 37') then driveway 5 spots (@ 21') 7 SPOTS	6th - 5th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5 SPOTS (1 @ 20', 4 @ 26') then Driveway	2 spots (@ 27') then Driveway 5 spots (@ 20')	5th - 4th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2 SPOTS (@ 27') <i>then Driveway</i> then Parking prohibited	Parking prohibited	4th - 3rd	2	0	2	0	2	0	2	0	1	0	2	0	1	0	0	0	0	0	0	0
3rd is a "T" intersection, parking prohibited directly across from 3rd	4 SPOTS (@ 20')	Parking prohibited	3rd - 2nd	1	0	1	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0
1st is a "T" intersection with a	Parking prohibited 34 SPOTS 15 spots (@20')	Parking prohibited 37 SPOTS	2nd - 1st	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
driveway directly across so parallel parking is not feasible through the intersection	then Driveway	31 spots (1 @ 20', 30 @ 21') then Driveway 6 spots (@ 24')	1st - SE Handley St	5	3	5	3	5	3	5	3	5	5	6	4	7	3	6	3	7	6	6	7
SE Handley is a "T" intersectior and parking appears to be allowed through the intersection	1 spots (1 @ 21' 3 @ 25')	26 SPOTS (1 @ 20', 25 @ 21') then Bike Lane begins	SE Handley St - Access Leg	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			Sub-Totals Totals	10	5 15	10	5 15	11	3 14	10	6 16	9	8 17	12	6 18	13	7 20	8	7 15	8	9 17	7	8 15

Parking Lots	10am-11am	11am-12pm	12pm-1pm	1pm-2pm	2pm-3pm	3pm-4pm	4pm-5pm	5pm-6pm	6pm-7pm	7pm-8pm
4th Street		11	9	10	13	11	8	3	1	1
2nd Street		11	5	10	10	8	9	8	1	1

Appendix C Historical Parking Data Comparison

HISTORICAL PARKING DATA COMPARISON

Although the study extents varied between this study and the Downtown Strategic Parking Plan, both studies collected data along the east side of Adams Street between 1st Street and 5th Street. Table 2 shows a visual comparison of peak parking volumes collected during these time periods. The parking occupancy is observed to be similar between the two periods, and to be consistent with conditions recorded in Google Street View, therefore it is expected that the data is reflective of typical parking conditions along the corridor.

Study (Data Collection Date)	Downtown Strategic Parking Management Plan (2017)	OR 99W McMinnville Active Transportation Concept Plan (2020)	Legend
Weekday (Thursday) Peak Parking	NE STH ST NE 4TH ST 25 NE 3RD ST Way 45 NE 2ND ST	NE ADAMS ST	< 55% 69% - 55% 84% - 70%
Weekend (Friday or Saturday) Peak Parking	NE STH ST NE 4TH ST NE 3RD ST NE 2ND ST 63	NE STH ST NE 4TH ST NE 3RD ST SW NE 1ST ST	>85% Parking Prohibited

Table 2: Parking Data Comparison



851 SW 6th AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 F 503.273.8169

TECHNICAL MEMORANDUM (TM) #5

Date:	March 12, 2021	Project #: 23021.020
To:	Project Management Team	
	Project Advisory Committee	
From:	Nick Gross, Amy Griffiths, Marc Butorac, PE, PTOE, PMP	
Project:	McMinnville OR 99W (NE McDonald Lane to Linfield Ave	enue) Active Transportation
	Concept Plan	
Subject:	TM #5: Alternatives Development and Preferred Alternative	Concept

PURPOSE

Today, the couplet section of OR 99W (Adams and Baker Street) has traffic volumes ranging between 11,700 and 13,000 vehicles average annual daily traffic (AADT), no dedicated bicycle lanes, no enhanced pedestrian crossings, and is identified in ODOT's statewide systemic safety analysis as high pedestrian and bicycle risk factor locations. As a result, the OR 99W corridor needs context sensitive solution(s) to support a lower-stress, safer connection within the city's multi-modal transportation system.

This memorandum describes, evaluates, and recommends a preferred alternative design concept for the OR 99W corridor in the City of McMinnville *to create a safer, more comfortable, and more attractive place to walk, bike, roll, and take transit.* The project team developed three corridor and six enhanced crossing design concepts to address the OR 99W multi-modal needs identified in the *Existing Conditions and Future Needs Analysis Memorandum* (Reference 1) and based on input from the Project Management Team (PMT) and Project Advisory Committee (PAC).

Additional public input will be solicited as part of the virtual public meeting with the preferred concept refinement to occur as part of the final version of TM #5.

OR 99W CONCEPT DEVELOPMENT

The follow section describes and illustrates the existing condition and proposed concept designs to address the needs and deficiencies along OR 99W. Typical sections along with concept design roll plots were produced to convey the proposed concepts. Upon selection of a preferred alternative, further design detail will identify potential constraints, challenges, and considerations.

The concept designs were developed based on field observations and initial assessments by the consultant team, national and state guidance for bicycle facility selection, and input from the PMT and PAC. Appendix "A" includes a summary of the project team field visit and observations. Appendix "B" includes a summary of PAC input.

Concept 1: Two-Way Separated Bike Lane on Adams Street

Existing Condition

The existing curb-to-curb section for the majority of Adams Street consists of two 12-foot southbound travel lanes, and two 8-foot parking lanes. Figure 1 illustrates the typical existing curb-to-curb cross-section for Adams Street. Curb extensions constrain the existing curb-to-curb cross-section at some intersections along the corridor, as described in Table 1.

Proposed Concept

Concept 1 proposes a two-way separated bike lane or "cycle track" along the west side of Adams Street between 15th Street and 2nd Street. The two-way separated bike lane connects to OR 99W with buffered bike lanes at 15th Street and 2nd Street, as illustrated in Figure 3. Parking along the west side of Adams Street would be removed to accommodate the two-way bicycle facility due to the constrained curb-tocurb width. The two-way separated bike lane requires travel lane width reduction from 12 to 11 feet. Parking along the east side of Adams Street will be maintained. Figure 2 illustrates the proposed concept cross-section and Figure 3 illustrates the proposed conceptual layout.

The two-way separated bike lane facility is difficult to implement within the existing 40-foot curb-to-curb cross section. The recommended minimum width for parking and vehicle travel lanes is 7 feet and 11 feet, respectively. The remaining cross section width to accommodate the two-way separated bike lane is 11 feet¹. Based on national and state guidance for bicycle facility design 13 feet is the preferred minimum width for a two-way separated bike lane:

- The preferred minimum width for a two-way bicycle facility is 10 feet so that people biking in opposite directions can pass each other comfortably.
- A minimum of 3 feet is recommended to provide vertical separation from people driving by installing flex-post delineators.

As illustrated in Figure 2, the two-way separated bike lane is constrained due to the need to accommodate a parking lane and two travel lanes within the existing curb-to-curb cross section.

Appendix "C" includes additional information about design treatments.

¹ Less space is available at pinch points along the corridor.

Figure 1: Adams Street – Existing

Adams Street - Existing

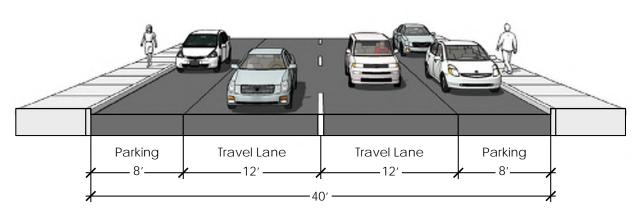
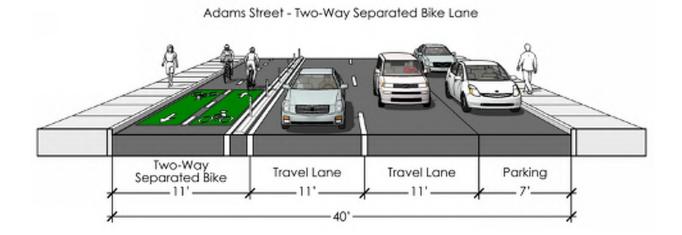
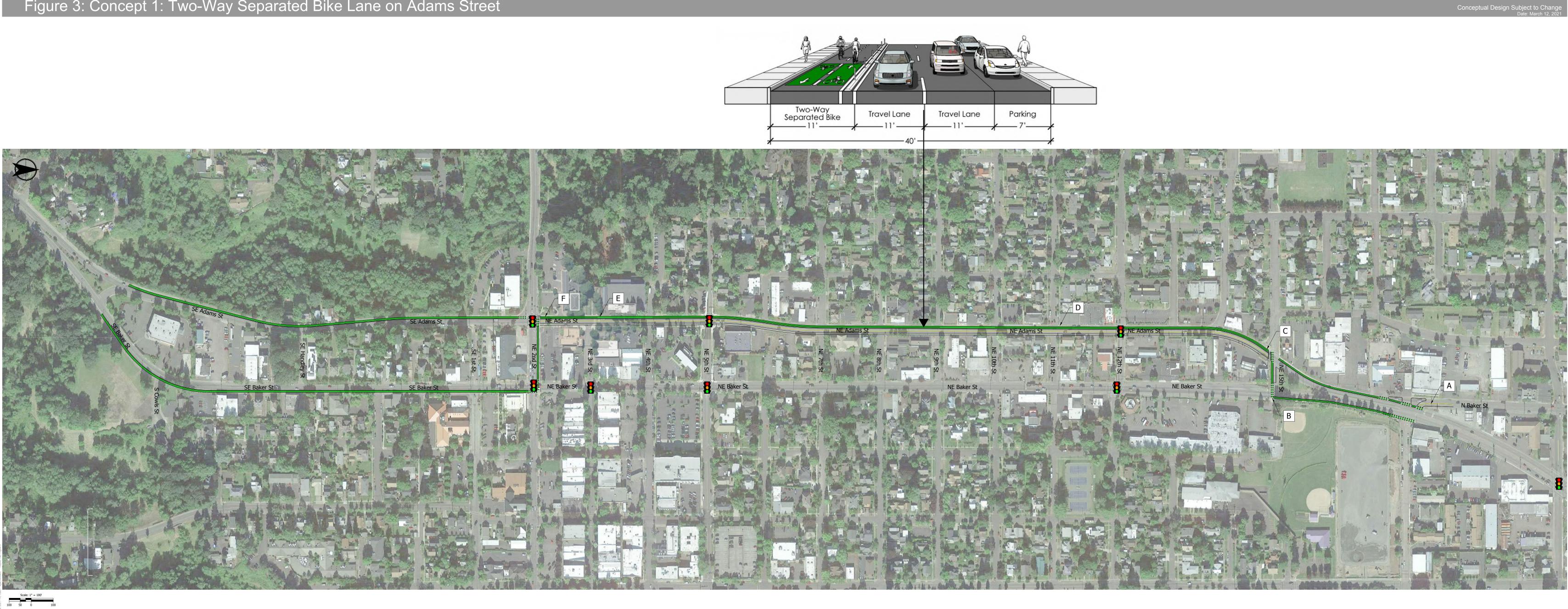


Figure 2: Adams Street – Two-Way Separated Bike Lane







McMinnville Active Transportation Concept Plan McMinnville, OR

Table 1 summarizes key considerations in implementing the concept as identified in Figure 3.

Label	Notes	Significance
A	• The existing intersection of OR 99W/N Baker Street is highly skewed and wide.	• Realigning the intersection could help reduce exposure to people biking and improve safety conditions at the intersection for all users.
В	 No sight distance concerns were observed at the intersection of Baker Street/ 15th Street. There is a pole at the southwest corner of the intersection that blocks ADA clearance. 	 No modification to improve sight distance are anticipated at this location, which is supportive of using this street as a crossing opportunity between the two-way separated bike lane and the buffered bike lanes proposed in this concept. If modifications are made to the existing curbs at this intersection, the concept would need to relocate this utility pole to ensure ADA compliance at the intersection.
С	 Drivers turning right from 15th Street onto Adams Street may not expect to look right for people biking contraflow. 	 compliance at the intersection. Signage and driver education would be necessary to improve driver awareness of people biking contraflow.
D	• Curb extensions at the Adams Street/ 11 th Street intersection constrain existing curb-to- curb width of the roadway to 34'-8".	• It may be necessary to remove the curb extension or reduce the width of the two-way separated bike lane and buffer at this location.
E	• Curb extensions at the northeast corner of the Adams Street/ 3 rd Street intersection constrain existing curb-to-curb width of the roadway.	• This pinch point is not expected to impact the proposed width of the two-way separated bike lane or travel lanes: parking is not accommodated at this location and the curb extension is located along the opposite side of the street of the two-way separated bike lane
F	 Adams Street/NE 2nd Street is a signalized intersection. There is a yield controlled eastbound slip lane from 2nd Street onto Adams Street. 	 The signalized intersection provides a protected opportunity for crossing between the two-way separated bike lane and buffered bike lanes proposed in this concept. Specific attention should be paid to the bicycle and vehicle interaction at the eastbound slip lane. A bike box, bike signal, and other enhancements may be needed at this location.

Based on project team field visit and observations, 15th Street and 2nd Street were identified as the most feasible locations to transition people biking to and from the two-way separated bike lane facility along Adams Street. Signal modifications would likely be needed at the intersections of 2nd Street/Adams Street and 2nd Street/Baker Street. Further evaluation and analysis will be conducted to determine appropriate signage, striping, and connectivity to the two-way separated bike lane facility if it is selected as the preferred alternative to be advanced into concept design.

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Existing Conditions

The existing curb-to-curb section for the majority of Adams Street consists of two 12-foot southbound travel lanes, and two 8-foot parking lanes. Curb extensions constrain the existing curb-to-curb cross-section at some intersections along the corridor, as described in Table 2.

Baker Street is wider than Adams Street: the existing curb-to-curb cross-section for the majority of Baker Street consists of two 14-foot northbound travel lanes, and two 8-foot parking lanes. The typical existing curb-to-curb cross-section of Adams Street is described previously.

Figure 4 illustrates the existing curb-to-curb cross-sections of Adams Street and Baker Street.

Proposed Concept

Concept 2 proposes buffered bike lanes along both Adams Street and Baker Street through the full extents of the OR 99W couplet. Parking along the west side of Adams Street will be removed to accommodate the buffered bike lane; parking along the east side of Adams will be maintained. Adams Street travel lane widths will be maintained. Travel lanes along Baker Street will be reduced to from 12 to 11 feet. Parking along both sides of Baker Street will be maintained.

Figure 5 illustrates the proposed concept cross-sections for Adams Street and Baker Street. Figure 6 illustrates the proposed conceptual layout.

Figure 4: Adams and Baker Street – Existing Cross-Sections

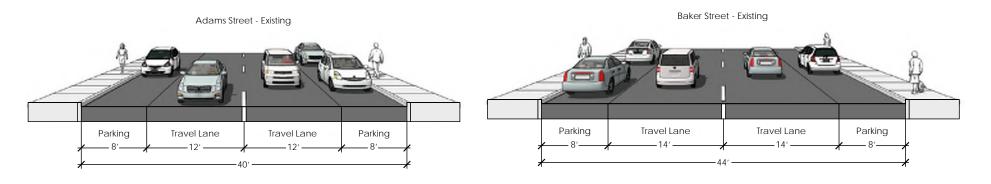
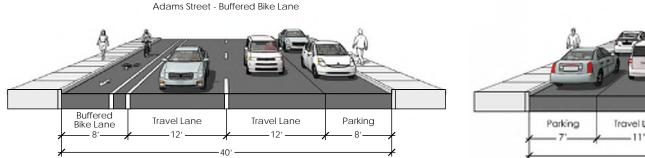
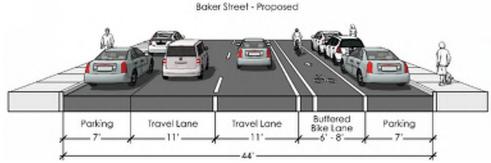
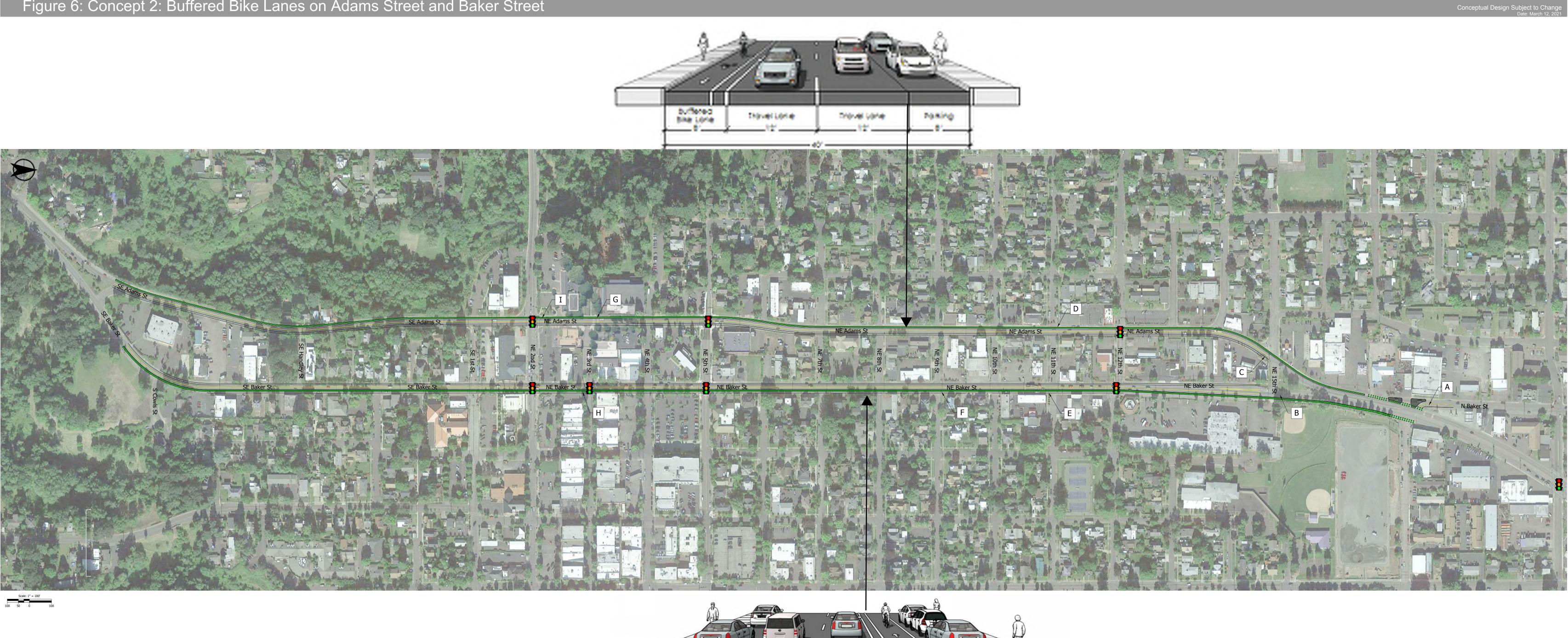


Figure 5: Adams Street and Baker Street – Buffered Bike Lanes









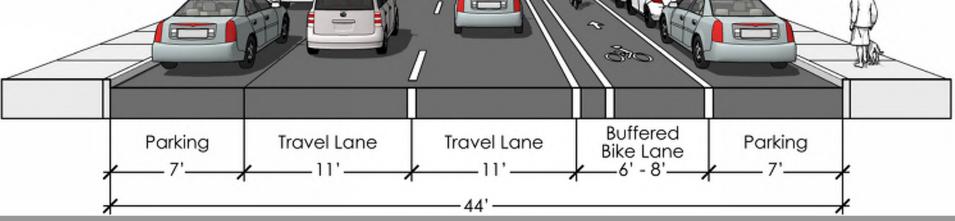


Table 2 summarizes key considerations in implementing the concept as identified in Figure 6.

Figure Label	Notes	Significance
A	• The existing intersection of OR 99W/N Baker Street is highly skewed and wide.	 Realigning the intersection could help reduce exposure to people biking and improve safety conditions at the intersection for all users.
В	 No sight distance concerns were observed at the intersection of Baker Street/ 15th Street. There is a pole at the southwest corner of the intersection that blocks ADA clearance. 	 No modification to improve sight distance are anticipated at this location, which is supportive of using this street as a crossing opportunity between the two-way separated bike lane and the buffered bike lanes proposed in this concept. If modifications are made to the existing curbs at this intersection, the concept would likely need to relocate this utility pole to ensure ADA compliance at the intersection.
С	• The center median and curb extension constrains existing curb-to-curb width of the roadway to 37'-8'.	• Parking is not accommodated at this location and the curb extension is on the opposite side of the roadway as the proposed bike lane. Therefore, this pinch point is not expected to impact the proposed width of the buffered bike lane or travel lanes.
D	 Curb extensions at the Adams Street/ 11th Street intersection constrain existing curb-to-curb width of the roadway to 34'-8". 	• The constrained width by curb extensions on both sides of the street may require a reduction in the width of the proposed buffered bike lane and/or vehicle travel lanes at this location.
E	 Curb extension at the southwest corner of the Baker Street/ 11th Street intersection constrain existing curb-to- curb width of the roadway to 39'-6". 	• Since parking is not accommodated at this curb extension, this pinch point is not expected to impact the proposed width of the buffered bike lane or travel lanes.
F	• Curb extension at the northeast corner of the Baker Street/9 th Street intersection constrain existing curb-to- curb width to 40'-5".	• Since parking is not accommodated at this curb extension, this pinch point is not expected to impact the proposed width of the buffered bike lane or travel lanes.
G	• Curb extension at the northeast corner of the Adams Street/ 3 rd Street intersection constrain existing curb-to- curb width of the roadway.	• Since parking is not accommodated at this location, and the curb extension is located along the opposite side of the street as the buffered bike lane, this pinch point is not expected to impact the proposed width of the buffered bike lane or travel lanes.
н	• Baker Street/3 rd Street is a signalized intersection.	• A dedicated northbound right turn lane on Baker at 3 rd will require that parking be removed on both sides of Baker leading up to the intersection. Parking may also need to be removed north of the intersection for a short distance.
I	 Adams Street/NE 2nd Street is a signalized intersection. There is a yield controlled eastbound slip lane from 2nd Street onto Adams Street. 	• Specific attention should be paid to the bicycle and vehicle interaction at this location.

Based on project team field visit and observations, existing curb extensions constrain the available crosssection at "pinch points" along the couplet. Existing curb restrictions prohibit parking at the curb extensions or immediately adjacent to them; therefore, parking is not included in the roadway crosssection at these points. However, shifting the bike lane and vehicle lanes at the intersection may pose a potential safety concern. As such, the bike facilities are not shifted in this concept. Along Baker Street, there is no parking at the curb extension, and the existing curb-to-curb width can accommodate the travel lanes and buffered bike lane without shifting the buffered bike lane. Along Adams Street, the bike lane may have a reduced width or no buffer at these pinch points.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

Existing Condition

Two potential parallel neighborhood greenway routes have been identified as low-stress alternatives, or supplemental routes to walking and biking along OR 99W: Davis Street and Evans Street. The existing curb-to-curb cross-section and street configuration elements (e.g., presence of parking) vary along the potential neighborhood greenway routes. Figure 7 illustrates the typical curb-to-curb cross-sections of the neighborhood street alignments.

Proposed

Concept 3 proposes a neighborhood greenway concept between the intersection of Linfield Avenue/OR 99W and the intersection of McDonald Lane/OR 99W. Based on feedback received from the PAC meeting as well as field visit observations, two primary neighborhood routes were identified as potential neighborhood greenway alignments: Evans Street and Davis Street. Both neighborhood greenways utilize Linfield Avenue from OR 99W to connect to 2nd Avenue via Davis Street. To the north, both neighborhood greenways utilize 17th Street to connect to OR 99W via 18th Street and McDonald Lane. Figure 8 illustrates the proposed concept cross-section and Figure 9 illustrates the proposed conceptual layout. This concept maintains the existing parking and travel lane widths of the greenway route.

If Concept 3 is selected as a preferred concept, either the Davis Street or Evans Street alignment would be constructed.

Appendix "C" includes additional information about design treatments for neighborhood greenways.

Figure 7: Neighborhood Street – Existing

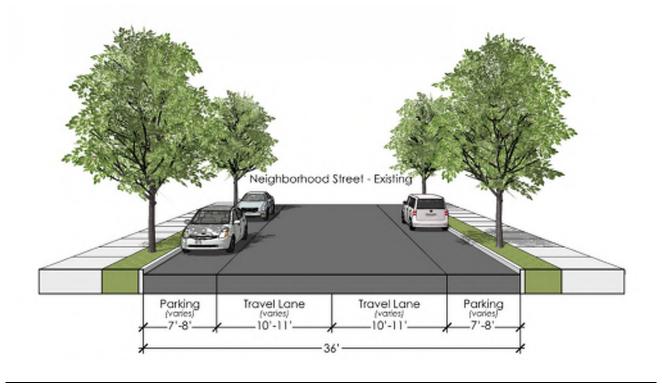
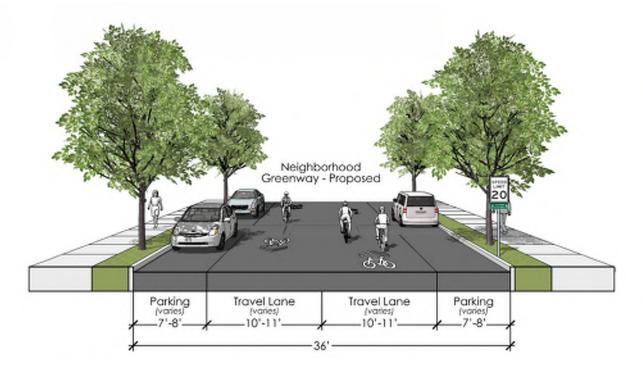


Figure 8: Neighborhood Street – Neighborhood Greenway





REALESS ASSOCIATES

McMinnville Active Transportation Concept Plan McMinnville, OR Table 3 and Table 4 summarize key considerations identified in Figure 9 for the Davis Street and Evans Street Neighborhood Greenway concepts, respectively.

Figure Label	Notes	Significance	
A	 At the intersection of 17th Street/Evans Street people biking will transition from existing bike lanes on Evans Street to sharrows on 17th Street. 	 Wayfinding signage will be used to support this transition. 	
В	• Today there is a stop control at these	• To facilitate through-movements for people walking and biking, it is recommended that these stop-controls be chifted to the cross-streets. Traffic-calming measures	
С	intersections on Davis Street with cross traffic moving freely.	be shifted to the cross-streets. Traffic-calming measures (e.g., speed bumps, chicanes, etc.) should be implemented to maintain lower traffic volumes along Davis Street.	
D	 Today there is a stop control on Davis Street at this intersection with cross traffic moving freely along 8th Street. Parallel to this point on Davis Street, bike lanes begin along Evans Street and run between 17th Street and 8th Street. 	 To facilitate through-movements for people walking and biking, it is recommended that the stop signs be shifted from Davis Street to 8th Street. Traffic-calming measures (e.g., speed bumps, chicanes, etc.) should be implemented to maintain lower traffic volumes along Davis Street. Maintaining the bike lanes along Evans Street would require signage distinguishing the low-stress neighborhood greenway facility from the bike lanes along a busier street. Based on PMT, PAC, and public comment, it will be determined whether the bike lanes along Evans Street should be maintained or removed. 	
E	 Today there is a stop control at 5th Street/Davis Street with cross traffic along 5th Street moving freely. 	 To facilitate through-movements for people walking and biking, it is recommended that the stop control be shifted to 5th Street. Traffic-calming measures should be implemented to maintain lower traffic volumes along Davis Street. 5th Street/Evans Street is signalized at this location. 	
F	 Today there is a stop control at 4th Street/Davis Street with cross traffic moving freely along 4th Street. 	• To facilitate through-movements for people walking and biking, it is recommended that the stop control be shifted to 4 th Street. Traffic-calming measures should be implemented to maintain lower traffic volumes along Davis Street.	
G	• The intersection of 3 rd Street/Davis Street is signalized.	 This intersection provides a lower-stress crossing than the intersection of 3rd Street/Evans Street, which is two- way stop-controlled. 	
н	• There is a hill for riders on Davis (uphill for northbound riders)	• This hill is located along both neighborhood greenway alignments. It is not anticipated to serve as a deterrent to usage.	

Table 4: Concept 3B Considerations (Evans Street)

Figure Label	Notes	Significance	
A	 At the intersection of 17th Street/Evans Street bikes will need to be transitioned from existing bike lanes on Evans Street to sharrows on 17th Street. 	• Wayfinding signage will be used to support this transition.	
E	• The intersection of 5 th Street/Evans Street is signalized.	 This intersection may provide a lower-stress crossing than the intersection of 5th Street/Davis Street, which is two-way stop controlled. 	
G	• The intersection of 3 rd Street/Evans Street is not signalized, but rather two-way stop-controlled.	 This intersection provides a higher-stress crossing than the intersection of 3rd Street/Davis Street, which is signalized. 	
н	• There is a hill for riders on Davis (uphill for northbound riders).	 This hill is located along both neighborhood greenway alignments. It is not anticipated to be a deterrent to usage. 	

Based on project team field visit and observations, Davis Street resembles more of a neighborhood route with calmer traffic conditions, lower traffic volumes, a narrower cross section, and no center line striping. Furthermore, Davis Street crosses 3rd Street at a signalized intersection whereas Evans Street crosses 3rd Street at a two-way stop-controlled intersection. Both neighborhood greenway alignments have stop controls at many intersections, which may need to be adjusted to prioritize through movement for people walking and biking.

Concept Cost Estimates

Planning-level cost estimates for each concept are provided in Table 5. The estimates include costs for mobilization, signage, striping, and a 30% contingency to cover costs for administrative or engineering services related to the potential projects. The concepts maintain existing curb-to-curb cross-sections; therefore, no right-of-way costs are anticipated.

Table 5: Planning-level Cost Estimates

Concept	Planning-Level Cost Estimate	Notes
Concept 1: Two-Way Separated Bike Lane on Adams Street	\$857,000	 Assumes project is completed with a paving project and estimate excludes costs associated with said paving project. Includes potential signal modifications to transition from the buffered bike lanes to the two-way separated bike lane at 2nd Street. Excludes specific intersection treatments. These will be added once a preferred alternative is selected.
Concept 2: OR 99W Buffered Bike Lanes	\$400,000	 Assumes project is completed with a paving project and estimate excludes costs associated with said paving project. Excludes specific intersection treatments. These will be added once a preferred alternative is selected.
Concept 3A: Neighborhood Greenway on Davis Street	\$140,000	 Includes the cost of switching the stop sign to the other street. Excludes traffic calming structures.
Concept 3B: Neighborhood Greenway on Evans Street	\$89,000	 Excludes traffic calming structures. Costs associated with traffic calming are anticipated to be higher for the Evans Street Greenway than the Davis Street Greenway.

As summarized in Table 5, the two-way separated bike lane is the most expensive concept, followed by the buffered bike lanes, and the neighborhood greenway concepts. Additionally, maintenance costs are anticipated to be substantially higher for Concept 1 than for the other concepts because of the flex-post delineators and special maintenance equipment needed to sweep the two-way separated bike lane.

The cost estimate for the preferred concept will be refined in the draft Concept Plan.

Appendix "D" contains the full planning level cost-estimates for each concept.

OR 99W CONCEPT EVALUATION

Evaluation criteria and performance measures identified in the Evaluation Criteria and Performance Measures Memorandum were used to assess the trade-offs of each concept and determine which concept most closely aligns with the project goals based on the corridor context and needs of intended users. The evaluation criteria below support the Corridor Vision Statement and the City of McMinnville Transportation System Plan (TSP) policies:

- 1. *Complete Streets*: The alternative provides comfortable facilities for people walking and biking, regardless of age and ability.
- 2. *Multi-Modal Transportation System*: The alternative provides integrated network of facilities and services for a variety of motorized and non-motorized travel modes based on the appropriate relative priority given the corridor context.
- 3. *Connectivity*: The alternative provides comprehensive connectivity and circulation to existing active transportation facilities in the City of McMinnville. The alternative encourages walking and biking to essential destinations within the City of McMinnville.
- 4. *Safety*: The alternative provides safety countermeasures that reduce the number of fatal and severe injury crashes.
- 5. *Equity*: The project meets the requirements set forth in the Americans with Disabilities Act (ADA) and provides transportation options to transportation disadvantaged populations.
- 6. *Livability*: The alternative minimizes impacts to adjacent property owners and encourages the use of public transit, bikeways, sidewalks, and walkways. The project provides equity and receives public support.
- 7. Design Feasibility: The alternative has no major design feasibility concerns.

The scoring scale for each criterion ranges from -1 to +2, reflecting the extent to which a project achieves the evaluation criteria per the associated performance measures. An evaluation of the concept designs according to this scale is provided below. *Appendix "F" contains the Evaluation Criteria and Performance Measures Memorandum*.

Complete Streets

The *Complete Streets* criterion considers the level of comfort each concept provides for people walking and biking, regardless of age and ability. This is measured with respect to bicycle and pedestrian level of traffic stress (LTS)².

Today, the BLTS scores ranges between BLTS 3 and BLTS 4 within the project study area. Each concept is expected to improve the experience for people biking according to LTS analysis. Table 6 summarizes the complete streets score based on implementation of the various concepts.

Concept	Complete Streets Score	Existing LTS	Concept LTS
Concept 1: Two-Way Separated Bike Lane on Adams Street	+1.5	BLTS 3 (north and south of couplet)BLTS 4 (within couplet)	• BLTS 1 with segments of BLTS 2
Concept 2: Buffered Bike Lanes on Adams Street and Baker Street	+1	BLTS 3 (north and south of couplet)BLTS 4 (within couplet)	• BLTS 2
Concept 3A: Davis Street Greenway	+2	• BLTS 1 with segments of BLTS 2	• BLTS 1 with segments of BLTS 2
Concept 3B: Neighborhood Greenway on Evans Street	+2	• BLTS 1 with segments of BLTS 2	• BLTS 1 with segments of BLTS 2

Table 6: Complete Streets Evaluation

Concept 1: Two-Way Separated Bike Lane on Adams Street

Concept 1 achieves a score of BLTS 1 along segments of Adams Street where the separated bike lane is proposed and a score of BLTS 2 where buffered bike lanes are proposed (north and south of the proposed separated bike lane). Compared to existing conditions, this improves the LTS score between 1 and 3 points.

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Concept 2 achieves a score of BLTS 2 throughout the project extents. Compared to existing conditions, this improves the LTS score between 1 and 2 points.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

Concept 3A and 3B achieves a score of BLTS 1 with some short segments of BLTS 2 along the parallel route. Compared to existing conditions, there is little-to-no change in LTS score; however, Concept 3A or

²The concepts developed for OR 99W are confined to the curb-to-curb width of the roadway. As a result, the pedestrian level of traffic stress (PLTS) was minimally impacted.

3B direct people walking and biking to the lowest stress, most comfortable experience for people biking compared to the concepts developed.

Multi-Modal Transportation System

The *Multi-Modal Transportation System* criterion evaluates if the concept alternative meets the needs of the modal priority set by the identified urban context in the ODOT Blueprint for Urban Design (BUD)³. According to the BUD, walking, biking, transit are the high priority modes for the study area, but these modes must still be balanced with the needs of vehicle and freight traffic. Table 7 summarizes the recommended design guidance for priority modes based on the BUD context.

Table 7: Recommended Modal Facility Selection for ODOT Highways in Urban Areas Based on Urban Contexts

OR 99W	Recommended	Bicyclist Facility Recommendation	Pedestrian Facility
Segment	Context		Recommendation
NE McDonald Road to NW 15th Street	Urban Mix	Wide, comfortable, buffered facilities	Wide, comfortable, buffered facilities
NW 15th Street	Traditional	Wide, comfortable facilities	Wide, comfortable, buffered
to SE 1st Street	Downtown/CBD		facilities
SE 1st Street to SW Linfield Avenue	Urban Mix	Wide, comfortable, buffered facilities	Wide, comfortable, buffered facilities

Concept 1: Two-Way Separated Bike Lane on Adams Street

Concept 1 provides wide, comfortable, and buffered facilities along segments of Adams Street where the separated bike lane is proposed. The separated bike lane increases the buffer distance between people walking and the travel lane. Concept 1 also provides buffered facilities along the buffered bike lanes segments (north and south of the proposed separated bike lane); however, the width and level of comfort of these facilities is less than the separated bike lane.

Concept 1 may impact freight mobility in the corridor. Although the BUD does not designate freight as a priority mode, OR 99W is a designated Reduction Review Route for freight; this Concept Plan should not limit the ability of freight to travel along OR 99W. The physical separation and lane reductions may not fully support the multi-modal transportation needs of OR 99W.

³ The ODOT BUD provides enhanced design guidance; for more information visit: https://www.oregon.gov/odot/Engineering/Pages/Manuals.aspx

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Concept 2 provides buffered facilities throughout the project extents; however, the width and level of comfort of these facilities is less than the separated bike lane.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

The modal considerations identified as part of the ODOT BUD are specific to the OR 99W corridor. Providing wide, comfortable, and buffered facilities on the parallel neighborhood greenway are not necessary to achieve a comfortable user experience due to the lower volume, lower vehicle speeds, and residential context of the roadway. Neighborhood greenway facilities prioritize the needs of people walking and biking, which are the priority users based on urban context.

Table 8 summarizes the results of the multi-modal transportation system evaluation scores.

Table 8: Multi-Modal Transportation System Evaluation

Concept	Multi-Modal Transportation System Score
Concept 1: Two-Way Separated Bike Lane on Adams Street	+1
Concept 2: Buffered Bike Lanes on Adams Street and Baker Street	+1
Concept 3A: Neighborhood Greenway on Davis Street	+1
Concept 3B: Neighborhood Greenway on Evans Street	+1

Connectivity

The *Connectivity* criterion evaluates how well the concept supports the development of the McMinnville active transportation network by assessing whether the concept is identified in existing planning documents, removes gaps or barriers in the existing walking and biking network, and is located near active transportation generators and essential destinations. Transit stops are included in this list of destinations, with Yamhill County Transit operating four routes with weekday hourly service in McMinnville⁴:

- Route 1: McMinnville South Loop;
- Route 2: McMinnville East Loop;
- Route 3: McMinnville North Loop; and,
- Route 4: McMinnville West Loop.

Kittelson & Associates, Inc.

⁴For additional information about transit routes in McMinnville, see <u>https://ycbus.org/</u>.

Table 9: Connectivity Evaluation

Concept	Number of Essential Destinations	Portion of Walk-to- School Routes Overlap	Connectivity Score
Concept 1: Two-Way Separated Bike Lane on Adams Street	Many (19)	Minor	+2
Concept 2: OR 99W Buffered Bike Lanes	Many (24)	Minor	+2
Concept 3A: Neighborhood Greenway on Davis Street	Some (11)	Moderate	+1.7
Concept 3B: Neighborhood Greenway on Evans Street	Many (20)	Substantial	+2

Concept 1: Two-Way Separated Bike Lane on Adams Street

Concept 1 minimizes barriers and fills gaps within the existing active transportation network by providing a two-way separated bike lane and buffered bike lanes along OR 99W. The need for improved multimodal accommodations within the OR 99W couplet was identified in the City's TSP. Most of the OR 99W corridor is not identified as a walk-to-school route; however, Adams Street and Baker Street south of 2nd Street are both identified as walk-to-school routes for Newby Elementary School and McMinnville High School, respectively. Nineteen (19) essential destinations were identified immediately adjacent to the alignment of Concept 1; the majority of which are transit stops and health related clinics.

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Concept 2 minimizes barriers and fills gaps within the existing active transportation network by providing buffered bike lanes along OR 99W. The need for improved multi-modal accommodations within the OR 99W couplet was identified in the City's TSP. Most of the OR 99W corridor is not identified as a walk-to-school route; however, Adams Street and Baker Street south of 2nd Street are both identified as walk-to-school routes for Newby Elementary School and McMinnville High School, respectively. Twenty-four (24) essential destinations were identified immediate adjacent to the alignment of Concept 2; the majority of which are transit stops and health related clinics.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

While the neighborhood greenway concepts are not identified in the City's TSP, the need for improving the multi-modal accommodations along OR 99W is addressed by providing a parallel route. Walk-to-school routes for Sue Buel Elementary School, McMinnville High School, and Patton Middle School, and Memorial Elementary school are located along the neighborhood greenway route(s). Eleven essential destinations were identified immediate adjacent to the alignment of Concept 3A; the majority of which are transit stops and churches. Twenty essential destinations were identified adjacent to the alignment of Concept 3B; the majority of which are transit stops and churches. Concepts 3A and 3B pass three school frontages.

Safety

The *Safety* criterion considers the concept impact to safety along the corridor through crash reduction factors, crash history, bicycle risk factor scoring, and pedestrian risk factor scoring. The proposed concepts include crash reduction factors (CRFs) for roadway segments. CRFs are used to estimate the potential reduction in crashes that could occur with the implementation of the proposed concepts. Table 10 summarizes the CRFs identified for each concept and respective crash reduction percentages with respect to cost.

Table 10: Crash Reduction Factors

Concept	Concept CRFs	Crash Reduction Factor (CRF)	Crash Reduction Value with Respect to Cost ²	
Concept 1: Two-Way	BP23: Install Cycle Tracks	59% Reduction in Bicycle Crashes at All Injury Severities		
Separated Bike Lane on Adams Street	BP24: Install Buffered Bike Lanes	47% Reduction in Bicycle Crashes at All Injury Severities	Moderate Value	
Concept 2: Buffered Bike Lanes on Adams Street and Baker Street	BP24: Install Buffered Bike Lanes	47% Reduction in Bicycle Crashes at All Injury Severities	Moderate Value	
Concept 3A: Neighborhood Greenway on Davis Street	BP27: Install Bicycle	63% Reduction in Pedestrian	Highest Value ³	
Concept 3B: Neighborhood Greenway on Evans Street	Boulevard	and Bicycle Crashes at All Severities	High Value	

¹CRF Source: ODOT ARTS Program Crash Reduction Factor Appendix

¹Crash reduction value with respect to cost is based on the estimated planning-level costs provided above; this considers the order-of-magnitude cost with respect to safety benefits.

²Although planning-level cost estimates shown are higher for Davis Street Greenway, traffic calming efforts are anticipated to make the Evans Street Greenway option more expensive.

Table 11 summarizes the safety evaluation with respect to crash reduction factor, crash history, pedestrian risk factor scoring, and bicycle risk factor scoring.

Table 11: Safety Evaluation

Concept	Safety Score
Concept 1: Two-Way Separated Bike Lane on Adams Street	+1.9
Concept 2: Buffered Bike Lanes on Adams Street and Baker Street	+1.8
Concept 3A: Neighborhood Greenway on Davis Street	+2.0
Concept 3B: Neighborhood Greenway on Evans Street	+1.9

Concept 1: Two-Way Separated Bike Lane on Adams Street

Concept 1 provides the second highest CRF for people biking at 59%. There were 22 reported crashes of people walking or biking along the alignment between January 1, 2014 and December 31, 2018⁵. Segments of the concept alignment score in the top 20% of risk factor locations for people walking and for people biking.

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Concept 2 provides the lowest CRF for people biking at 47%. There were 30 reported crashes of people walking or biking along the alignment between January 1, 2014 and December 31, 2018. Segments of the concept alignment score in the top 20% of risk factor locations for people walking and for people biking.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

The neighborhood greenway concepts provide the highest CRF for people walking and biking at 63%. There were eight reported crashes of people walking or biking along the Davis Street Greenway alignment and seven reported crashes of people walking or biking along the Evans Street Greenway alignment between January 1, 2014 and December 31, 2018. Additionally, these concepts provide parallel facilities that reduce expected crashes involving people walking and biking along the couplet. Segments of the concept alignment score in the top 40% of risk factor locations for people biking. The route also provides an alternative to locations in the top 20% risk factor locations for people walking and for people biking.

The existing signal at 3rd Street/Davis Street and anticipated costs associated with traffic calming needs along Evans Street makes the Davis Street Greenway score slightly higher with respect to safety than the Evans Street Greenway option.

Appendix "C" includes additional information about ARTS countermeasures.

Equity

The *Equity* criterion considers how the concept supports access for transportation disadvantaged populations (TDP). A TDP index was calculated according to the Oregon Department of Transportation (ODOT) Active Transportation Needs Inventory Assessment⁶. The higher the index number the more

⁵ The five most recent years of pedestrian and bicyclist crash data (January 1, 2014 to December 31, 2018) were obtained from ODOT's Crash Analysis and Reporting Unit. This alignment extends from Linfield Avenue to McDonald Lane.

⁶The index converts household statistics from the American Community Survey to a per capita index. It is calculated at the census block group level as the sum of people 65 and older, 17 and younger, non-white or Hispanic, speak English "not well" or "not at all", low-income, with a disability, living in crowded households, or living in households without vehicle access. That sum is divided by total block population. People fitting into multiple vulnerability categories are counted multiple times.

historically disadvantaged the population is with respect to transportation. Each of the three concepts are along the same block groups, which have a TDP Index ranging from 1.6 to 1.9. None of the concepts are anticipated to directly impact ADA compliance.

As a result, historically disadvantaged populations with respect to transportation would be served equally when compared to the TDP index. However, the different concepts provide distinct advantages with respect to supporting access for transportation disadvantaged groups. Concept 1 and Concept 2 may provide more direct access for economically disadvantaged populations; Concept 2 and Concept 3 may provide more comfortable facilities for people using a mobility device, as described below.

Table 12 summarizes the results of the equity evaluation scores.

Table 12: Equity Evaluation

Concept	Equity Score
Concept 1: Two-Way Separated Bike Lane on Adams Street	+1
Concept 2: OR 99W Buffered Bike Lanes	+0.8
Concept 3A: Neighborhood Greenway on Davis Street	+1
Concept 3B: Neighborhood Greenway on Evans Street	+1

Concept 1: Two-Way Separated Bike Lane on Adams Street

Concept 1 directly improves transportation options and facilities for transportation disadvantaged populations of all ages and abilities. The concept provides physical separation from vehicle traffic, providing low-stress facilities for elderly, youth, and people using mobility devices along the corridor. This concept also provides direct access to facilities along the couplet, supporting access to jobs for individuals without access to motor vehicles.

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Concept 2 also directly improves transportation options and facilities for some transportation disadvantaged populations by providing direct access to facilities along the couplet. This concept, however, does not provide the same level of comfort as the other concepts because there is no physical separation from the high traffic volumes along the couplet.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

The lower traffic volumes along the neighborhood greenway routes support elderly, youth, and people who use mobility devices. The concept directly improves transportation options and facilities for transportation disadvantaged populations of all ages and abilities, supporting comfortable access to destinations in the project area.

Livability

The *Livability* criterion considers impacts the concept has to residential and commercial access along the corridor and the public response. The public response is pending, as it will be determined in a virtual open house.

Table 13 provides the *Livability* score for each concept. All concepts considered are expected to directly improve access to residential and commercial areas and are not expected to require right-of-way acquisition. Information collected in the virtual open house will be used to distinguish between each concept's impact to livability in the study area.

Table 13: Livability Evaluation

Concept	Livability Score
Concept 1: Two-Way Separated Bike Lane on Adams Street	+1.5
Concept 2: OR 99W Buffered Bike Lanes	+1.5
Concept 3A: Neighborhood Greenway on Davis Street	+1.5
Concept 3B: Neighborhood Greenway on Evans Street	+1.5

Concept 1: Two-Way Separated Bike Lane on Adams Street

Parking removal along one side of Adams Street is not anticipated to impact commercial access. Concept 1 directly improves access for people walking and biking to residential and commercial areas surrounding the couplet.

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Parking removal along one side of Adams Street is not anticipated to impact commercial access. Concept 2 directly improves access for people walking and biking to residential and commercial areas surrounding the couplet.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

Concepts 3A and 3B directly improve access for people walking and biking to residential and commercial areas, particularly those east of the couplet.

Design Feasibility

The *Design Feasibility* criterion assesses potential design feasibility considerations for each concept to determine whether there are any potential "fatal flaws" that would preclude implementation.

As described in Table 14, Concept 1 is expected to have the most substantial design challenges of the concepts considered based on potential to impede heavy vehicle movements and special considerations for designing contraflow facilities and transitioning users from buffered bike lanes to the two-way

separated bike lane within the OR 99W couplet. Additional information about design challenges associated with each concept is provided below.

Table 14: Design Feasibility Evaluation

Concept	Design Feasibility Score
Concept 1: Two-Way Separated Bike Lane on Adams Street	-1
Concept 2: Buffered Bike Lanes on Adams Street and Baker Street	0
Concept 3A: Neighborhood Greenway on Davis Street	+1
Concept 3B: Neighborhood Greenway on Evans Street	0

Concept 1: Two-Way Separated Bike Lane on Adams Street

Concept 1 poses the most substantial design challenges due to the removal of parking along the west side of Adams Street, the reduction in travel lane widths to accommodate the two-way separated bike lane, and transition zones to bring people biking to and from the two-way separated bike lane facility. The physical buffers also have potential to impede heavy vehicle movements and may also provide maintenance challenges.

Concept 2: Buffered Bike Lanes on Adams Street and Baker Street

Concept 2 poses design challenges due to parking removal along the west side of Adams Street, reduction in travel lane widths along Adams Street and Baker Street, and ability to fit buffered bike lanes along Baker Street at the constrained pinch points created by existing curb extensions.

Concept 3: Neighborhood Greenway on Davis Street or Evans Street

Concepts 3A and 3B pose minor design challenges due to the nature and lack of infrastructure required with the neighborhood greenway concept. Traffic calming in the form of signage, traffic diverters, and speed humps will be explored to reduce the potential of cut-through traffic, vehicle volumes, and vehicle speeds on the neighborhood routes.

Traffic calming measures along Concept 3B: Neighborhood Greenway on Evans Street Greenway are anticipated to have more design challenges and implications than Concept 3A: Neighborhood Greenway on Davis Street due to differences in the roadway classifications of Davis Street and Evans Street. According to the McMinnville TSP, Davis Street is classified as a minor collector from Booth Bend Road to 3rd Street and as a local street from 3rd Street to 14th Street. Evans Street is classified as a minor collector from 3rd Street north to OR 99W.

Evaluation Criteria Scoring

Table 15: Evaluation Criteria Scoring

Evaluation Criteria	Performance Measure	Separated	1: Two-Way I Bike Lane on ns Street	Lanes on A	: Buffered Bike dams Street and er Street		cept 3A: Neighborhood enway on Davis Street		B: Neighborhood on Evans Street	
Criteria		Criteria Score	Performance Measure Score	Criteria Score	Performance Measure Score	Criteria Score	Performance Measure Score	Criteria Score	Performance Measure Score	
	Bicycle Level of Traffic Stress (BLTS)		+2		+2		+2		+2	
Complete Streets	Pedestrian Level of Traffic Stress (PLTS)	+1.5	+1	+1	0	+2	+2	+2	+2	
Multi-Modal Transportation System	Type and presence of pedestrian, bicycle, transit, motor vehicle, and freight facilities align with the recommendations from the Blueprint for Urban Design	+1	+1	+1	+1	+1	+1	+1	+1	
	Project is identified by the City of McMinnville TSP or is located on the Safe Routes to School (SRTS) Network.		+2		+2		+2		+2	
Connectivity	Project removes barrier to walking and biking or fills gap in the walking and biking transportation network	+2	+2	+2	+2	+1.7	+2	+2	+2	
	Proximity to activity generators and essential destinations		+2		+2		+1		+2	
	Crash Reduction Factor/Planning Level Project Cost		+1.5		+1		+2		+1.5	
	Crash History	+1.9	+2		+2		+2		+2	
Safety	Pedestrian Risk Factor Scoring		+1.9	+1.9	+2	+1.8	+2	+2	+2	+1.9
	Bicyclist Risk Factor Scoring		+2		+2		+2		+2	
Equity	Project impact to transportation disadvantaged populations based on the ODOT Transportation Disadvantaged Population (TDP) Index	+1	+2	+0.8	+1.5	+1	+2	+1	+2	
	Project impact to ADA compliance		0	0 0			0		0	
	Right-of-way acquisition needs		+1		+1		+1		+1	
Livability	Neighborhood street modification, business access and parking	+1.5	+2	+1.5	+2	+1.5	+2	+1.5	+2	
	Public response based on Open House and Public Advisory Committee Comments		pending		pending		pending		pending	
Design Feasibility	High-level feasibility of constructing the intended project at the location.	-1	-1	0	0	+1	+1	0	0	
Total Score			7.9		8.1		10.2		9.4	

OR 99W CONCEPT CONSULTANT TEAM PRELIMINARY RECOMMENDATIONS

As shown in Table 15, *Concept 3A: Neighborhood Greenway on Davis Street* scores highest, followed by *Concept 3B: Neighborhood Greenway on Evans Street. Concept 2: Buffered Bike Lanes on Adams Street and Baker Street* scores higher than *Concept 1: Two-Way Separated Bike Lane on Adams Street*. Based on the scoring, and the distinct benefits each concept provides, the consultant team's preliminary recommendation is to construct Concept 3A: Neighborhood Greenway on Davis Street ("Davis Street Greenway") and Concept 2: Buffered Bike Lanes on Adams Street and Baker Street ("OR 99W Buffered Bike Lanes"). A list of primary benefits of these concepts is as follows:

- The Davis Street Greenway provides low-stress facilities for users of all ages and abilities.
- The Davis Street Greenway is a low-cost option.
- The existing character of Davis Street is more conducive to neighborhood greenway facilities; Evans Street would likely require more substantial traffic calming efforts to serve as a low-stress facility.
- The intersection of Davis Street/3rd Street is signalized, providing a more comfortable intersection crossing than the two-way stop controlled intersection of Evans Street/3rd Street.
- The OR 99W Buffered Bike Lanes provide direct access for people biking through the couplet and to destinations west of the couplet.
- The OR 99W Buffered Bike Lanes are a moderate-cost option that can be easily added to pavement projects along the couplet.

Public input will be key to confirming or modifying the alignment recommendation for the neighborhood greenway.

Access to the preferred concept design will be supported with enhanced crossings along OR 99W. Development of enhanced crossing recommendations is described in the following sections.

ENHANCED CROSSING DEVELOPMENT

Potential locations for enhanced crossing treatments were identified based on field observations and initial assessments by the consultant team, input from the PMT and PAC, and a review of the City's TSP and walk-to-school routes. This section analyzes and recommends enhanced crossing treatments for the following six intersections:

- Adams Street/15th Street;
- Baker Street/15th Street;
- Adams Street/8th Street;

- Baker Street/8th Street;
- Adams Street/3rd Street; and,
- Baker Street/Cowls Street

The intent of the enhanced crossing development is to identify and recommend crossing treatments that will provide safe, comfortable crossing opportunities for people walking and biking in the study area.⁷ Once the preferred alternative is established, the enhanced crossings recommendations will be updated to tie into the preferred crossing facilities and support access to essential destinations and activity generators around McMinnville.

ENHANCED CROSSING EVALUATION

The six enhanced crossing study locations listed above were evaluated using the FHWA *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations* (Reference 3) and NCHRP *Report 562 Improving Pedestrian Safety at Unsignalized Crossings* (Reference 4). This evaluation was conducted to identify appropriate crossing treatments based on existing roadway and traffic conditions.

Federal Highway Administration (FHWA) Guide for Improving Pedestrian Safety at Uncontrolled Locations

The FHWA *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations* (Reference 3) was produced as part of the Safe Transportation for Every Pedestrian (STEP) program and provides guidance on selecting appropriate countermeasures to help improve pedestrian safety at uncontrolled crossing locations. Table 1 of the *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations* provides a matrix of countermeasure options for evaluating appropriate levels of crossing protection based on roadway configurations, posted speed limit, and average annual daily traffic (AADT). Figure 10 illustrates the countermeasure matrix and highlights the applicable matrix cell based on the roadway configuration, posted speed limit, and AADT within the study area.

									P	ost	ed	Sp	eed	d L	imi	it a	nd	AA	DT								
		٧	ehio	cle /	AAI	DT <	:9,0	00		Ve	ehio	cle A	AD	DT 9	,00	0-1	5,0	00		Ve	hic	le A	AD	T >	15,0	00	
Roadway Configuration	≤3	0 n	nph	3	5 m	nph	≥4	10 n	nph	≤3	0 m	nph	35	5 m	ph	24	40 n	nph	≤3	0 m	ph	35	m	ph	≥4(0 m	ph
4+ lanes with raised median	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	5	0
(2 or more lanes in each direction)	7	8	9	7	8	9		8	0	7	8	9	0	8	ø		8	ø	0	8	ø		8	0		8	ø
4+ lanes w/o raised median	0	5	6	0	5	-	0	5	-	0	5	0	0		8	-	5	-	1		00	0		0	0		8
(2 or more lanes in each direction)	7	8	9	7	8	9		8	0	7	8	9	0		0		8	0	0	8	0		8	0		8	0

Figure 10: Application of Pedestrian Crash Countermeasures by Roadway Feature

Traffic data available in ODOT's TransGIS shows that the average annual daily traffic (AADT) through the OR 99W couplet ranges between 11,700 and 13,000 vehicles. Adams Street and Baker Street have one-

⁷ Enhanced crossing treatments require approval from ODOT Region 2 Traffic.

way, two-lane cross-sections with a posted speed of 30 mph (except for the segment of Adams Street south of 2nd Street which has a posted speed limit is 35 mph).

Based on the guidance provided in the countermeasure matrix, the following countermeasures should be considered at the identified crossing locations based on roadway context⁸:

Countermeasure	FHWA Level of Recommendation
Countermeasure 1: High visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs	Crosswalk visibility enhancements should always occur in conjunction with other identified countermeasure.
Countermeasure 2: Raised Crosswalk	Countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgement
Countermeasure 3: Advance Stop Here For Pedestrians sign and stop line	Countermeasure should always be considered, but not mandated or required, based upon engineering judgement.
Countermeasure 4: In-Street Pedestrian Crossing sign	Countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgement
Countermeasure 5: Curb extensions	Countermeasure is a candidate treatment
Countermeasure 6: Pedestrian refuge island	Countermeasure should always be considered, but not mandated or required, based upon engineering judgement.
Countermeasure 7: Rectangular Rapid Flashing Beacon (RRFB)	Countermeasure is a candidate treatment
Countermeasure 8: Road diet	Countermeasure is a candidate treatment
Countermeasure 9: Pedestrian Hybrid Beacon (PHB)	Countermeasure is a candidate treatment

Source: FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations

The complete matrix of countermeasure options can be found in Reference 3.

NCHRP Report 562 Improving Pedestrian Safety at Unsignalized Crossings

The NCHRP Report 562 *Improving Pedestrian Safety at Unsignalized Crossings* (Reference 4) provides a methodology for evaluating appropriate levels of crosswalk protection that considers traffic, travel

⁸ Note: Roadway Configuration "(2 or more lanes in each direction)" was selected due to the roadway context and configuration of the OR 99W couplet.

speed, pedestrian crossing volumes as well as a number of other factors. NCHRP Report 562 methodology was applied to the potential enhanced crossing locations.

Pedestrian Volumes

Pedestrian crossing volumes at the potential enhanced crossing locations were unavailable. To conduct the NCHRP Report 562 analysis, the minimum pedestrian volume for a peak-hour evaluation recommended by NCHRP 562 was used (20 pedestrians per hour for both direction where the major road speed does not exceed 35 mph). Table 17 summarizes the results of the NCHRP Report 562 application.

Note: The FHWA Countermeasure Selection Matrix does not rely on existing or forecasted pedestrian crossing volumes to determine the appropriate level of enhanced crossing facility type.

Table 17: NCHRP Report 562 Analysis Study Intersections

ID	Major Street	Minor Street	PM Peak Hour Traffic Volume ¹	Posted Speed	Crossing Distance ²	NCHRP 562 Recommended Treatment ³
1	Adams Street	15 th Street	1300	30	44	Active or Enhanced
2	Baker Street	15 th Street	1280	30	34	Active or Enhanced
3	Adams Street	8 th Street	1300	30	42	Active or Enhanced
4	Baker Street	8 th Street	1260	30	46	Active or Enhanced
5	Adams Street	3 rd Street	1300	30	34	Active or Enhanced
6	Baker Street	Cowls Street	1170	30	46	Active or Enhanced

¹Peak hour volume estimate was taken as 10% of the AADT provided in TransGIS. This estimate was consistent with tube counts collected along a segment of Adams Street in 2017.

²Crossing distances were measured during the project team field visit.

³The "Active or Enhanced" treatment recommendation assumes a peak pedestrian volume of 20 pedestrians/hour.

Under the scenario where a minimum of 20 pedestrians would need to cross the major street in the peak hour, the NCHRP Report 562 analysis results in a "**ACTIVE OR ENHANCED**" indication for the six crossing locations. This category includes devices that enhance the visibility of the crossing location and devices designed to display a warning only when pedestrians are present or crossing the street.

Based on the existing walking and biking activity along the couplet, it is anticipated that the minimum pedestrian activity thresholds are currently met with increasing activity anticipated based on upcoming development and the other improvements included in the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan. *Appendix "E" includes the NCHRP 562 worksheets used in this analysis.*

ENHANCED CROSSING RECOMMENDATIONS

Based on the recommend guidance in the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Locations and the results of the NCHRP Report 562 analysis the following enhanced crossing treatments are recommended at the identified crossing locations:

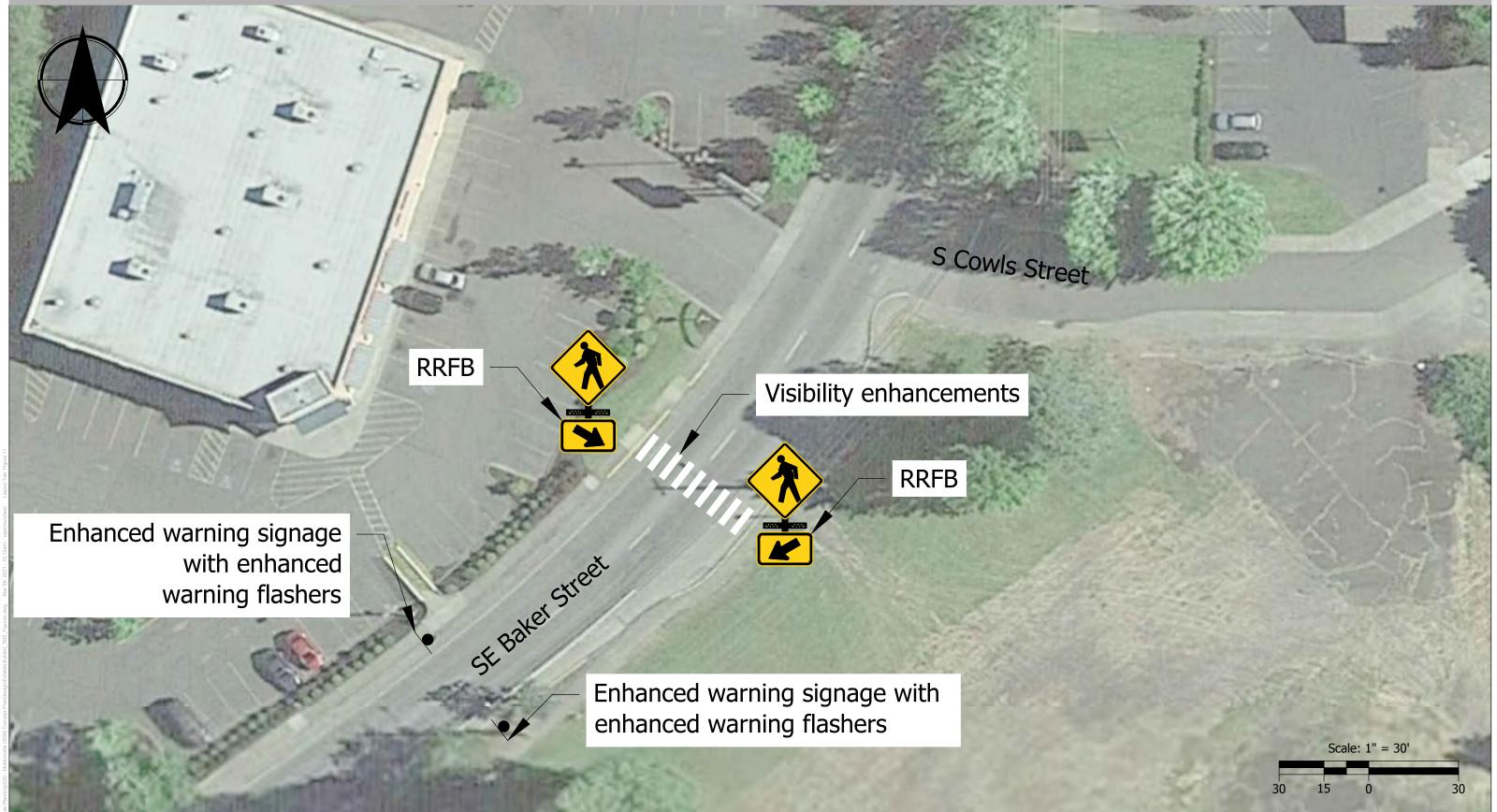
- High visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
- Advance Stop Here For Pedestrians sign and stop line
- Rectangular Rapid Flashing Beacon (RRFB)

Figure 11 through Figure 14 illustrate conceptual layouts for the recommended enhance crossing treatments. The planning-level cost associated with high visibility crosswalk markings with RRFB is \$125,000 per location. This estimate includes construction and professional fees for ADA ramp reconstruction on both sides of the roadway, striping, signage, and the RRFB. The estimate does not include right-of-way, utility relocations, or bicycle detection on approaches. The planning-level cost estimate for each intersection will be refined in the draft Concept Plan once the preferred OR 99W facility concept the enhancements would tie into is established.

Additionally, coordination with Yamhill County Transit is recommended to consider relocating existing transit stops to enhanced crossing locations to facilitate transit use in the area.

Appendix "C" provides additional information about design treatments for improving safety at intersections.

Figure 11: Enhanced Crossing Conceptual Layout at Baker Street/Cowls Street





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Conceptual Design Subject to Change Date: March 12, 2021

Figure 12: Enhanced Crossing Conceptual Layout at Adams Street/3rd Street





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Conceptual Design Subject to Change Date: March 12, 202

Figure 13: Enhanced Crossing Conceptual Layout at Adams Street/8th Street and Baker Street/8th Street





McMinnville Active Transportation Concept Plan McMinnville, OR

Conceptual Design Subject to Chang 000 **Baker Street** SE SE 8th Street K RRFB Enhanced warning signage Scale: 1" = 30'

Figure 14: Enhanced Crossing Conceptual Layout at Adams Street/15th Street and Baker Street/15th Street







Visibility enhancements

Enhanced warning signage

15

Scale: 1" = 30'

McMinnville Active Transportation Concept Plan McMinnville, OR

30

Phasing and Implementation

The McMinnville OR 99W Active Transportation Concept Plan concept recommendations can be separated into distinct projects to support incremental implementation as funding sources are identified. Securing funding for construction of the Davis Street Neighborhood Greenway should be prioritized, however, if funding sources are identified for any other project that project may be implemented first. Timing and potential funding sources for each project is outlined in Table 18.

Project	Priority Order ¹	Timing	Potential Funding Sources
Davis Street Neighborhood Greenway	1	As soon as funding can be made available	Safe Routes to School
OR 99W Buffered Bike Lanes	2	Improvements should occur as part of the next resurfacing preservation project	Safe Routes to SchoolSTIP Preservation funding
Adams Street/15th Street Enhanced Crossing	3	Construct these crossings at the same time ² , or with	Private developmentTransportation Safety Division GrantsSTIP Preservation funding
Adams Street/15th Street Enhanced Crossing	3	development	Private developmentTransportation Safety Division GrantsSTIP Preservation funding
Baker Street/Cowls Street Enhanced Crossing	4	Time with upcoming development	 Upcoming private development Transportation Safety Division Grants STIP Preservation funding
Adams Street/8th Street Enhanced Crossing	5	Construct these crossings at	Private developmentTransportation Safety Division GrantsSTIP Preservation funding
Baker Street/8th Street Enhanced Crossing	5	the same time ² , or with development	Private developmentTransportation Safety Division GrantsSTIP Preservation funding
Adams Street/3 rd Street Enhanced Crossing	6	Time with upcoming development	Private developmentTransportation Safety Division GrantsSTIP Preservation funding

Table 18: Phasing and Funding Recommendations

¹ The priority order of enhanced crossing projects was established based on PAC input.

² Constructing enhanced crossings in pairs may reduce costs and help make the full connection across the couplet, however enhanced crossings can be designed and constructed separately if there is only available funding for one crossing.

Senate Bill 408 Requirements

Oregon Senate Bill (SB) 408 requires balancing competing interests on facility plans developed by ODOT. An example of competing interest is described in ODOT's Oregon Greenhouse Gas Reduction Toolkit: Strategy Report (Reference 2): "Preserving the economic interests of property owners (who place a high value on convenient access to their property) will require finding a balance between private property interests and the safety and operations of public roadways." The concepts developed to address the multi-modal needs along OR 99W are not anticipated to impact the access or reduce capacity of the OR 99W corridor. Concepts developed are limited to signing and striping with the exception of the potential two-way separated bike lane which proposes vertical flexpost separation.

NEXT STEPS

The preferred alternative concept outlined in this memo will be incorporated into a draft Concept Plan.

OR 99W is a designated Reduction Review Route for freight, the Oregon Mobility Advisory Committee will have the opportunity to provide input on these concepts before finalizing the draft Concept Plan.

REFERENCES

- 1. TM #4: Existing Conditions and Future Needs. Kittelson & Associates, Inc. 2020.
- ODOT Greenhouse Reduction Toolkit. <<u>https://www.oregon.gov/odot/Planning/Pages/GHG-Toolkit.aspx</u>>
- 3. *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.* Federal Highway Administration. 2017.
- 4. NCHRP Report 562 *Improving Pedestrian Safety at Unsignalized Crossings.* National Cooperative Highway Research Program. 2006.

Appendix A Field Visit Notes

Field Visit Summary

This appendix summarizes the field observations and key findings based on the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan project development field visit. The project team, including Amy Griffiths, Nick Gross, and Eric Germundson, conducted the site visit on Wednesday January 13, 2020 from approximately 1:00 to 4:00 PM. The weather was sunny and in the mid-40s.

The purpose of the field visit was to document existing physical and operational conditions of the alternative concept alignments to develop a further understanding of cross-sectional elements, pinch points, and traffic flows. Field measurements were recorded by the project team at pinch points and at the enhanced crossing study locations. The field notes are documented in this appendix.

Field Observations

Field observations were documented along the different alternative concept alignments to better understand the varying character of the different alignments, right-of-way constraints, and potential challenges for construction. Figure 15 provides detailed notes from the field visit.

OR 99W (Outside the Couplet)

The following bullets summarize the key observations along OR 99W outside the couplet:

- High traffic volumes were observed, including heavy vehicles.
- The center median south of the couplet creates pinch points that may make constructing a twoway separated bike lane challenging.
- The skewed intersection of N Baker Street / OR 99W north of the couplet is complex. People biking in the southbound direction through the intersection are exposed to traffic for approximately 265 feet, and the skew associated with the intersection creates visibility challenges.

Adams Street-Baker Street Couplet

The following bullets summarize the key observations along Adams and Baker Street:

- Low parking utilization was observed.
- Adams Street is approximately 40'-5" to 40'-11" wide, except at pinch points created by curb extensions.
- Baker Street is approximately 44'-6" to 44'-9" wide, except at pinch points created by curb extensions.
- Traffic volumes are substantially higher than they are along parallel routes. Signals help create traffic gaps for crossing the street.

Neighborhood Greenway Alignments

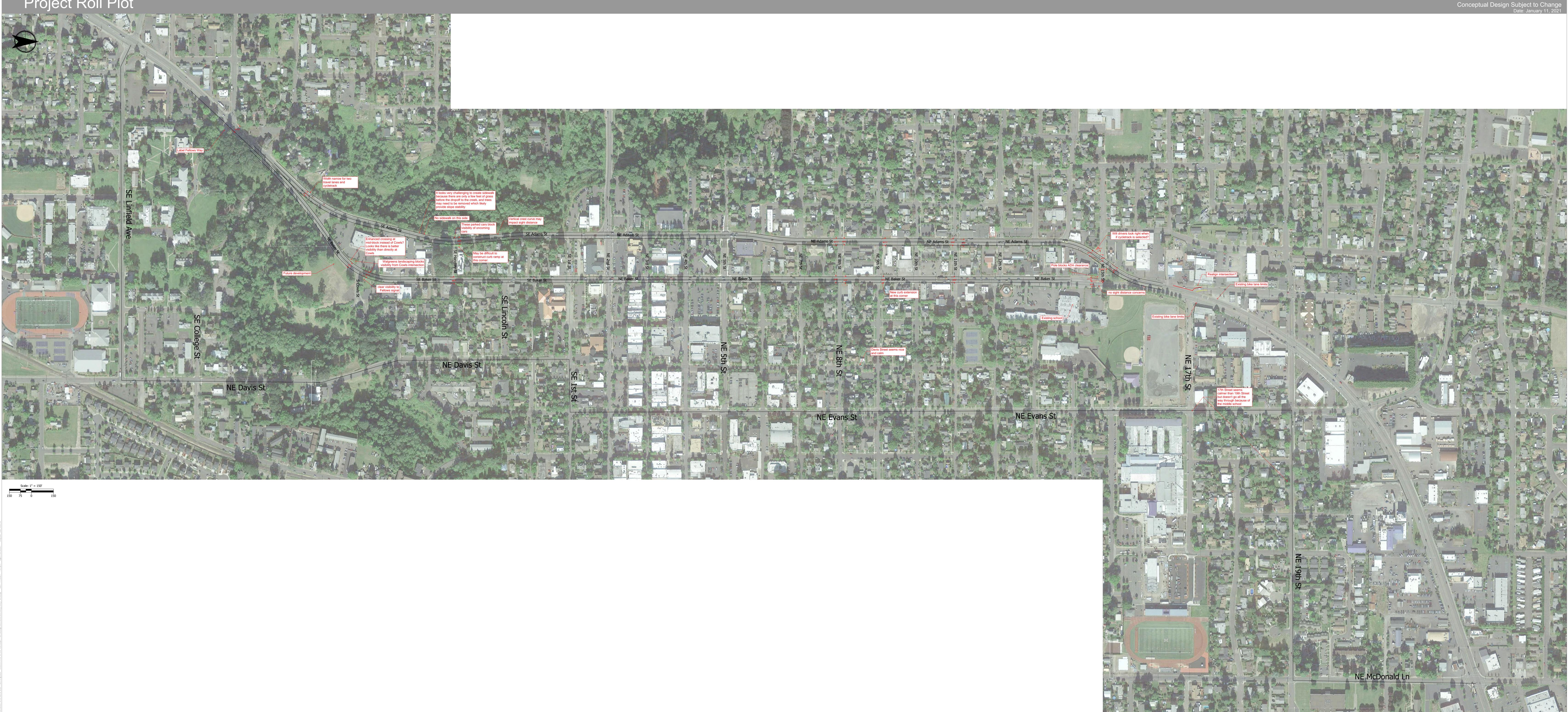
The following bullets summarize the key observations along Evans Street in the study area:

- Evans Street had lower traffic volumes than OR 99W but was busier than Davis Street. Evans Street would likely require greater traffic calming efforts to provide comfortable facilities as a neighborhood greenway.
- Constructing bike lanes along the remainder of Evans Street would require removal of a parking lane.
- Parking was highly utilized.

The following bullets summarize the key observations along Davis Street in the study area:

- Davis Street was less busy than Evans Street or the couplet.
- There is a moderate hill along Davis Street at the southern end of the corridor.

Project Roll Plot



HONE: (503) 228-5230 CONTACT: Marc Butorac

McMinnville Active Transportation Concept Plan McMinnville, OR

Appendix B PAC Input

PAC Meeting #1 Homework Summary

A homework assignment was developed and distributed to the Project Advisory Committee (PAC)⁹ in advance of the first PAC Meeting, which was held on Thursday, December 10th from 3:00 PM to 5:00 PM. The homework assignment was developed to solicit input on preferred route alignments and facility types to be evaluated in TM #5: Alternatives Development and Preferred Alternative Concept. This appendix summarizes the PAC homework responses. Twelve homework responses were received.

Preferred Facility Type

Respondents were provided a toolbox of bicycle facility types. The three main options described were a two-way separated bike lane, buffered bike lanes, and a neighborhood greenway along a parallel route.

- Six respondents prefer the neighborhood greenway option to the options along OR 99W; some respondents mention that even facilities with vertical separation along OR 99W may not feel comfortable.
- Four respondents prefer the two-way separated bike lane option, several respondents cite a need for physical separation for any facilities along OR 99W.
- One respondent prefers the buffered bike lane because he is concerned about maintenance difficulties for physically separated bike facilities.
- One respondent suggested a one-way separated bike lane because he is concerned about people biking in opposite directions in a limited space.

Preferred Neighborhood Greenway Alignment

Respondents also provided a recommendation for their preferred alignment, particularly with respect to the neighborhood greenway.

- Six respondents recommend that the neighborhood greenway travel primarily along Evans Street.
- Five respondents recommend that the neighborhood greenway travel along Davis Street and connect back to Evans Street at some point north of 11th Street.
- One respondent mentioned Davis Street or Evans Street, with no preference towards either.
- Respondents primarily recommended connecting to OR 99W to the parallel route via Linfield Avenue from the south and via Evans or McDonald on the north.

⁹ Information about the PAC is available on the project website:

https://www.walkbike99wmcminnville.com/websites/69/pages/398

Appendix C Design Toolbox

NEIGHBORHOOD GREENWAY AND ENHANCED CROSSING TREATMENTS

Neighborhood Greenways are low-volume, low-speed streets where people biking and driving share road space. Motorized vehicle restrictions created by traffic calming elements and intersection crossing treatments are used to prioritize access for people biking. The treatments would include shared lane markings and wayfinding signage for people biking. Additional treatments to consider include speed humps, chicanes, and traffic diverters. Examples of chicanes, traffic diverters, and intersection crossing treatments are shown below.

Chicanes



Bulb-out/Curb Extension



Rectangular Rapid Flash Beacon





Crossing Island (Pedestrian Refuge)



Pedestrian Hybrid Beacon



Source: NACTO



Kittelson & Associates, Inc.

SAFETY COUNTERMEASURES

Table 19: ODOT All Roads Transportation Safety Program (ARTS) Countermeasures

Countermeasures	Crash Reduction Factor (CRF)
BP1: Install Pedestrian Countdown Timer(s)	70% Reduction in Pedestrian Crashes at All Severities
BP2: Provide Intersection Illumination (Bike & Ped)	42% Reduction in Nighttime Pedestrian and Bicycle Crashes at All Injury Severities
BP3: Install Urban Leading Pedestrian or Bicycle Interval at Signalized Intersections	37% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP4: Install No Pedestrian Phase Feature with Flashing Yellow Arrow	43% Reduction in Pedestrian Crashes at All Severities
BP5: Reduce Right Turn Permissive Conflicts (Right Turn Arrow)	20% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP6: Install Urban Green Bike Lanes at Conflict Points	39% Reduction in Bicycle Crashes at All Severities
BP7: Install Bike Box at Conflict Points	35% Reduction in Bicycle Crashes at All Severities
BP8: Install Pedestrian Refuge Island	31% Reduction in Pedestrian Crashes at All Severities
BP9: Install Rectangular Rapid Flashing Beacon (2-Lane Road)	10% Reduction in Pedestrian Crashes at All Severities
BP10: Install Rectangular Rapid Flashing Beacon without Median (3-Lane or More Roadway)	10% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP11: Install Rectangular Rapid Flashing Beacon with Median (3-Lane or More Roadway)	56% Reduction in Pedestrian Crashes at All Severities
BP12: Install Pedestrian Activated Beacon at Intersection	10% Reduction in Pedestrian Crashes at All Severities
BP13: Install Pedestrian Activated Beacon Midblock	10% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP14: Install Pedestrian Activated Beacon (Flashing Beacon in Conjunction with Median and Stop Bar)	56% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP15: Install continental Crosswalk Markings and Advanced Pedestrian Warning Signs at Uncontrolled Locations	15% Reduction in Pedestrian Crashes at All Severities
BP16: Install Curb Ramps and Extensions with a Marked Crosswalk and Pedestrian Warning Signs	37% Reduction in Pedestrian Crashes at All Severities
BP17: Install Advance Pedestrian or Bicycle Warning Signs	5% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP18: Install Pedestrian Signal	55% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP19: Pedestrian Hybrid Beacon	55% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP20: Convert 4-Lane Roadway to 3-Lane Roadway with Center Turn Lane (Road Diet)	29% Reduction in All Crashes at All Severities
BP21: Install Bike Signal	45% Reduction in Bicycle Crashes at All Severities

Countermeasures	Crash Reduction Factor (CRF)
BP23: Install Cycle Tracks	59% Reduction in Bicycle Crashes at All Injury Severities
BP24: Install Buffered Bike Lanes	47% Reduction in Bicycle Crashes at All Injury Severities
BP25: Prohibit Right-Turn-On-Red	41% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP26: Advanced Yield and Stop Markings & Signs	25% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP27: Install Bicycle Boulevard	63% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP28: Install Raised Crosswalk	30% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP29: Add Sidewalk	20% Reduction in Pedestrian – walking along Crashes at All Severities
BP30: Install Speed Humps/Table (Not on State Highways)	15% Reduction in Pedestrian and Bicycle Crashes at All Severities
BP31: Add Street Tree's (supports blueprint for Urban Design)	10% Reduction in All Crashes at All Severities

Source: ODOT ARTS Program Crash Reduction Factor Appendix

Appendix D Cost Estimates

McMinnville OR 99W Active Transportation Concept Plan Concept 1: Two-Way Separated Bike Lane (Cycle Track) ODOT



Engineer's Conceptual Estimate

Prepared By: Eric Germundson, PE	Date: March 12, 20	021		
Reviewed By: Nick Gross, Amy Griffiths, and Marc Butorac				
This Estimate h	as a Rating of:	3C	(See rating scale gu	ide below.)
ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST
MOBILIZATION	LS	ALL	\$37,000.00	\$37,000.0
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	\$8,000.00	\$8,000.00
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$24,000.00	\$24,000.0
STRIPE REMOVAL	FOOT	500	\$0.50	\$250.00
LEGEND REMOVAL	SQFT	250	\$3.00	\$750.00
BAR REMOVAL	SQFT	500	\$3.00	\$1,500.00
PERMANENT SURFACE MOUNTED TUBULAR MARKERS	EACH	350	\$200.00	\$70,000.00
METHYL METHACRYLATE, EXTRUDED	FOOT	16,500	\$4.00	\$66,000.00
PAVEMENT LEGEND, TYPE B-HS: ARROWS	EACH	10	\$20.00	\$200.0
PAVEMENT BAR, TYPE B-HS	SQFT	2,000	\$10.00	\$20,000.0
PAVEMENT LEGEND, TYPE B-HS: ON-STREET PARKING	EACH	10	\$250.00	\$2,500.00
GREEN BICYCLE LANE, METHYL METHACRYLATE	SQFT	33,500	\$5.00	\$167,500.0
REMOVE EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00
REMOVE AND REINSTALL EXISTING SIGNS	LS	ALL	\$10,000.00	\$10,000.0
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$10,000.00	\$10,000.00
SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	500	\$25.00	\$12,500.00
SIGNAL MODIFICATIONS	LS	ALL	\$100,000.00	\$100,000.00
	T	OTAL CONSTR	RUCTION COST	\$ 535,200
		TOTAL PROJ	JECT SUBTOTAL	\$ 535,200
	30% Engine	ering & Adminis	strative Services	\$ 160,560
		3	0% Contingency	\$ 160,560
	TOTAL	ESTIMATED P	ROJECT COST	\$ 857,000

Assumptions:

- Cycle track assumed to be painted green

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Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions;

limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

McMinnville OR 99W Active Transportation Concept Plan Concept 2: OR99W Buffered Bike Lanes



Engineer's Concentual Estimate

Engineer's Conceptual Estimate				
Prepared By: Eric Germundson, PE			2021	
Reviewed By: Nick Gross, Amy Griffiths, and Marc Butorac				
This Estima	te has a Rating of:	3C	(See rating scale gui	ide below.)
ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST
MOBILIZATION	LS	ALL	\$22,000.00	\$22,000.00
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	\$5,000.00	\$5,000.00
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$11,000.00	\$11,000.00
STRIPE REMOVAL	FOOT	1,000	\$0.50	\$500.00
LEGEND REMOVAL	SQFT	500	\$3.00	\$1,500.00
BAR REMOVAL	SQFT	1,000	\$3.00	\$3,000.00
METHYL METHACRYLATE, EXTRUDED	FOOT	33,500	\$4.00	\$134,000.00
PAVEMENT LEGEND, TYPE B-HS: ARROWS	EACH	20	\$20.00	\$400.00
PAVEMENT BAR, TYPE B-HS	SQFT	4,000	\$10.00	\$40,000.00
PAVEMENT LEGEND, TYPE B-HS: ON-STREET PARKING	EACH	20	\$250.00	\$5,000.00
REMOVE EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00
REMOVE AND REINSTALL EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$5,000.00	\$5,000.00
SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	500	\$25.00	\$12,500.00
	т	OTAL CONST	RUCTION COST	\$ 249,900
		TOTAL PRO	JECT SUBTOTAL	\$ 249,900
	30% Engine	ering & Admini	strative Services	\$ 74,970
			30% Contingency	\$ 74,970
	TOTAL	ESTIMATED	PROJECT COST	\$ 400,000

Assumptions:

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Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

McMinnville OR 99W Active Transportation Concept Plan Concept 3: Neighborhood Greenway on Davis Street



Engineer's Conceptual Estimate

Prepared By: Eric Germundson, PE	Date: March 12, 20	021		
Reviewed By: Nick Gross, Amy Griffiths, and Marc Butorac				
This Estimate h	as a Rating of:	3C	(See rating scale gu	uide below.)
ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST
MOBILIZATION	LS	ALL	\$8,000.00	\$8,000.00
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	\$2,000.00	\$2,000.00
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$4,000.00	\$4,000.00
LEGEND REMOVAL	SQFT	500	\$3.00	\$1,500.00
BAR REMOVAL	SQFT	500	\$3.00	\$1,500.00
PAVEMENT BAR, TYPE B-HS	SQFT	1,800	\$10.00	\$18,000.00
REMOVE EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00
REMOVE AND REINSTALL EXISTING SIGNS	LS	ALL	\$25,000.00	\$25,000.00
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$10,000.00	\$10,000.00
SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	500	\$25.00	\$12,500.00
	T	OTAL CONSTR	UCTION COST	\$ 87,500
		TOTAL PROJ	IECT SUBTOTAL	\$ 87,500
	30% Engine	ering & Adminis	trative Services	\$ 26,250
		3	0% Contingency	\$ 26,250
	TOTAL	ESTIMATED P	ROJECT COST	\$ 140,000

Assumptions:

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Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions;

limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

McMinnville OR 99W Active Transportation Concept Plan Concept 3: Neighborhood Greenway on Evans Street ODOT



Engineer's Conceptual Estimate

Prepared By: Eric Germundson, PE		Date: March 12, 20	021	
Reviewed By: Nick Gross, Amy Griffiths, and Marc Butorac				
This Estimate has	a Rating of:	3C	(See rating scale gu	iide below.)
ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST
MOBILIZATION	LS	ALL	\$5,000.00	\$5,000.00
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	ALL	\$1,000.00	\$1,000.00
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	ALL	\$3,000.00	\$3,000.00
PAVEMENT BAR, TYPE B-HS	SQFT	1,900	\$10.00	\$19,000.00
REMOVE EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00
REMOVE AND REINSTALL EXISTING SIGNS	LS	ALL	\$5,000.00	\$5,000.00
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	LS	ALL	\$5,000.00	\$5,000.00
SIGNS, STANDARD SHEETING, EXTRUDED ALUMINUM	SQFT	500	\$25.00	\$12,500.00
	т	OTAL CONSTR	UCTION COST	\$ 55,500
		TOTAL PROJ	ECT SUBTOTAL	\$ 55,500
3	\$ 16,650			
		3	0% Contingency	\$ 16,650
	TOTAL	ESTIMATED P	ROJECT COST	\$ 89,000

Assumptions:

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Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions;

limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

Appendix E Enhanced Crossing Analysis

Enhanced Crossing Key Findings

This memorandum summarizes the results of an enhanced crossing facility assessment for people walking and biking along the OR 99W couplet. The crossing assessment was performed at six intersections, as illustrated in Figure 16.

The purpose of this assessment is to identify and recommend crossing treatments that will provide safe, comfortable crossing opportunities for people walking and biking in the study area based on the existing traffic volumes, posted speeds, and proposed crossing location characteristics.¹⁰ The analysis relies on the guidance provided by National Cooperative of Highway Research Program (NCHRP) *Report 562: Improving Pedestrian Safety at Unsignalized Crossings* and Federal Highway Administration (FHWA) *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.*

Enhanced Crossing Worksheets based on NCHRP and FHWA guidance are attached in this appendix.

Enhanced Crossing Recommendations

Based on the traffic volume data, roadway context, anticipated levels of walking and biking activity upon completion of the McMinnville OR 99W Active Transportation Concept Plan, and crossing analysis, the following enhanced crossing facility and treatments are recommended at the proposed crossing location along the Adams Street-Baker Street Couplet:

- Evaluate lighting conditions at the proposed crossing location to ensure proposed lighting conditions.
- Install high-visibility pavement markings and signs per the Manual on Uniform Traffic Control Devices (MUTCD).
- Install a rectangular rapid flashing beacon (RRFB) at the six enhanced crossing study locations.
- Explore opportunities to integrate bicycle detection at proposed crossing approaches to reduce or eliminate dismounting for people biking to activate beacon push buttons.

Kittelson & Associates, Inc.

¹⁰ Enhanced crossing treatments require approval from ODOT Region 2 Traffic.

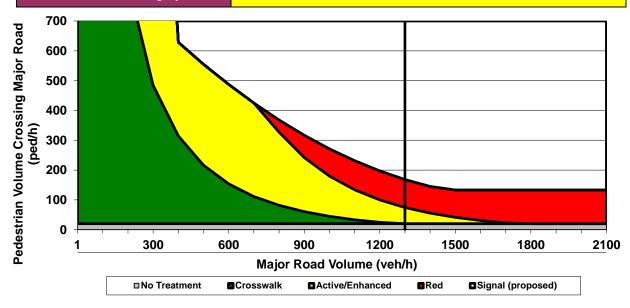




Enhanced Crossing Study Locations McMinnville, OR

This spreadsheet combines Worksheet 1 and Worksheet 2 (Appendix A, pages 69-70) of TCRP Report 112/NCHRP Report 562 (*Improving Pedestrian Safety at Unsignalized Intersections*) into an electronic format. This spreadsheet should be used in conjunction with, and not independent of, Appendix A documentation.

Green fields Tan fields ar	This spreadsheet is st contain descriptive informat s are required and must be	till under deve tion. completed. ed out only ur	e <mark>lopment, pleas</mark> nder certain co	se inform TTI	a documentation. if errors are identified.	the cell).	
Analyst and Site Info	ormation						
Analyst	Kittelson & Associates, Ind	с.		Major Street	Adams Street		
Analysis Date	January 20, 2021		Minor Street	t or Location	3rd Street (Northern Leg)		
Data Collection Date	TransGIS ADT, PH Tube Counts	June 8, 2017		Peak Hour	5:00-6:00 PM		
Step 1: Select works	sheet:						
Posted or statutory speed	l limit (or 85th percentile sp	peed) on the r	major street (m	ıph)		1a	30
Is the population of the su	urrounding area <10,000?	(enter YES o	or NO)			1b	NO
Step 2: Does the cro	ossing meet minimu	m pedestr	ian volume	s to be co	nsidered for a traffic	control de	evice?
Peak-hour pedestrian volu	ume (ped/h), V _p					2a	20
Result: Go to step 3	3.						
Step 3: Does the cro	ossing meet the ped	estrian wa	rrant for a	traffic sig	inal?		
Major road volume, total of	of both approaches during	peak hour (ve	eh/h), V _{maj-s}			За	1300
[Calculated automatically]] Preliminary (before min. t	threshold) pea	ak hour pedesti	rian volume t	o meet warrant	3b	168
[Calculated automatically]] Minimum required peak h	our pedestria	n volume to me	eet traffic sig	nal warrant	Зс	168
Is 15th percentile crossing	g speed of pedestrians less	than 3.5 ft/s	(1.1 m/s)? (e	nter YES or	NO)	3d	NO
If 15th percentile crossing	15th percentile crossing speed of pedestrians is less than 3.5 ft/s % rate of reduction for 3c (up to 50%)						0%
(1.1 m/s), then reduce 3c by up to 50%. Reduced value or 3c						3f	168
	warrant is not met. Go	to step 4.					
Step 4: Estimate peo	destrian delay.						
Pedestrian crossing distan	nce, curb to curb (ft), L					<i>4a</i>	34
Pedestrian walking speed	(ft/s), S _p (suggested spee	ed = 3.5 ft/s)				4b	3.5
Pedestrian start-up time a	and end clearance time (s),	t _s (suggeste	d start-up time	e = 3 sec)		4c	3
] Critical gap required for c					4d	13
Major road volume, total both approaches OR approach being crossed if raised median island 4e 1300 is present, during peak hour (veh/h), V _{maj-d}						1300	
Major road flow rate (veh/s), v						4f	0.36
Average pedestrian delay (s/person), d _p						4g	255
							1.4
major roadway without a crossing treatment (assumes 0% compliance). If the actual total pedestrian delay has been measured at the site, that value can be entered in 4i to replace the calculated value in 4h.							
Step 5: Select treatm	nent based up on to	tal pedest	trian delay	and expe	cted motorist compli	ance.	
Expected motorist complia Compliance	ance at pedestrian crossing	in region: e	nter HIGH fo	r High Com	pliance or LOW for Low	5a	LOW
	t Category:			ACT	IVE OR ENHANCED	L	



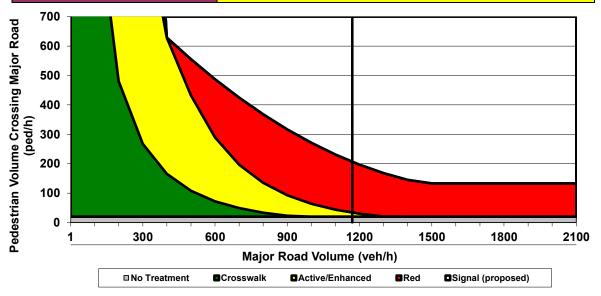
This spreadsheet combines Worksheet 1 and Worksheet 2 (Appendix A, pages 69-70) of TCRP Report 112/NCHRP Report 562 (*Improving Pedestrian Safety at Unsignalized Intersections*) into an electronic format. This spreadsheet should be used in conjunction with, and not independent of, Appendix A documentation.

This spreadsheet is still under development, please inform TTI if errors are identified.
Blue fields contain descriptive information.

Key	
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Green fields are required and must be completed. Tan fields are adjustments that are filled out only under certain conditions (follow instructions to the left of the cell). Gray fields are automatically calculated and should not be edited.

Analyst Kittelson & Associates, Inc.	M	lajor Street	Baker Street		
Analysis Date January 20, 2021		or Location	Cowls Street (Bus Stop)		
Data Collection Date TransGIS ADT, PH Tube Counts June	e 8, 2017	Peak Hour	5:00-6:00 PM (Vehicular Pea	ik)	
Step 1: Select worksheet:					
Posted or statutory speed limit (or 85th percentile spee	ed) on the major street (m	nph)		1a	30
Is the population of the surrounding area <10,000? (er	nter YES or NO)			1b	NO
Step 2: Does the crossing meet minimum	pedestrian volume	es to be o	considered for a traffi	c control c	levice?
Peak-hour pedestrian volume (ped/h), V _p				2a	20
Result: Go to step 3.					
Step 3: Does the crossing meet the pedes		traffic s	ignal?		
Major road volume, total of both approaches during pea	ak hour (veh/h), V _{maj-s}			За	1170
[Calculated automatically] Preliminary (before min. three	eshold) peak hour pedestr	rian volume	to meet warrant	3b	207
[Calculated automatically] Minimum required peak hour	lated automatically] Minimum required peak hour pedestrian volume to meet traffic signal warrant				207
Is 15th percentile crossing speed of pedestrians less the	rians less than 3.5 ft/s (1.1 m/s)? (enter YES or NO)				NO
If 15th percentile crossing speed of pedestrians is less t	than 3.5 ft/s	% rate of re	duction for <i>3c</i> (up to 50%)	3e 3f	0%
(1.1 m/s), then reduce <i>3c</i> by up to 50%.	Reduced value or 3c				207
Result: The signal warrant is not met. Go to	step 4.				
Step 4: Estimate pedestrian delay.				<i>4a</i>	
Pedestrian crossing distance, curb to curb (ft), L					46
Pedestrian walking speed (ft/s), S _p (suggested speed =				4b	3.5
Pedestrian start-up time and end clearance time (s), t_{s}	(55 1	e = 3 sec)		4c	3
[Calculated automatically] Critical gap required for cross Major road volume, total both approaches OR approach		nodion iclon	d	4d	16
is present, during peak hour (veh/h), V _{mai-d}	i Dellig crossed il Talsed II		u	<i>4e</i>	1170
Major road flow rate (veh/s), v					0.33
Average pedestrian delay (s/person), d _n				4g	605
Total pedestrian delay (h), D_n The value in 4h is the calculated estimated delay for all pedestrians crossing the				4h	3.4
major roadway without a crossing treatment (assumes 0% compliance). If the actual total pedestrian delay has been measured at the site, that value can be entered in 4i to replace the calculated value in 4h.				<i>4i</i>	
Step 5: Select treatment based up on tota	al pedestrian delay	and exp	ected motorist compl	iance.	
Expected motorist compliance at pedestrian crossings in	n region: enter HIGH for	r High Com	npliance or LOW for	5a	LOW
Low Compliance					



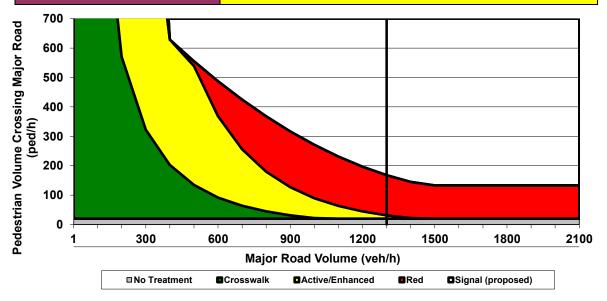
This spreadsheet combines Worksheet 1 and Worksheet 2 (Appendix A, pages 69-70) of TCRP Report 112/NCHRP Report 562 (*Improving Pedestrian Safety at Unsignalized Intersections*) into an electronic format. This spreadsheet should be used in conjunction with, and not independent of, Appendix A documentation.

This spreadsheet is still under development, please inform TTI if errors are identified.
Blue fields contain descriptive information.

Key	
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	Green fields a
	Tan fields are

Green fields are required and must be completed. Tan fields are adjustments that are filled out only under certain conditions (follow instructions to the left of the cell). Gray fields are automatically calculated and should not be edited.

Analyst Kittelson & Associa	ates. Inc.		Maior Street	Adams Street		
Analysis Date January 20, 2021			2	8th Street (Southern Leg)		
Data Collection Date TransGIS ADT, PH Tut	e Counts June 8, 2017			5:00-6:00 PM		
Step 1: Select worksheet:				<u> </u>		
Posted or statutory speed limit (or 85th per	entile speed) on th	ne major street (mph)		1a	30
Is the population of the surrounding area <					1b	NO
Step 2: Does the crossing meet m	inimum pedes	strian volum	es to be o	considered for a traff	ic control o	levice?
Peak-hour pedestrian volume (ped/h), V _p					2a	20
Result: Go to step 3.						
Step 3: Does the crossing meet the	e pedestrian	warrant for a	a traffic s	ignal?		
Major road volume, total of both approaches	during peak hour	(veh/h), V _{maj-s}			За	1300
[Calculated automatically] Preliminary (before	e min. threshold) r	peak hour pedest	trian volume	to meet warrant	3b	168
[Calculated automatically] Minimum required	l peak hour pedest	nour pedestrian volume to meet traffic signal warrant				168
Is 15th percentile crossing speed of pedestr	ans less than 3.5 f	s than 3.5 ft/s (1.1 m/s)? (enter YES or NO)				NO
If 15th percentile crossing speed of pedestri	ans is less than 3.5	5 ft/s	% rate of re	duction for <i>3c</i> (up to 50%)	Зе	0%
(1.1 m/s), then reduce $3c$ by up to 50%.			Reduced val	ue or <i>3c</i>	3f	168
Result: The signal warrant is not m						
Step 4: Estimate pedestrian delay						
Pedestrian crossing distance, curb to curb (f	7				<i>4a</i>	42
Pedestrian walking speed (ft/s), S _p (sugges		1			4b	3.5
Pedestrian start-up time and end clearance	() 3 (55	!	e = 3 sec)		4c	3
[Calculated automatically] Critical gap requir Major road volume, total both approaches C			modian idan	4	4d	15
is present, during peak hour (veh/h), V _{mai-c}				u	<i>4e</i>	1300
Major road flow rate (veh/s), v				4f	0.36	
Average pedestrian delay (s/person), d _p				<i>4g</i>	597	
Total pedestrian delay (h), D _p The value in 4h is the calculated estimated delay for all pedestrians crossing the				4h	3.3	
major roadway without a crossing treatme has been measured at the site, that value					<i>4i</i>	
Step 5: Select treatment based up	on total ped	estrian delay	and exp	ected motorist comp	liance.	
Expected motorist compliance at pedestrian	crossings in region	: enter HIGH fo	or High Con	pliance or LOW for	5a	LOW
Low Compliance						

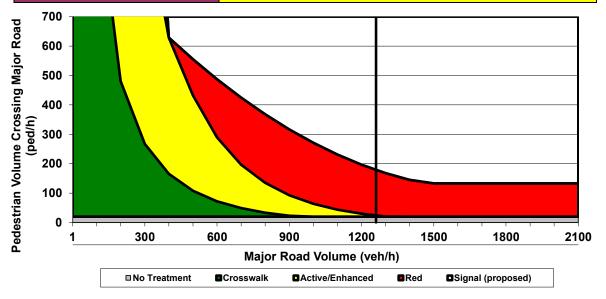


This spreadsheet combines Worksheet 1 and Worksheet 2 (Appendix A, pages 69-70) of TCRP Report 112/NCHRP Report 562 (*Improving Pedestrian Safety at Unsignalized Intersections*) into an electronic format. This spreadsheet should be used in conjunction with, and not independent of, Appendix A documentation.
This spreadsheet is still under development, please inform TTI if errors are identified.
Blue fields contain descriptive information.

Key		This s
	Blue fields c	ontain des
	Green fields	are requir
	Tan fields a	re adiustm

Green fields are required and must be completed. Tan fields are adjustments that are filled out only under certain conditions (follow instructions to the left of the cell). Gray fields are automatically calculated and should not be edited.

Analyst and Site Information							
Analyst Kittelson & Associates, Ind	2.	Major Street	Baker Street				
Analysis Date January 20, 2021	ate January 20, 2021 Minor Street or Location 8th Street (Southern L						
Data Collection Date TransGIS ADT, PH Tube Counts June 8, 2017 Peak Hour 5:00-6:00 PM							
tep 1: Select worksheet:							
Posted or statutory speed limit (or 85th percentile s	peed) on the major street	(mph)		1a	30		
Is the population of the surrounding area <10,000?	(enter YES or NO)			1b	NO		
tep 2: Does the crossing meet minimu	m pedestrian volum	nes to be o	considered for a traff	ic control o	levice?		
Peak-hour pedestrian volume (ped/h), V _p				2a	20		
Result: Go to step 3.							
tep 3: Does the crossing meet the ped	estrian warrant for	a traffic s	ignal?				
Major road volume, total of both approaches during	peak hour (veh/h), V _{maj-s}			За	1260		
[Calculated automatically] Preliminary (before min. 1	hreshold) peak hour pedes	strian volume	to meet warrant	3b	179		
[Calculated automatically] Minimum required peak h	gnal warrant	Зс	179				
Is 15th percentile crossing speed of pedestrians less	r NO)	3d	NO				
If 15th percentile crossing speed of pedestrians is le	Зе	0%					
If 15th percentile crossing speed of pedestrians is less than 3.5 ft/s % rate of reduction for 3c (up to 50%) (1.1 m/s), then reduce 3c by up to 50%. Reduced value or 3c					179		
Result: The signal warrant is not met. Go	to step 4.						
tep 4: Estimate pedestrian delay.							
Pedestrian crossing distance, curb to curb (ft), L				<i>4a</i>	46		
Pedestrian walking speed (ft/s), S_p (suggested speed	ed = 3.5 ft/s)			4b	3.5		
Pedestrian start-up time and end clearance time (s)	, t_s (suggested start-up tin	ne = 3 sec)		<i>4c</i>	3		
[Calculated automatically] Critical gap required for c				4d	16		
Major road volume, total both approaches OR appro is present, during peak hour (veh/h), V _{maj-d}	ach being crossed if raised	l median islan	d	<i>4e</i>	1260		
Major road flow rate (veh/s), v				4f	0.35		
Average pedestrian delay (s/person), d _p				4g	793		
	the calculated estimated de			4h	4.4		
major roadway without a crossing treatment (ass has been measured at the site, that value can be				<i>4i</i>			
tep 5: Select treatment based up on te	otal pedestrian dela	y and exp	ected motorist comp	liance.			
Expected motorist compliance at pedestrian crossing <i>Low Compliance</i>	gs in region: enter HIGH f	for High Con	apliance or LOW for	5a	LOW		
Treatment Category:		ACT	IVE OR ENHANCED				

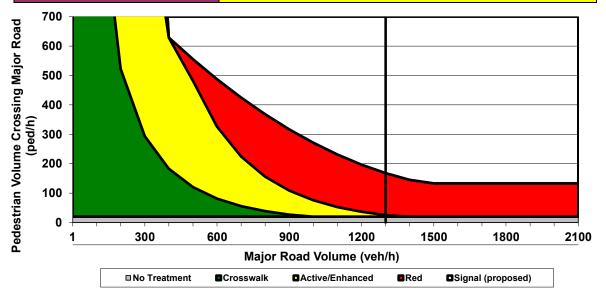


This spreadsheet combines Worksheet 1 and Worksheet 2 (Appendix A, pages 69-70) of TCRP Report 112/NCHRP Report 562 (*Improving Pedestrian Safety at Unsignalized Intersections*) into an electronic format. This spreadsheet should be used in conjunction with, and not independent of, Appendix A documentation.
This spreadsheet is still under development, please inform TTI if errors are identified.
Blue fields contain descriptive information.

Key	This spread
	Blue fields contain descripti
	Green fields are required an
	Tan fields are adjustments

Green fields are required and must be completed. Tan fields are adjustments that are filled out only under certain conditions (follow instructions to the left of the cell). Gray fields are automatically calculated and should not be edited.

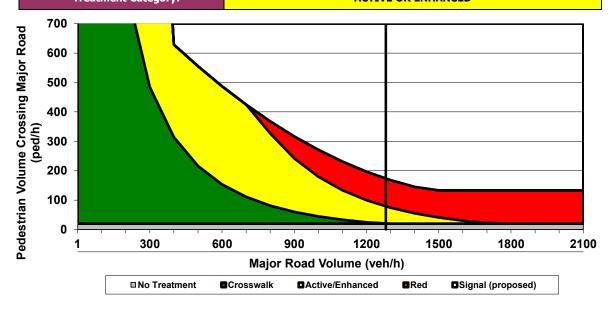
nalyst and Site Info	ormation						
Analyst	Kittelson & Associates, Ind	с.	I	Major Street	Adams Street		
Analysis Date	January 20, 2021	15th Street (Southern Leg)	g)				
Data Collection Date TransGIS ADT, PH Tube Counts June 8, 2017 Peak Hour 5:00-6:00 PM							
Step 1: Select works	sheet:						
Posted or statutory speed limit (or 85th percentile speed) on the major street (mph) 1a 30							
Is the population of the surrounding area <10,000? (enter YES or NO) 1b NO							
Step 2: Does the cro	ssing meet minimu	ım pedesti	rian volum	es to be c	onsidered for a traff	ic control o	device?
Peak-hour pedestrian volu	ıme (ped/h), V _p					2а	20
Result: Go to step 3	3.						
Step 3: Does the cro	ssing meet the peo	lestrian wa	arrant for a	a traffic s	ignal?		
Major road volume, total of	of both approaches during	peak hour (ve	eh/h), V _{maj-s}			За	1300
[Calculated automatically]	Preliminary (before min.	threshold) pea	ak hour pedest	rian volume	to meet warrant	3b	168
[Calculated automatically]	gnal warrant	Зс	168				
Is 15th percentile crossing	3d	NO					
If 15th percentile crossing speed of pedestrians is less than 3.5 ft/s % rate of reduction for <i>3c</i> (up to 50%)					Зе	0%	
(1.1 m/s), then reduce 3	(1.1 m/s), then reduce 3c by up to 50%. Reduced value or 3c					3f	168
Result: The signal v	warrant is not met. Go	to step 4.					
Step 4: Estimate peo	destrian delay.						
Pedestrian crossing distan	ice, curb to curb (ft), L					<i>4a</i>	44
Pedestrian walking speed	(ft/s), S _p (suggested spee	ed = 3.5 ft/s)				4b	3.5
Pedestrian start-up time a	nd end clearance time (s)	, t _s (suggeste	d start-up tim	e = 3 sec)		4c	3
	Critical gap required for c					4d	16
Major road volume, total i is present, during peak h		bach being cro	ssed if raised	median islan	d	4e	1300
Major road flow rate (veh,	/s), v					4f	0.36
Average pedestrian delay	(s/person), d _p					4g	737
Total pedestrian delay (h)	, D _p The value in 4h is	the calculated	estimated de	lay for all peo	lestrians crossing the	4h	4.1
major roadway without a crossing treatment (assumes 0% compliance). If the actual total pedestrian delay has been measured at the site, that value can be entered in 4i to replace the calculated value in 4h.							
tep 5: Select treatr	ment based up on t	otal pedes	trian delay	and exp	ected motorist comp	liance.	
Expected motorist complia	ance at pedestrian crossing	gs in region: e	enter HIGH fo	or High Com	pliance or LOW for	5a	LOW
	Category:			1.07	IVE OR ENHANCED		



This spreadsheet combines Worksheet 1 and Worksheet 2 (Appendix A, pages 69-70) of TCRP Report 112/NCHRP Report 562 (Improving Pedestrian Safety at Unsignalized Intersections) into an electronic format. This spreadsheet should be used in conjunction with, and not independent of, Appendix A documentation.

Green fields Tan fields a	This spreadsheet is still under deve contain descriptive information. s are required and must be completed. re adjustments that are filled out only u are automatically calculated and should	under certain conditions (fo		of the cell).				
Analyst and Site Inf	ormation							
Analyst	Kittelson & Associates, Inc.	Major Street	Baker Street					
Analysis Date	January 20, 2021	Minor Street or Location	15th Street (southern Leg)					
Data Collection Date	TransGIS ADT, PH Tube Counts June 8, 2017	Peak Hour	5:00-6:00 PM					
Step 1: Select work	sheet:							
Posted or statutory speed	Posted or statutory speed limit (or 85th percentile speed) on the major street (mph) 1a 30							
Is the population of the s	Is the population of the surrounding area <10,000? (enter YES or NO) 1b NO							
Step 2: Does the cro	Step 2: Does the crossing meet minimum pedestrian volumes to be considered for a traffic control device?							
Peak-hour pedestrian vol	ume (ped/h), V _p			2a	20			
Result: Go to step	3.							
Step 3: Does the cro	ossing meet the pedestrian w	arrant for a traffic s	signal?					
Major road volume, total	of both approaches during peak hour (v	veh/h), V _{maj-s}		За	1280			
[Calculated automatically] Preliminary (before min. threshold) pe	ak hour pedestrian volume	to meet warrant	3b	173			
[Calculated automatically] Minimum required peak hour pedestria	an volume to meet traffic si	ignal warrant	Зс	173			
Is 15th percentile crossin	g speed of pedestrians less than 3.5 ft/	s (1.1 m/s)? (enter YES o	r NO)	3d	NO			
If 15th percentile crossing	g speed of pedestrians is less than 3.5 f	ft/s % rate of re	eduction for <i>3c</i> (up to 50%)	Зе	0%			
x + <i>n</i>	(1.1 m/s), then reduce 3c by up to 50%. Reduced value or 3c 3f 173							
	warrant is not met. Go to step 4.							
Step 4: Estimate pe	destrian delay.							
Pedestrian crossing distant	Pedestrian crossing distance, curb to curb (ft), L 4a 34							
Pedestrian walking speed (ft/s), S_p (suggested speed = 3.5 ft/s) 4b 3.5								

4а 34 3.5 4b Pedestrian start-up time and end clearance time (s), t_s (suggested start-up time = 3 sec) 4с 3 [Calculated automatically] Critical gap required for crossing pedestrian (s), t_c Major road volume, total both approaches OR approach being crossed if raised median island 4d 1280 4e is present, during peak hour (veh/h), V_{maj-d} Major road flow rate (veh/s), v 0.36 4f Average pedestrian delay (s/person), d_p 4q The value in 4h is the calculated estimated delay for all pedestrians crossing the Total pedestrian delay (h), D_p 4h major roadway without a crossing treatment (assumes 0% compliance). If the actual total pedestrian delay 4i has been measured at the site, that value can be entered in 4i to replace the calculated value in 4h. Step 5: Select treatment based up on total pedestrian delay and expected motorist compliance. Expected motorist compliance at pedestrian crossings in region: enter HIGH for High Compliance or LOW for 5a IOW Low Compliance **Treatment Category: ACTIVE OR ENHANCED**



This worksheet provides general recommendations on pedestrian crossing treatments to consider at unsignalized intersections; in all cases, engineering judgment should be used in selecting a specific treatment for installation. This worksheet does not apply to school crossings. In addition to the results provided by this worksheet, users should consider whether a pedestrian treatment could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex geometrics, or nearby traffic signals.

1280

Locations:

Adams Street/15th Street, Baker Street/15th Street, Adams Street/8th Street, Baker Street/8th Street, Adams Street/3rd Street, and, Baker Street/Cowls Street

Table 1. Application of pedestrian crash countermeasures by roadway feature.

									P	oste	ed	Sp	eed	Li	mit	ar	nd A	A AC)T								
		V	ehic	le A	AD	T <9	9,00	0		Ve	ehic	le A	ADT	9,0	000	-15	5,00	00		Ve	ehic	le AA	١DT	>1	5,00	00	
Roadway Configuration	≤3	0 n	nph	3	5 m	ph	≥4	0 m	nph	≤3(0 m	ph	35	i mp	bh	≥4	0 m	nph	≤3	0 m	nph	35	m	ph	≥4(0 m	ph
0.1	0	2		0			1			0			0			1			0			1			1		
2 lanes (1 lane in each direction)	4	5	6		5	6		5	6	4	5	6		5	6		5	6	4	5	6		5	6		5	6
				7		9	0		9				7		9	0		0	7		9	7		9			9
2 Jan on with raised modian	0	2	3	0		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
3 lanes with raised median (1 lane in each direction)	4	5			5			5		4	5			5			5		4	5			5			5	
				7		9	0		0	7		9	0		0	0		0	7		9	0		0			9
3 lanes w/o raised median	0	2	3	0		3	1		3	1		3	1		8	1		3	1		€	1		3	1		0
(1 lane in each direction with a	4	5	6		5	6		5	6	4	5	6		5	6		5	6	4	5	6		5	6	5	6	
two-way left-turn lane)	7		9	7		9			9	7		9	0		9			0	7		9			0			9
	0		0	0		0	1		0	1		0	1		€	1		0	1		0	1		3	1		€
4+ lanes with raised median (2 or more lanes in each direction)		5			5			5			5			5			5			5			5			5	
	7	8	9	7	8	9		8	0	7	8	9	0	8	9		8	0	0	8	Ø		8	0		8	0
	0		3	1		3	1	•	3	1		3	1		0	1		8	1		€	1		8	1		0
4+ lanes w/o raised median		5	6		5	6		5	6		5	6		5	6		5	6		5	6		5	6		5	6
(2 or more lanes in each direction)	7	8	9	7	8	9		8	9	7	8	9	0	8	9		8	0	0	8	9		8	0		8	9

Given the set of conditions in a cell,

- Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
- Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
- O Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

- 1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
- 2 Raised crosswalk
- 3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
- 4 In-Street Pedestrian Crossing sign
- 5 Curb extension
- 6 Pedestrian refuge island
- 7 Rectangular Rapid-Flashing Beacon (RRFB)**
- 8 Road Diet
- 9 Pedestrian Hybrid Beacon (PHB)**

*Refer to Chapter 4, 'Using Table 1 and Table 2 to Select Countermeasures,' for more information about using multiple countermeasures

**It should be noted that the PHB and RRFB are not both installed at the same crossing location.

It should be holed into the PhB and RkP are hol both installed of the same clossing inclusion. This table was developed using information from: Zegeer, C.V., J.R. Stewart, H.H. Huang, P.A. Lagerwey, J. Feaganes, and B.J. Campbell. (2005). Safety effects of marked versus unmarked crosswalks at uncontrolled locations: Final report and recommended guidelines. FHWA, No. FHWA-HRT-04-100, Washington, D.C.; FHWA. Manual on Uniform Traffic Control Devices, 2009 Edition. (revised 2012). Chapter 4F, Pedestrian Hybrid Beacons. FHWA, Washington, D.C.; FHWA. Crash Modification Factors (CMF) Clearinghouse. http://www.cmfclearinghouse.org/; FHWA. Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE). http://www.pedbikesafe.org/PEDSAFE/; Zegeer, C., R. Srinivasan, B. Lan, D. Carter, S. Smith, C. Sundstrom, N.J. Thirsk, J. Zegeer, C. Lyon, E. Ferguson, and R. Van Houten, (2017). NCHRP Report 841: Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments. Transportation Research Board, Washington, D.C.; Thomas, Thirsk, and Zegeer. (2016). NCHRP Synthesis 498: Application of Pedestrian Crossing Treatments for Streets and Highways. Transportation Research Board, Washington, D.C.; and personal interviews with selected pedestrian safety practitioners.

Appendix F Evaluation Criteria and Performance Measures Memorandum



851 SW 6th AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 F 503.273.8169

MEMORANDUM

Date:	October 7, 2020	Project #: 23021.020
To:	Project Management Team	
	Project Advisory Committee	
From:	Nicholas Gross, Nick Gross, Marc Butorac, PE, PTOE, PMP	
Project:	McMinnville Active Transportation Concept Plan	
Project: Subject:	McMinnville Active Transportation Concept Plan Final Evaluation Criteria and Performance Measures	

INTRODUCTION

The purpose of this document is to articulate the goals and objectives, evaluation criteria, and performance measures to fulfill the Corridor Vision Statement for the McMinnville Active Transportation Concept Plan. Understanding and executing a performance-based approach with clear, actionable, and measurable evaluation criteria enables project teams to make informed decisions about the performance trade-offs of alternative solutions to best suit the project goals based on the corridor context and needs of the intended users. The corridor context and relative need of the intended users are set according to the Oregon Department of Transportation (ODOT) Blueprint for Urban Design (BUD – Reference 1) and the Draft Corridor Vision (Reference 2).

GUIDING GOALS AND POLICIES

The primary purpose of the McMinnville Active Transportation Concept Plan is to identify improvements along the OR99W corridor in the City of McMinnville that will result in a safer, more comfortable, and attractive place to walk, bike, roll and facilitate transit. The City of McMinnville Transportation System Plan (TSP – Reference 3) identifies guiding goals and policies for the transportation vision for the City. The goals and policies relevant to the McMinnville Active Transportation Concept Plan are included in Table 1 on the following page.

Table 1: TSP Goal and Policy Guidance

	TSP Goals and Supplemental Policies
Complete Streets	"The safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and balanced in all types of transportation and development projects and through all phases of a project so that even the most vulnerable McMinnville residents – children, elderly, and persons with disabilities – can travel safely within the public right of way."
Multi-Modal Transportation System	"The transportation system for the McMinnville planning area shall consist of an integrated network of facilities and services for a variety of motorized and non-motorized travel modes."
Connectivity and Circulation	"The vehicle, pedestrian, transit, and bicycle circulation systems shall be designed to connect major activity centers in the McMinnville planning area, increase the overall accessibility of downtown and other centers, as well as provide access to neighborhood residential, shopping and industrial areas, and McMinnville's parks and schools."
Transportation System and Energy Efficiency	"The implementation of transportation system and transportation demand management measures, provision of enhanced transit service, and provision of bicycle and pedestrian facilities in the McMinnville planning area shall be embraced by policy as the first choice for accommodating travel demand and relieving congestion in a travel corridor, before street widening projects for additional travel lanes are undertaken. The McMinnville Transportation System Plan shall promote alternative commute methods that decrease demand on the transportation system" including "walking and bicycling."
Transportation Safety	"The City of McMinnville shall make the design, construction, and operation of a safe transportation system for all modes of travel a high priority."
Accessibility for Persons with Disabilities	"The McMinnville transportation system shall be designed with consideration of the needs of persons with disabilities by meeting the requirements set forth in the Americans with Disabilities Act (ADA)."
Livability	"Transportation facilities in the McMinnville planning area shall be, to the degree possible, designed and constructed to mitigate noise, energy consumption, and neighborhood disruption, and to encourage the use of public transit, bikeways, sidewalks, and walkways."
Health and Welfare	"Through implementation of its Complete Streets policy and the TSP by enhancing its pedestrian and bicycle systems, the City of McMinnville will help encourage greater physical activity and improved health and welfare of its residents."
Transportation Sustainability	"Through implementation of the TSP and the Comprehensive Plan, the City of McMinnville will, to the extent possible, seek measures that simultaneously help reduce traffic congestion, pollution, crashes and consumer costs, while increasing mobility options for non-drivers, and encouraging a more efficient land use pattern."
Aesthetics and Streetscaping	"Aesthetics and streetscaping shall be a part of the design of McMinnville's transportation system. Streetscaping, where appropriate and financially feasible, including public art, shall be included in the design of transportation facilities. Various streetscaping designs and materials shall be utilized to enhance the livability in the area of a transportation project."

EVALUATION CRITERIA AND PERFORMANCE MEASURES

The goals and policy guidance from the TSP have been converted into draft evaluation criteria for the Active Transportation Concept Plan. These criteria align with the Draft Corridor Vision for OR99W. The performance measures provide a performance-based decision framework for the selection of a preferred alternative. Aligning with guidance from the BUD, the performance measures are designed to be understandable, consistent, measurable, able to differentiate between alternatives, and specific to this project.

Table 2 provides the draft evaluation criteria and performance measures for the McMinnville Active Transportation Concept Plan.

- **Evaluation Criteria** are derived from the goal and supplemental policies from the McMinnville TSP and will be used to evaluate draft alternatives.
- Description includes the purpose and general explanation of the evaluation criteria, connecting the criteria to the specific community or agency values (based on the TSP) goals and desired outcomes for the project.
- **Performance Measures** are the measurements used to assess the evaluation criteria.
- Proposed Methodology describes how the criterion will be measured, whether it is qualitative or quantitative, and the data needed to evaluate the criteria.

Table 3 provides a scoring scale from -1 to +2, reflecting the extent to which a project achieves the prioritization measure and describes the data required to complete the scoring. Performance measure sub-categories within each evaluation criterion are scored individually, and then averaged to provide an overall score for the evaluation criterion. Each evaluation criteria score can result in a range between -7 (worst possible score) to +14 (best possible score) based on the seven evaluation criteria listed in Table 2.

Appendix A provides a sample evaluation of potential projects.

Table 2: Evaluation Criteria and Performance Measures

Evaluation Criterion	Description	Proposed Performance Measures
Complete Streets	The alternative provides comfortable facilities for people walking and biking, regardless of age and ability. The "complete streets" criterion addresses the "Complete Streets" goal and supplemental policy identified in the TSP.	 Bicycle Level of Traffic Stress (BLTS) Pedestrian Level of Traffic Stress (PLTS)
Multi-Modal Transportation System	The alternative provides integrated network of facilities and services for a variety of motorized and non-motorized travel modes based on the appropriate relative priority given the corridor context. The multi-modal transportation system criterion addresses the "Multi-Modal Transportation System" goal and supplemental policy identified in the TSP.	 Type and presence of pedestrian, bicycle, transit, motor vehicle, and freight facilities align with the recommendations from the Blueprint for Urban Design (provided in Appendix B)
Connectivity	The alternative provides comprehensive connectivity and circulation to existing active transportation facilities in the City of McMinnville. The alternative encourages walking and biking to essential destinations within the City of McMinnville. The "connectivity" criterion addresses the "Connectivity and Circulation", "Transportation System and Energy Efficiency", and "Transportation Sustainability" goals and supplemental policies identified in the TSP.	 Connection of alternative to the existing and planned bicycle and pedestrian network Barriers to walking and biking (including an unsafe crosswalk or facilities in poor condition) removed by the alternative Facility gap filled by alternative Proximity of alternative to essential destinations Proximity of alternative to activity generators
Safety	The alternative provides safety countermeasures that reduce the number of fatal and severe injury crashes. The "safety" criterion addresses the "Transportation Safety" and "Transportation Sustainability" goals and supplemental policies identified in the TSP.	 Percentage (%) of anticipated crash reduction based on crash reduction factor (CRF) scaled by planning-level cost of project Bicyclist and pedestrian crash history Pedestrian Risk Factor Bicyclist Risk Factor
Equity	The project meets the requirements set forth in the Americans with Disabilities Act (ADA) and provides transportation options to transportation disadvantaged populations. The "equity" criterion addresses the "Accessibility for Persons with Disabilities" and "Health and Welfare" goals and supplemental policies identified in the TSP.	 This will use the Transportation Disadvantaged Population (TDP) Index from the ODOT Active Transportation Needs Inventory (ATNI). The index considers the following characteristics of a census block: elderly populations (65 and older), youth populations (under 18), non-white and Hispanic populations, low-income populations (households earning less than 200% of the poverty level as determined by the census), limited English proficiency population (aggregate of census populations who speak English "not well" or "not at all"), households without access to a vehicle, and people with a disability (severe or non-severe disability) This criterion will also consider impacts to ADA compliance.
Livability	The alternative minimizes impacts to adjacent property owners and encourages the use of public transit, bikeways, sidewalks, and walkways. The project provides equity and receives public support. The "livability" criterion addresses the "Livability" and "Aesthetics and Streetscaping" goals and supplemental policies identified in the TSP.	 Right-of-way acquisition needs Neighborhood street modification, business access and parking Anticipated public support based on Open House and Public Advisory Committee Comments
Design Feasibility	The alternative has no major design feasibility concerns. The "design feasibility" criterion does not directly address any goals or supplemental policies identified in the TSP.	• Constructability (including, but not limited to, right-of-way availability, existing terrain, utility location, visibility concerns, etc.)

Table 3: Evaluation Criteria Scoring

Evaluation			Scoring	g Scale			
Criterion	Performance Measure	-1	0	+1	+2	Resources	
Complete	Quantitative: BLTS	Project degrades existing BLTS	Project makes no change to existing BLTS	Project improves existing BLTS by 1 point	Project improves existing BLTS by 2 or 3 points	Posted speed, traffic volumes, number of lanes, and bicycle facility type	
Streets	Quantitative: PLTS	Project degrades existing PLTS	change to existing PLTS existing PLTS by 1 point e		Project improves existing PLTS by 2 or 3 points	Posted speed, traffic volumes, number of lanes, and pedestrian facility type	
Multi-Modal Transportation System	Qualitative: Type and presence of pedestrian, bicycle, transit, motor vehicle, and freight facilities align with the recommendations from the Blueprint for Urban Design (provided in Appendix B)	Project degrades modal priorities based on urban context.	Project has no impact on modal priorities based on urban context.	Project improves modal priorities for urban context.	Project significantly improves modal priorities for urban context.	Posted speed, travel lane characteristics, shy distance, median, bicycle facility type and characteristics, pedestrian facility type and characteristics, parking type and characteristics The urban context was determined to be Traditional Downtown/CBD and Urban Mix in the Corridor Vision (Reference 2). Based on recommendations from the Blueprint for Urban Design, Transit, Bicyclist, and Pedestrian are "High" priority modes (reference table provided in Appendix B)	
	Qualitative: Project is identified by the City of McMinnville Transportation System Plan (TSP) or is located on the Safe Routes to School (SRTS) Network.	N/A	The project is not identified by the TSP or located on the SRTS Network	The project is identified by the TSP or is located on the STRS Network	The project is identified by the TSP and is located on the SRTS Network	City of McMinnville Transportation System Plan, Safe Routes to School Network	
Connectivity	Qualitative: Project removes barrier to walking and biking or fills gap in the walking and biking transportation network	Project creates barriers or gaps in the walking and biking transportation network	Project has no impacts to barriers or gaps in the walking and biking transportation network	Project indirectly addresses barriers or gaps in the walking and biking transportation network	Project directly addresses barriers or gaps in the walking and biking transportation network	Existing conditions inventory	
	Quantitative: Proximity to activity generators and essential destinations	N/A	Project would serve no active generators or essential destinations in ¹ / ₄ mile radius	Project would serve some active generators or essential destinations in ¼ mile radius	Project would serve many active generators or essential destinations in 1/4 mile radius	Count of active generators and essential destinations within ¼ mile of the project location.	
	Quantitative: Crash Reduction Factor C/Planning Level Project Cost	N/A	The project is not anticipated to reduce crashes at a location.	The project provides a moderate value crash reduction factor given the project cost.	The project provides a high value crash reduction factor given the project cost.	This is a quantitative measurement based on crash countermeasures and planning-level cost estimates.	
Safety	Quantitative: Crash History	N/A	There were no bicyclist or pedestrian crashes reported in the 5-year crash history within 250 feet of the project.	There were 1 or 2 bicyclist or pedestrian crashes reported in the 5-year crash history within 250 feet of the project.	There were 3 or more bicyclist or pedestrian crashes reported in the 5-year crash history within 250 feet of the project.	5-Year Crash History	
	Quantitative: Pedestrian Risk Factor Scoring	N/A	The project is not located on, or perpendicular to a Medium or High risk factor location.	The project is located on, or perpendicular to a Medium risk factor location.	The project is located on, or perpendicular to a High risk factor location.	This is a quantitative measure based on the ODOT	
	Quantitative: Bicyclist Risk Factor Scoring	N/A	The project is not located on, or perpendicular to a Medium or High risk factor location.	The project is located on, or perpendicular to a Medium risk factor location.	The project is located on, or perpendicular to a High risk factor location.	Statewide Pedestrian and Bicycle Safety Plan's established risk factor scoring for systemic safety.	

Table 3: Evaluation Criteria Scoring

Evaluation	Derformence Mercure		Scoring	g Scale		Becourses
Criterion	Performance Measure	-1	0	+1	+2	Resources
Equity	Quantitative: Project impact to transportation disadvantaged populations based on the ODOT Transportation Disadvantaged Population (TDP) Index	Project degrades transportation options and facilities for transportation disadvantaged populations	Project has no impact on transportation options and facilities for transportation disadvantaged populations	Project indirectly improves transportation options and facilities for transportation disadvantaged populations	Project directly improves transportation options and facilities for transportation disadvantaged populations	Census block data
	Qualitative: Project impact to ADA compliance	Project degrades ADA compliance	Project makes no improvements to ADA compliance	Project makes moderate improvements to ADA compliance	Project makes significant improvements to ADA compliance	ODOT ADA Inspection Summary, ADA Standards for Accessible Design
	Quantitative: Right-of-way acquisition needs	The project requires significant right-of- way acquisition	The project requires minor right-of-way- acquisition	The project requires no right-of-way acquisition	N/A	Right-of-way maps
Livability	Qualitative: Neighborhood street modification, business access and parking	The project degrades access and/or mobility to residential and commercial areas	The project has no impact to access and/or mobility to residential and commercial areas	The project indirectly improves access and/or mobility to residential and commercial areas	The project directly improves access and/or mobility to residential and commercial areas	Parking inventories, locations of residential and commercial properties in study area
	Qualitative: Public response based on Open House and Public Advisory Committee Comments	The project has (or is expected to have) significant negative public response	The project has (or is expected to have) a neutral public response	The project has (or is expected to have) a positive public response	The project has (or is expected to have) strong support from the public	Open House and Public Advisory Committee Comments
Design Feasibility ¹	Qualitative: High-level feasibility of constructing the intended project at the location.	The project poses significant design challenges	The project poses moderate design challenges	The project poses minor design challenges	The project poses no notable design challenges	Constructability (including, but not limited to, right-of-way availability, existing terrain, utility location, visibility concerns, etc.)

¹ ADA design requirements will be considered but not included as a precluding factor to design feasibility.

NEXT STEPS

The Evaluation Criteria and Performance Measures has been reviewed by the project management team (PMT) and updated to produce the Final Evaluation Criteria and Performance Measures. The Evaluation Criteria will be used to compare the alternatives developed as part of Task 5: Alternatives Development, Analysis, and Preferred Alternative Concept.

REFERENCES

- 1. Oregon Department of Transportation. Blueprint for Urban Design, 2020.
- 2. Kittelson & Associates, Inc. Corridor Vision, 2020.
- 3. City of McMinnville. *Transportation System Plan, 2010.*

Appendix A Sample Evaluation

Bulb	-Out Improvement	s at NE 8 th Street / NE Baker Street Intersection ¹
Evaluation Criterion	Score	Methodology ¹
Complete Streets	1	Posted speed: 30 mph Number of Lanes: 2 AADT: 14300 Change in LTS: 1 point
Multi-Modal Transportation System	1	The project improves facilities for people walking and biking, improving modal priorities for the urban context.
Connectivity	1.3	The TSP recommended that new curb extensions should be installed at the NE 8 th Street / NE Baker Street Intersection. The project is not on a SRTS network. There are some essential destinations and active transportation generators within ¼ mile of the intersection. The project directly addresses a barrier in the walking transportation network.
Safety	1.8	Two crashes involving pedalcyclists within a 5-Year Period: 1 serious injury crash and 1 minor injury crash. Install Curb Ramps and Extensions with a Marked Crosswalk and Pedestrian Warning Signs (BP12) has a Crash Reduction Factor of 37% for pedestrian crashes. This is a high value crash reduction factor given the project cost. Project is located on a high risk factor location for bicyclists and pedestrians.
Equity	2	Project highly improves ADA compliance at a location. Project directly improves transportation options and facilities for transportation disadvantaged populations.
Livability	0.3	The project requires no right-of-way acquisition. The project indirectly improves access to residential and commercial areas. The project is expected to have a negative public response.
Feasibility	2	The project has no significant design challenges
Total Score		9.4

¹ The scoring provides an example of the evaluation criteria and performance metrics, however the methodology includes incomplete data and analysis. The scoring for this particular project would need to be refined in the project development process if it is considered in Task 5 of this project.

	RRFB at NE 8th	Street / NE Baker Street Intersection ²
Evaluation Criterion	Score	Methodology ¹
Complete Streets	2	Posted speed: 30 mph Number of Lanes: 2 AADT: 14300 Change in Crossing LTS: 2 points
Multi-Modal Transportation System	2	The project significantly improves modal priorities for urban context, as it provides an enhanced crossing for people walking and biking.
Connectivity	1.3	The TSP recommended that new curb extensions should be installed at the NE 8th Street / NE Baker Street Intersection. The project is not on a SRTS network. There are some essential destinations and active transportation generators within ¼ mile of the intersection. The project directly addresses a barrier in the walking transportation network.
Safety	1.5	 Two crash involving pedalcyclists in 5-year period: 1 minor injury crash and 1 fatal injury crash Install Rectangular Rapid Flashing Beacon (2-Lane Road) (BP8) has a Crash Reduction Factor of 10% for pedestrian crashes. This is a moderate value crash reduction factor given the project cost. Project is located on a high risk factor location for bicyclists and pedestrians.
Equity	2	Project highly improves ADA compliance at a location. Project directly improves transportation options and facilities for transportation disadvantaged populations.
Livability	0.7	The project requires no right-of-way acquisition. The project indirectly improves access to residential and commercial areas. The project is expected to have a neutral public response.
Feasibility	2	The project has no significant design challenges.
Total Score		11.5

² The scoring provides an example of the evaluation criteria and performance metrics, however the methodology includes incomplete data and analysis. The scoring for this particular project would need to be refined in the project development process if it is considered in Task 5 of this project.

Bike Lane along Baker Street between NE 1st Street and 5 th Street ³				
Evaluation Criterion	Score	Methodology		
Complete Streets	1.5	Posted speed: 30 mph Number of Lanes: 2 AADT: 14300 Change in BLTS: improve by 2 points Change in PLTS: improve by 1 point		
Multi-Modal Transportation System	1	Based on the context the BUD recommends buffered facilities. Therefore, although this project improves modal priorities for urban context, it does not provide ideal facilities.		
Connectivity	1.3	The project is not identified by the TSP or located on the SRTS Network. The project directly addresses a gap in the biking transportation network. The project would serve many active generators and essential destinations in a 1/4 mile radius.		
Safety	1.8	There were 3 or more crashes involving pedalcyclist in a 5- year period. Install Bike Lanes (BP18) has a Crash Reduction Factor of 36% reduction for crashes involving bicyclist. This is a high value crash reduction based on project cost. Project is located on a medium pedestrian risk factor location and high bicyclist risk factor location.		
Equity	1	Does not impact ADA compliance. Project directly improves transportation options and facilities for transportation disadvantaged populations.		
Livability	1.3	The project requires no right-of-way acquisition. The project directly improves mobility to residential and commercial areas. The project is expected to have a positive public response.		
Feasibility	2	The project has no anticipated design challenges.		
Total Score	9.9			

³ The scoring provides an example of the evaluation criteria and performance metrics, however the methodology includes incomplete data and analysis. The scoring for this particular project would need to be refined in the project development process if it is considered in Task 5 of this project.

Appendix B Blueprint for Urban Design

Urban Context	Target Speed (MPH) ⁴	Travel Lanes?	Turn Lanes ^{1,2}	Shy Distance ^{1,3}	Median ¹²	Bicycle Facility ^{1,2,5}	Sidewalk	Target Pedestrian Crossing Spacing Range (feet) ¹	On-street parking ¹
Traditional Downtown/ CBD	20-25	Start with minimum widths, wider by roadway characteristics	Minimize additional crossing width at intersections	Minimal	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility	Ample space for sidewalk activity (e.g., sidewalk cafes, transit shelters)	250-550 (1-2 blocks)	Include on- street parking if possible
Urban Mix	25-30	Start with minimum widths, wider by roadway characteristics	Minimize additional crossing width at intersections	Minimal	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility, consider roadway characteristics	Ample space for sidewalk activity (e.g., sidewalk cafes, transit shelters)	250-550 (1-2 blocks)	Consider on- street parking if space allows
Commercial Corridor	30-35	Start with minimum widths, wider by roadway characteristics	Balance crossing width and operations depending on desired use	Consider roadway characteristics, desired speeds	Typically used for safety/ operational management	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks, with space for transit stations	500-1,000	Not Applicable
Residential Corridor	30-35	Start with minimum widths, wider by roadway characteristics	Balance crossing width and operations depending on desired use	Consider roadway characteristics, desired speeds	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks	500-1,000	Generally Not Applicable, Consider roadway characteristics
Suburban Fringe	35-40	Start with minimum widths, wider by roadway characteristics	Balance crossing width and operations depending on desired use	Consider roadway characteristics, desired speeds	Optional, use as pedestrian crossing refuge	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks	750-1,500	Not typical
Rural Community	25 - 35	Start with minimum widths, wider by roadway characteristics	Balance crossing width and operations depending on desired use	Consider roadway characteristics, desired speeds	Optional, use as pedestrian crassing refuge	Start with separated bicycle facility, consider roadway characteristics	Continuous and buffered sidewalks, sized for desired use	250-750	Consider on- street parking if space allows

Designing based on urban context, considering roadway designations and activity of different modes

Source: ODOT Blueprint for Urban Design, Volume 1 Orange box indicates Urban Contexts considered as part of this project.

General Modal Considerations in Different Urban Concepts

Land Use Context	Motorist	Freight	Transit	Bicyclist	Pedestrian
Traditional Downtown/CBD	Low	Low	High	High	High
Urban Mix	Medium	Low	High	High	High

Source: ODOT Blueprint for Urban Design, Volume 1

Public Involvement & PAC Meeting Notes



851 SW 6th AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 F 503.273.8169

MEMORANDUM

Date: To:	April 13, 2021 Project Management Team	Project #: 23021.020
From:	Nick Gross, Amy Griffiths, Marc Butorac, PE, PTOE, PMP	
Project:	McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Concept Plan	Active Transportation
Subject:	Public Involvement Summary	

The project team, Oregon Department of Transportation ("ODOT"), and the City of McMinnville ("the City") hosted a virtual open house for the McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan ("McMinnville Active Transportation Concept Plan"). The goal of the virtual open house was to educate the public on the project and solicit feedback on the selection of a preferred concept for advancement into the draft Concept Plan.

OVERVIEW

The virtual open house contained an accompanying survey which was open from February 25 through March 11, 2021. A livestreamed virtual meeting was held on Thursday, March 4 and a recording of this meeting was posted to the virtual open house website. This memorandum summarizes the feedback received from the virtual open house.

The City advertised the open house through social media posts and newspaper advertisements. Information about the virtual open house was also provided on the project website.¹

The virtual open house for the McMinnville OR 99W Active Transportation Concept Plan had the following components:

- Information about the project, including the project purpose, background, and study area;
- Information about three preliminary concepts developed to address the active transportation needs in the study area;
- An interactive map where participants can make location-specific comments and draw their preferred neighborhood greenway route;

Kittelson & Associates, Inc.

¹ https://www.walkbike99wmcminnville.com/

- A survey where participants could provide input on the preliminary concepts; and,
- A livestreamed public meeting that included a Q&A session on the project.

VIRTUAL OPEN HOUSE FINDINGS

The virtual open house had 76 survey responses and 536 page views. Findings from the survey, comment map, and input received during the live meeting are summarized below.

Appendix "A" provides the survey responses.

Appendix "B" provides a detailed summary of the livestreamed virtual meeting.

Respondent Characteristics

Chart 1 shows respondents' confidence levels biking. The survey overrepresents confident cyclists; the Concept Plan will work to provide facilities that meet the needs of less confident users.

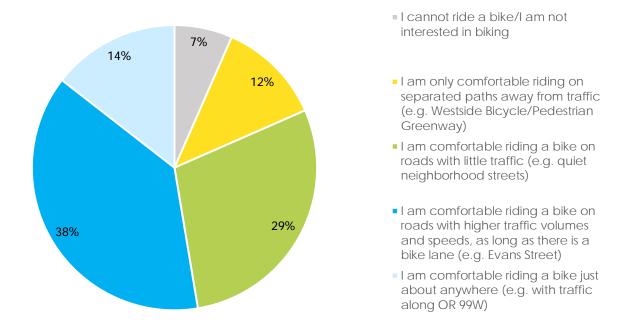
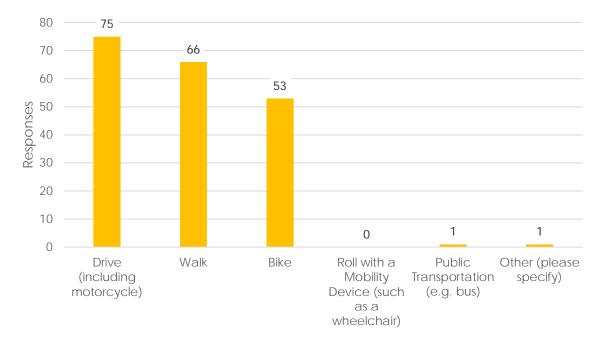


Chart 1: Type of Cyclist of Respondents

Chart 2 shows the travel modes used by respondents. Almost all respondents use a combination of vehicular and active transportation; they are able to provide insight on the needs for both vehicular and active travelers.

Chart 2: Respondents' Travel Modes



As shown in Chart 3, respondents walk and bike in McMinnville for a variety of trips, including recreation, shopping, commuting to work or school, and social events. The Concept Plan will provide facility recommendations that continue supporting recreational trips and active transportation access in the community.

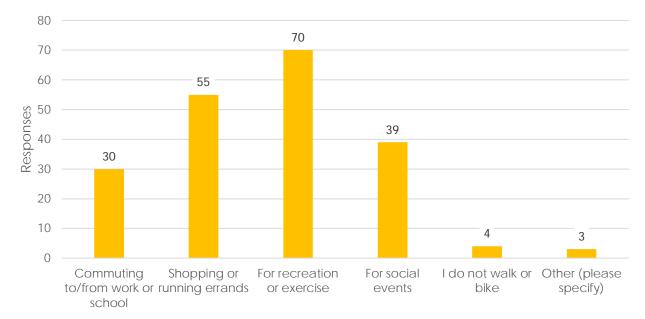
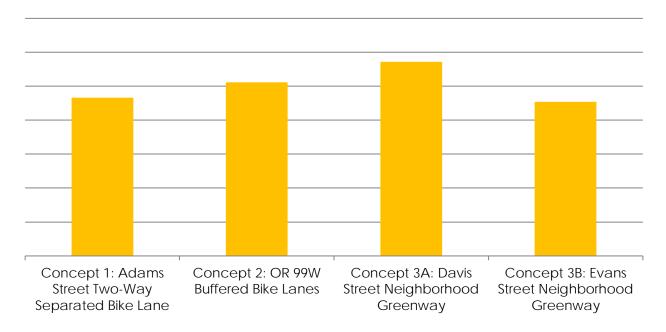


Chart 3: Purpose of Walking and Biking Trips

Concept Feedback

Survey respondents were asked to rank their preference on concepts. As shown in Chart 4, Concept 3A and Concept 2 were the most preferred options.

Chart 4: Concept Preference



Respondents provided the reason they support their top preference. These reasons are described below.

For people who prefer Concept 1, they think that it:

- Looks the safest and most accessible for people biking (due to separation),
- Would be the most used option,
- Provides more separation for pedestrians from traffic lanes, and
- Only impacts Adams Street (does not impact Baker Street).

For people who prefer Concept 2, they think that:

- It is the most intuitive and practical (due to directional flow),
- It has low maintenance requirements,
- It provides direct access to businesses on OR 99W, and
- People would continue biking on Baker Street even if there was a two-way facility on Adams Street.

For people who prefer Concept 3A, they think that:

- It is attractive and sensible (due to low traffic volumes and speeds);
- It supports children and beginner bikers;

- It is already used as a parallel route today;
- There is no advantage to making OR 99W more bike friendly because there is no need to use it in town; and,
- Options on OR 99W would increase congestion.

For people who prefer Concept 3B; they think that:

- There is less traffic along Evans Street than OR 99W;
- Evans Street is already a high-use bicycling area; and
- It provides clear access to McMinnville High School.

Respondents provided their top preference for facilities along OR 99W, assuming that the neighborhood greenway is also constructed. As shown in Chart 5, respondents are supportive of constructing facilities along OR 99W in addition to neighborhood greenway facilities. Slightly more respondents preferred constructing the Adams Street Two-Way Separated Bike Lane Concept *in addition to the neighborhood greenway* (40%) to the constructing OR 99W Buffered Bike Lanes Concept *in addition to the neighborhood greenway* (33%). The primary reason for this preference was due to the presence of vertical separation from traffic. Based on the input above, and the overall preference for OR 99W Buffered Bike Lanes (as shown in Chart 4), recommendations to add future vertical separation to the buffered bike lanes will likely make the OR 99W Buffered Bike Lanes Concept the preferred option.

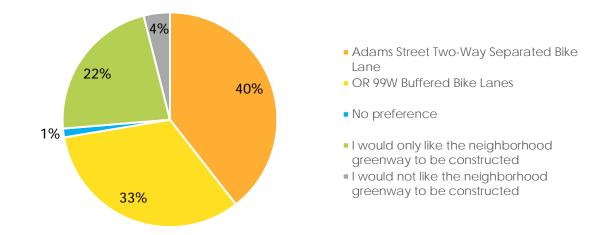


Chart 5: Top Preference for OR 99W Facilities (In Addition to Neighborhood Greenway)

Virtual open house participants were able to draw their preferred neighborhood greenway alignment. As shown in Figure 1, there are a variety of recommended routes:

- Linfield Avenue and Cowls Street were both identified as southern connections to OR 99W;
- Cowls Street, Davis Street, and Evans Street were all identified as preferred locations for the alignment; and

• 14th Street and 19th Street were both identified as northern connections to OR 99W.

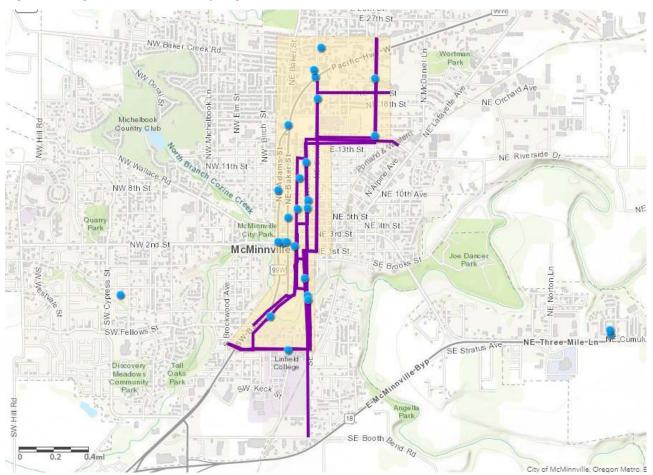


Figure 1: Neighborhood Greenway Alignment Recommendations

Respondents provided a variety of "other ideas" for projects to make walking, biking, and rolling in the study area more enjoyable. These ideas include the following:

- Provide stronger buffers (e.g., concrete curbs or planters),
- Add sitting benches,
- Add a bike share program, and
- Provide connections to and along Lafayette Avenue, 3rd Street, 4th Street, 5th Street, Birch Street, and Alder Street.

No participants identified a concern with removing parking along the west side of Adams Street.

Influence on Concept Plan Recommendations

Public input confirms the recommendation to provide both a low-stress neighborhood greenway route and facilities directly on OR 99W. The following modifications to the preferred concept will be made in the Concept Plan based on public input:

- Near-term and long-term recommendations for adding physical separation to Concept 2 will be included in the Concept Plan, where possible.
- Additional traffic calming recommendations will be included with Concept 3A, particularly along Davis Street between Linfield Avenue and 1st Street.
- Concept 3A's northern connection to OR 99W will be modified from 17th Street/18th Street to 19th Street.
- The Concept Plan will provide recommendations for potential low-stress connections to these concepts that could provide a low-stress walking, biking, and rolling network in McMinnville.

Appendix A Survey Responses

Q1 Please rank your preference of the concepts from highest preference (1) to lowest preference (4).



Q2 For the concept you ranked as your highest preference, why is it your preferred concept?

Answered: 72 Skipped: 4

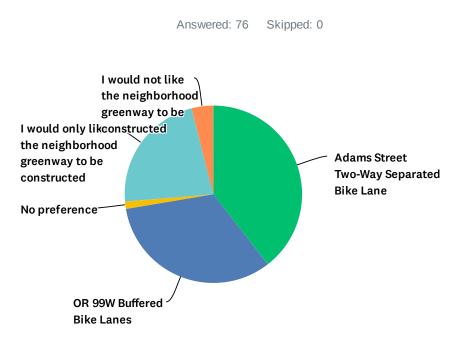
#	RESPONSES	DATE
1	It highlights alternative transportation to cars. We've got to get people out of their vehicles and seeing folks on bikes will give the visibility and prominence that alternative transport deserves.	3/11/2021 10:01 PM
2	Keeps bikes off 99W and leaves Evans Street as accessible to cars.	3/11/2021 8:05 PM
3	Safer	3/11/2021 8:04 PM
4	I personally find HWY 99 to be loud and busy, even if there was a safe way to bike it, and would prefer to be in neighborhoods.	3/11/2021 8:29 AM
5	It provides the best separation for cyclists.	3/10/2021 9:40 AM
6	I like the way it looks, bikes are going the same direction as cars in a lane of their own, it won't narrow the drive lanes like the Two-Way Separated Bike Lanes will	3/9/2021 4:47 PM
7	Seems easiest to implement.	3/9/2021 10:25 AM
8	it feels adequate, safe enough and less expensive than #1	3/9/2021 9:03 AM
9	between riding/walking on a busy street like 99 or a quieter greener one, I would prefer the greener.	3/8/2021 7:55 PM
10	It is the safest and it's also nice to pass by other bikers on their way, to build a culture of biking in this place where few bike. Culture shift relies on people feeling a part of a movement or group that matters.	3/8/2021 10:40 AM
11	Because it seems the safest and I think the most used.	3/8/2021 10:19 AM
12	It seems like the most community impact in a positive way and also the least amount of maintenance in the future for the city.	3/8/2021 9:32 AM
13	changes the 99w corrider and improves its safety instead of hoping you can change the behaviors of people. Seems the greenway alternative is just the best choice because it is the cheapest - which isn't a good basis if you are trying to keep people safe.	3/8/2021 8:05 AM
14	Evans is quiet and would work for multi purpose much better than other options, plus it goes straight into downtown.	3/7/2021 7:25 PM
15	Davis would be a safe low traffic route through town. I already use much of Davis when I bike through town.	3/7/2021 3:27 PM
16	99W is becoming more of a thorough fair every year and the more we adapt to climate change as a community we have to be adapting infrastructure to support changes in transportation options. The more commuters that can safely travel in the major thoroughfare in town the closer we can get to a carbon neutral city.	3/7/2021 1:44 PM
17	Access to businesses on 99w via bicycle	3/7/2021 11:36 AM
18	Slower traffic, more enjoyable to bike through neighborhoods than on highways.	3/7/2021 11:35 AM
19	Less/slower car traffic, fewer/no big trucks, more scenic/quieter than Hwy 99	3/7/2021 11:30 AM
20	Best all around chance for bike commuting in McMinnville. Safest route by far. Doesn't require impact on both Baker and Adams since it is double lane on one road.	3/7/2021 10:45 AM
21	Easy division of road space along the main route.	3/5/2021 7:00 PM
22	Longest straight run.	3/5/2021 5:57 PM
23	Feels more dedicated and safer than a buffered lane.	3/5/2021 2:40 PM
24	I'm concerned that changes to the parts of 99W could worsen traffic. I'd rather see safer routes through neighborhoods.	3/5/2021 12:40 PM
25	Seems safer to get bike traffic off the Main Street.	3/5/2021 9:42 AM
26	I like a greenway	3/5/2021 9:33 AM
27	The first one is out as I do not like reduced lane widths. I believe the walkers/bikers should be away from the highway.	3/5/2021 9:06 AM

28	Davis Street is a perfect North South connector. It is off of buys roads and connects Linfiled and Sue Buel Elementary, the High School and shopping + services near and around 99w.	3/5/2021 8:53 AM
29	Good for children & beginning bikers	3/5/2021 8:28 AM
30	All of these ideas dont make sense. The only people that ride bikes are the homeless and they dont follow the laws anyway.	3/5/2021 8:04 AM
31	With proper design and cooperation of the neighborhoods I think it would work best for the entire cycling community, families and timid bikers	3/4/2021 7:55 PM
32	Least busy with traffic of the 4 options.	3/4/2021 4:29 PM
33	SE Davis is already a popular option for walkers and cyclist who want to avoid 99W. Limiting motor vehicles to the local residents would make it a popular and safe choice for families and small groups of students riding from Linfield. It also stretches from Booth Bend Rd all the way to NE 14th St. There could be two sections separated by the blocks from SE 1st to NW 4th streets.	3/4/2021 2:04 PM
34	Appears to be the safest option for the most highly used pedestrian/cyclist areas.	3/4/2021 12:59 PM
35	Because there are actual barriers that indicate for bikers only. There are no parked cars along the bike area that can pull in or out with no warning. I think bikers feel safer that way.	3/4/2021 12:47 PM
36	1. Low traffic north of downtown. 2. Traffic light at 3rd St. for safety in crossing 3rd. 3. Davis goes all the way to Linfield and Booth Bend Rd. Negative: Crossing 2nd and 1st.	3/4/2021 7:37 AM
37	In my opinion there is no advantage to making 99W more bike-friendly, it will never be. I am an active, experienced cyclist with 25 years in McMinnville and I NEVER use 99 in town. One does not need to.	3/3/2021 5:29 PM
38	Keeps bicycles on one side of the street, painted markings are very visible and defined.	3/3/2021 4:29 PM
39	Walking, w/chair, or biking would be much quieter on this street, more scenic, and it seems safer to me.	3/3/2021 4:13 PM
40	With the amount of traffic I don't think any feasible improvements to 99W/Adams would do enough to truly increase bike or pedestrian traffic. The Greenway idea provides a space with shade in the summer and less right and left turns from vehicle traffic. This option would be safer and see a lot more use from walkers/runners/cyclists.	3/3/2021 3:43 PM
41	I'm not sure any level of design along Baker or Adams will make me feel safe as a bicyclist. The amount of commercial traffic (such as semi tractor-trailers and agricultural equipment) is so high so consistently. Evans Street is already a relatively high-use bicycling area where drivers may already be more aware to be on the lookout for non-drivers using the right-of-way. The Evans Street route is also adjacent to the high school, athletic areas, and the closest grocery store (Grocery Outlet) for many who live in that residential area. It also provides access to Rite-Aid, as well as an apartment complex. I bike this route for work as often as the weather permits, and I think having it enhanced would be a great way to go. Invest the time and effort in an area that is already being utilized, don't pursue something on Adams and Baker that will need lots of convincing. By enhancing Evans Street, people will feel more encouraged to join other walkers/bikers/rollers who already utilize it, I can't imagine that as many people would opt in to bike on Adams and Baker vs. Evans even if Adams and Baker were enhanced instead.	3/3/2021 1:46 PM
42	1 appears to be the safest.	3/3/2021 1:10 PM
13	Best for bikers	3/3/2021 8:04 AM
14	A davis greenway is the most attractive and sensible option for the existing city design.	3/2/2021 10:38 PM
45	Because it separates non motorized traffic from cars. I feel it's safer for both groups of users and more enjoyable for all. Evans street is even too busy of a car street to have significant use by active transport users.	3/2/2021 9:48 PM
46	Steers bicycles off of busy roads, often used by non-residents who may not be use to the bike lanes. Moving to quieter residential streets would be better for cyclists and motorists.	3/2/2021 6:39 PM

48	Biking along 99, even with buffered lanes, is scary. Especially for kids.	3/2/2021 5:25 PM
9	avoid 99/47/18. truckers need it	3/2/2021 4:56 PM
60	Under Concept 2 bike traffic moves in same direction as motor traffic, making merges easier and safer and more consistent with normal traffic patterns. The painted buffer strips help maintain separation from motor traffic.	3/1/2021 11:16 PM
51	Like neighborhood greenway instead of cyclists along 99W. Davis is best street for this, since Evans is already used by many cars as a secondary road to reach downtown, avoiding traffic on 99W.	3/1/2021 4:25 PM
52	More space for bikes and well marked for vehicles	3/1/2021 1:31 PM
53	There are bike highways (two-way bike lanes) in Hillsboro that work wonderfully in separating car and bike traffic. Cornelius Pass Road in Hillsboro has a great example between Cornell Road and 26.	3/1/2021 10:52 AM
54	I ride my bike as a mode of transportation. I prefer to not ride along high traffic roads to avoid exhaust, debris, and noise. I like the idea of having a dedicated neighborhood road for biking. Given the number of large trucks that travel on Hwy. 99, even with dedicated bike lanes it seems unsafe. Also, with the dedicated bike lanes on Hwy. 99, it seems like turning left through traffic would be difficult for bikes.	3/1/2021 8:53 AM
55	It seems to be the most convenient and likely to be used option. Adams is also in bad shape and also needs a lot of work, so this could facilitie that happening. And if freight could be encouraged to use Lafayette Hwy instead of Adams, that would be a benefit.	2/26/2021 8:28 PM
56	Does not involve narrowing lanes for vehicular traffic on 99	2/26/2021 6:52 PM
57	It seems like logistically it is easier to maintain than the 2-way separated lanes, but keeps bikes separate from cars.	2/26/2021 4:29 PM
58	Dedicated bicycle route keeps everyone safer.	2/26/2021 1:42 PM
59	Davis runs continuous from the high school south beyond the southern border of the project area, and offers a safer biking environment than anything that can be reasonably developed on Adams Street, with its continuously heavy traffic.	2/26/2021 1:28 PM
60	The buffered bike lane still allows parking along the side of the road while creating spacious sections for bikers and pedestrians.	2/26/2021 10:32 AM
61	Cost and don't want to deal with pedestrian and bike traffic at all.	2/26/2021 7:01 AM
62	Evans street is a clearer access to the high school and 3rd Street with less traffic. It is already wider than Davis which is more residential. Given the variety of traffic on 99 (log trucks, etc) losing lane width seems difficult and would still make me hesitant to ride a bike even with a designated lane.	2/25/2021 8:02 PM
63	It looks safest, and it looks like Portland.	2/25/2021 7:46 PM
64	Creating north/south bound access for bicycles on routes that are already established as north/south bound makes most sense to me; to create a 2-lane buffered zone for bikes isn't conducive to accessing all of the turn-offs from the highway that bicyclists may need without having to cross 2 lanes of highway traffic + 1 bike lane of traffic to make it so.	2/25/2021 7:10 PM
65	Stays away from trucks and traffic, slower speeds, no debris in the streets that can affect safety,	2/25/2021 6:40 PM
66	The idea of a safe and accessible bike lane is more of what Mcminnville needs	2/25/2021 6:17 PM
67	Davis has the most direct connection to Linfield, and has less traffic than Evans. The 2-way separated lane on Adams comes in last because of difficulties in keeping the road surface clean.	2/25/2021 2:51 PM
68	People are always biking along the highway, on both sides Adams and Baker. A two-way bike lane is not going to push all bike traffic there they will still be in a hazardous area on Baker. For everyone's safety, please make bike lanes on both Adams and Baker!	2/25/2021 2:40 PM
69	It seems the most practicial	2/25/2021 2:35 PM

70	A 2-way buffered lane would provide even more protection for pedestrians on the sidewalk, from noise, and proximity to cars.	2/25/2021 2:17 PM
71	Davis has less vehicular traffic and goes all the way to Linfield College. Evans has slightly more vehicular traffic but is a wonderful route from downtown to the high school and 99W.	2/25/2021 11:56 AM
72	it feels like it would be the safest for bike traffic	2/25/2021 11:42 AM

Q3 If a neighborhood greenway is constructed in addition to facilities along OR 99W, which facilities would you prefer to be constructed along OR 99W?



ANSWER CHOICES	RESPONSES	
Adams Street Two-Way Separated Bike Lane	39.47%	30
OR 99W Buffered Bike Lanes	32.89%	25
No preference	1.32%	1
I would only like the neighborhood greenway to be constructed	22.37%	17
I would not like the neighborhood greenway to be constructed	3.95%	3
TOTAL		76

Q4 Do you have other ideas for walking or biking facilities along OR 99W that you prefer to the concepts outlined above? If so, please describe your recommendation in the comment box below.

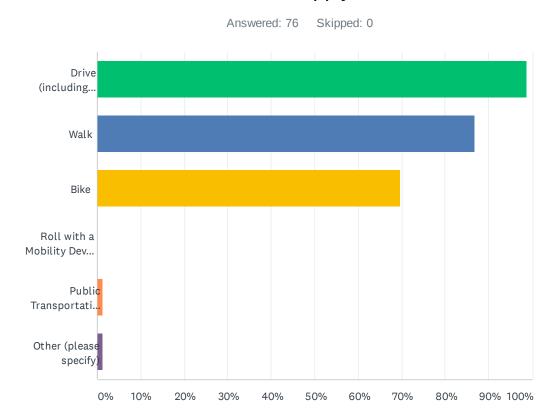
Answered: 41 Skipped: 35

#	RESPONSES	DATE
1	Nothing I can think of at this time.	3/9/2021 4:47 PM
2	A well-marked bike lane on the bridge that goes to the hospital and a well-marked bike lane on Lafayette would promote safer, easier biking. Closing 3rd Street to cars would, obviously, promote more biking and walking as well, but perhaps a well-marked biking option on 3rd,4th or 5th would also be helpful.	3/8/2021 10:40 AM
3	Yes! A bike-share such as CitiBike in NYC, where there are bikes that you can rent/pick up and leave at different locations!	3/8/2021 10:19 AM
4	no	3/8/2021 8:05 AM
5	Expanding Baker Creek out to Hill Road and out to Pevine. Also, a way for tourist to get from downtown on 2nd to Hill Road and out to side roads. More importantly current bike lanes need to be frequently cleaned. I get so many flats and it's hard to ride in existing infrastructure. Please keep bike lanes clean.	3/7/2021 7:25 PM
6	I would not choose to bicycle along Hwy 99W, even with additional bicycle lanes. There is too much traffic.	3/7/2021 3:27 PM
7	The idea shown in some of the images of a barrier between the bike lane and car lane seems very important for a narrow highway with many turns. As clear signage and distinction as possible!	3/7/2021 1:44 PM
8	Bicycle greenway through or parallel to downtown with easy connection to 99w project and sw 2nd avenue. Right now getting from Lafayette ave to sw 2nd bike lanes is unclear and unsafe.	3/7/2021 11:36 AM
9	Designated bike shoulders along the hills through upper and lower city park.	3/7/2021 11:35 AM
10	It might be safer to have a full size 3' concrete wall or highway divider instead of the low curb so that vehicles cannot jump the curb while texting, etc.	3/7/2021 10:45 AM
11	N/A	3/5/2021 7:00 PM
12	I don't think bike lanes should be put along Adams or Baker. Have you ridden along Hawthorn St., in Portland? As someone who drives a car along those streets, it is scary! Bikes "have the right of way" and give no consideration to what cars need to watch out for. Bikes need to be away from cars. and especially on Adams, the almost no stop merges from the side streets/Westside Rd will cause serious injuries and death.	3/5/2021 5:57 PM
13	Trash cans along sidewalks but make them environment friendly. Corvallis has lovely receptacles with plants on top which allows them to blend in but also be good for the environment.	3/5/2021 2:40 PM
14	I think some sort of flashing light or improved crosswalk at 99w and Third street is much needed. Those intersections connecting Clty Park, the Library, the Pool and more to the "core" of our City + County services, and main visitor destination are critical.	3/5/2021 8:53 AM
15	Electrical charging stations for e-bikes & mobility equipment.	3/5/2021 8:28 AM
16	Dont worry about it. Only the homeless ride bikes, and they dont follow the law.	3/5/2021 8:04 AM
17	As a pedestrian it makes more sense to move north/south via Cowls or Davis and at the southern end to cut through the Linfield campus.	3/4/2021 4:29 PM
18	none	3/4/2021 12:47 PM
19	Can you make crossing 99W (at intersections with traffic lights, like 19th St. or Fellows St. for instance) easier for cyclists regarding triggering the traffic light sensors by bicycles? That is, so cyclists do not have to get up on the sidewalk to push the pedestrian crossing button in order to get a green light for the cross street. Being at the sidewalk means the cyclist is in an awkward position, in conflict with auto traffic (which arrives after pushing the pedestrian button) making right turns from the cross street on to 99W.	3/4/2021 7:37 AM
20	At some point, the State, County and City need to address a cyclists or walkers need to reach county roads by traveling in or out of Mcminnville safely. All local cycling routes into or out of town are unsafe with the lone exception of Hill Road west towards Old Sheridan road or Peavine. 99 east towards Lafayette has a dangerously narrow and unsafe bridge. Ditto leaving	3/3/2021 5:29 PM

town on 3rd to Three mile lane, a bad bridge and then hwy 18. Finally, you can't even consider using Westside road as it is very narrow and speeds are high, same with HWY 47 which has a fig leaf of a bike shoulder.

	tig leat of a bike shoulder.	
21	Stop/Turn green areas at lights and intersections. Easy access to crosswalk signal buttons.	3/3/2021 4:29 PM
22	If possible along walkways, maybe a sitting bench every 4-6 blocks. This would help accommodate seniors and/or limited ability folks who may walk for groceries a place to rest. Options to dispose of trash, drink containers, etc. should be available every 4-6 blocks as well.	3/3/2021 4:13 PM
23	There would need to be more green space along 99W, from 17th to Lafayette especially. It just seems way too tight through there to make improvements that would actually make that space usable/safe.	3/3/2021 3:43 PM
24	Two way bike lane seperated by a curb for safety	3/2/2021 10:38 PM
25	4 way Car only stop signs at every block for cars. No stopping required for active transporters.	3/2/2021 9:48 PM
26	A walking path could be added without hurting car and truck traffic. There's only a limited area that doesn't have good walking access at this time, and that could be widened and paved without cutting into current traffic lanes. Bikes could be routed along Davis and/or Evans	3/2/2021 5:59 PM
27	ruts along pool and 12th are hard to cross and bikers swerve to avoid =danger	3/2/2021 4:56 PM
28	Needs "safe zones" for merging left-turning bicycle traffic at intersections.	3/1/2021 11:16 PM
29	For pedestrians, place buffer between sidewalk and street (strip of low landscaping or grass). Bike lane could also provide this buffer area.	3/1/2021 4:25 PM
30	Multi-use sidewalk plan (where the bike lanes end at sidewalk curbs and you use the sidewalk to ride your bike on).	3/1/2021 10:52 AM
31	There really needs to a stoplight crosswalk or at least a flashing light to cross Adams at 3rd. It's really dangerous and kids cross often	2/26/2021 8:28 PM
32	Are there ways to create separate bike lanes in the neighborhood greenways?	2/26/2021 4:29 PM
33	Add dedicated left hand turn signal at intersection of Hwy 99 and Baker Creek Road.	2/26/2021 1:42 PM
34	We need a continuous sidewalk along 99W !!!!!!!!!! At present this is missing from SE Adams St.	2/26/2021 1:28 PM
35	It would be nice if you would concentrate on vehicular traffic not bikes and walkers!	2/26/2021 7:01 AM
36	More pedestrian friendly sidewalks. Additional lighting and safety features along with look/feel of McMinnville/3rd St vs. current rundown feel that is less inviting. A better crosswalk from the High School across Baker and Adams. Potentially a light there or some way for people to more easily and safely cross.	2/25/2021 8:02 PM
37	No parking on Baker Street on the side where the bike lane would betoo easy to be hit by a car door or a car pulling in/out of parking space.	2/25/2021 6:40 PM
38	I don't have any other ideas:)	2/25/2021 6:17 PM
39	no	2/25/2021 2:35 PM
40	I think any options for providing additional buffers to the sidewalks and bike lanes is helpful and useful. Planter boxes, textured bumps if it's a buffered bike lane, signage - it is not a pedestrian or bike friendly road.	2/25/2021 2:17 PM
41	I would sincerely love to see our community more connected by trails of all kinds. My kids love to ride their bikes, and knowing they have safe ped/bike routes through the neighborhoods and to major points of interest is exciting as a community member.	2/25/2021 11:56 AM

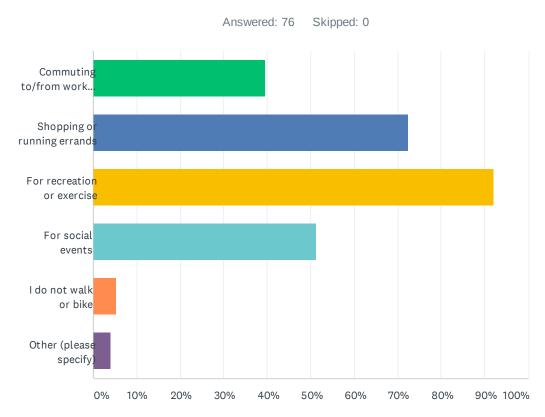
Q5 What type of transportation do you currently use in McMinnville? Select all that apply.



ANSWER C	HOICES	RESPONSES	
Drive (including motorcycle)		98.68%	75
Walk		86.84%	66
Bike		69.74%	53
Roll with a Mobility Device (such as a wheelchair)		0.00%	0
Public Transportation (e.g. bus)		1.32%	1
Other (please specify)		1.32%	1
Total Respondents: 76			
#	OTHER (PLEASE SPECIFY)	DATE	

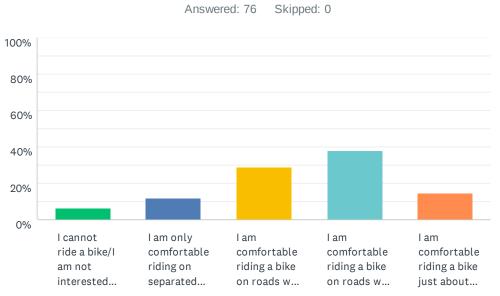
1	run, run with stroller, bike with child	3/8/2021 8:06 AM

Q6 If you walk or bike in McMinnville, what are the purpose of your trips? Select all that apply.



ANSWER CHOICES	RESPONSES	
Commuting to/from work or school	39.47%	30
Shopping or running errands	72.37%	55
For recreation or exercise	92.11%	70
For social events	51.32%	39
I do not walk or bike	5.26%	4
Other (please specify)	3.95%	3
Total Respondents: 76		

#	OTHER (PLEASE SPECIFY)	DATE
1	Exercise	2/26/2021 6:53 PM
2	Accessing public facilities, govt. offices, and churches.	2/26/2021 1:37 PM
3	to get to outlying areas for cyclinglike to Amity, Dayton, Newberg, Sheridan and Lincoln City	2/25/2021 6:46 PM



Q7 How would you characterize your biking ability?

ANSWER CHOICES		RESPONSES	
I cannot ride a bike/I am not interested in biking	6.58%	5	
I am only comfortable riding on separated paths away from traffic (e.g. Westside Bicycle/Pedestrian Greenway)	11.84%	9	
I am comfortable riding a bike on roads with little traffic (e.g. quiet neighborhood streets)	28.95%	22	
I am comfortable riding a bike on roads with higher traffic volumes and speeds, as long as there is a bike lane (e.g. Evans Street)	38.16%	29	
I am comfortable riding a bike just about anywhere (e.g. with traffic along OR 99W)	14.47%	11	
TOTAL		76	

Q8 Is there anything else you would like to share with us about these concepts or about walking, biking, rolling, or taking transit in the study area?

Answered: 42 Skipped: 34

щ	DECDONCES	DATE
#	RESPONSES	DATE
1	Yes; we are raising our children to be independent and responsible, including instilling the value of trusting their own abilities and capabilities. Unfortunately there are few protections for bikers in town: the 2nd Street bike lane disappears in between two busy lanes just as you approach Adam's heading east, and then the bike stencils continue up 2nd smack in the middle of the road. All kids and adults should be made to feel safe on our streets. The reroute of traffic to 5th Street with the inclusion of street lights has pushed more traffic onto 1st and 2nd Street making it at times dangerous when trying to head south of downtown. There needs to be lined crosswalks and 4 way stops.	3/11/2021 10:06 PM
2	Talking about concept 2 here: if bike lanes are constructed on 99W, I strongly feel that enforcement of proper use should be a priority, not sure the best way to do that but it needs to be a consideration. Is a car allowed to drive the wrong way on a one-way street? Not without consequences, and the same should be for a bicyclist. I am reasonably sure, for example, that people will try to use the bike lane on Adams to go north if deemed "more convenient" or faster to get where they want to be.	3/9/2021 4:57 PM
3	I feel it's not necessary to spend 400,000 and that the greenway is the best option.	3/8/2021 7:57 PM
4	We need more bike lanes in McMinnville! And more public transportation! I am super excited about this project!	3/8/2021 10:20 AM
5	please consider bikes with children	3/8/2021 8:06 AM
6	Really the most important thing for me is maintenance. We can put in all the bike lanes in the world but if they are full of gravel and other debris then people are not going to use them. That is the only thing keeping me from riding to work at the moment. However, I have also notice bike paths getting messy even mid summer. Thank you for all your work on this.	3/7/2021 7:29 PM
7	Would appreciate the enhanced bike designated pathways as I bicycle or walk whenever the weather allows. Many times I can reach my destination faster and more comfortably than driving. These designated pathways will encourage more bicycling and help reduce automobile traffic. I would leave 99W for the cars.	3/7/2021 3:34 PM
8	As much information as possible at various locations would be helpful so folks know what is happening and why. Also to ensure proper use of facilities and infrastructure.	3/7/2021 1:46 PM
9	I am comfortable riding anywhere by myself, but riding with my kids is very uncomfortable in most places including higher speed roads like 99w and Lafayette ave or downtown where they can't be on sidewalks. That is where most all shops and restaurants are. So we find ourselves walking bikes downtown and riding on sidewalks elswhere.	3/7/2021 11:40 AM
10	While currently only in an exploratory phase, I would like to see decisions about this plan tied in to the potential of a new community/recreation center next to Albertsons. Creating the safest possible route for families and children to access these facilities should be a top priority. I personally would not want my children biking along Hwy 99.	3/7/2021 11:34 AM
11	I think it would be wise to also consider a reduction in speed along 99W for the entire length of any section that will gain bike path/route protection. 25 mph or 30 mph tops. It is common to see vehicles driving at 40-45 mph (in 35 mph zones) which is quite dangerous for walking/biking.	3/7/2021 10:49 AM
12	With all of the new housing that will come online in Mac, I agree that recreational bike lanes will be needed. I'd also bet that only a minute percent of those that decide to live in Mac will actually bike to work. Sorry, but Mac isn't an urban city where biking (like in Portalnd) will catch on all that much. Surely not enough to make mess up traveling on Adams, Baker, and 99W worth the investment. 99W is how many MANY drivers get from point A, to point B: Portland/Metro to the coast. If you want to make a nice road for bikes to travel on, widen Westside Rd. and put in a lane that connects Mac to Carlton and Yamhill. Since the ladies on the commission nixed the trail project, there is still a need to have a FUN place to ride. (Mac, along 99W, would never be a fun destination place to ride.)	3/5/2021 6:06 PM
13	With regards to walking. Many of McMinnville's sidewalks in downtown areas are from an older era and are in varied shapes of disrepair. I walk a lot during the winter when it's raining or has recently rained. These are slippery and can be dangerous. Addressing them would be helpful as part of a transportation plan.	3/5/2021 12:43 PM
14	It would be great if it could link with Recreational bicycle ride through the countryside. This	3/5/2021 9:44 AM

could be a great tourist draw.	
Greenway needs to be well signed for both bikes & cars.	3/5/2021 8:31 AM
Dont waste the time or money.	3/5/2021 8:05 AM
It only crosses the study area, but the Cozine Creek Greenway in the City's Parks Plan that was never implemented would be a useful way to talk through part of this area without dealing with cars.	3/4/2021 4:32 PM
There is a real lack of adherence to bicycle etiquette and rules among riders (especially young people). I'm surprised by how many cyclists ride on the wrong side of the road and without helmets. When I was young, we used to participate in annual bike safety fairs, where we went through the basics of safe riding, registered our bikes, and received a certificate for our participation. All of the kids I knew took part in it. It was free and was held in the parking lot of the local school. It would be nice if we want to encourage ridership, that we ensure that our riders know the rules of the road.	3/4/2021 2:12 PM
I would love to cycle to work (coming from Carlton into McMinnville) but there aren't many safe places to enter the highway/road ways, especially in busy and high traffic areas.	3/4/2021 1:02 PM
I see many bikers on sidewalks even when there are bike lanes or it a slow moving residential area. That indicates to me they do not feel safe. However, by being on the sidewalks they present a safety hazard for themselves, pedestrians and for cars pulling out of driveways or sidestreets.	3/4/2021 12:50 PM
I bike about 30 miles per week in McMinnville. When I answered that I was comfortable riding 99W as is (above), I do it, but I would prefer one of the options being discussed. I often use Davis St. from NW 12th St. to Booth Bend Rd. I also often cross 99W at traffic signaled intersections throughout the study area. My favorite crossing is on NW 12th because the signal does not require activation of buried sensors to change. My least favorite are the signals in the Linfield area. I am 78 years old.	3/4/2021 7:47 AM
Mcminnville and it's environs is a great place to ride but getting into and out of town safely is hard. Mcminnville seems to have the right idea in planning to make local cycling safer and it will need to cooperation of ODOT and Yamhill county to really make the area a more attractive cycling venue by making access to county roads more safe and crossing state highways 99W and 18 easier.	3/3/2021 5:33 PM
These are all good and improvements are needed. 99w will only have more traffic and more people will be riding bicycles especially after COVID. Safe riding and walking should be first priority.	3/3/2021 4:35 PM
This will be a great improvement for McMinnville whichever option is chosen.	3/3/2021 4:15 PM
With high traffic areas it becomes more important to keep the bike lane swept. Along 99W this is a major issue for folks who want to ride their bikes. Even if there is a little separation for the bike lane the road grit and gravel make it into the lane, increasing hazards for cyclists	3/3/2021 3:46 PM
I'm really concerned about the separated bike lane. The concept description warns that it would be difficult to maintain and sweep. It doesn't take much to pop a tire. How can it be kept clear of debris and items that could puncture tires?	3/3/2021 1:50 PM
A Davis st greenway would attract significant amount of bikers who currently feel unsafe to ride. It would also be attractive to tourists.	3/2/2021 10:40 PM
This is a great idea! Parking along the 99 couplet as well as large cross traffic makes bike lane concept hard to me. Green way seems to mimic the natural traffic pattern. I frequently use Evans as my main north south road when driving, but I always chose to walk or bike down Davis or cowls. It's also nice that Davis has a stop light to cross 3rd street.	3/2/2021 9:51 PM
not at this time	3/2/2021 6:02 PM
McMinnville could increase the desirability of its downtown core even more by making the area more accessible (and safer) for biking and walking. I know people complain about parking, but	3/2/2021 5:26 PM
biking and walking are the future. Let's invest money there.	
	Greenway needs to be well signed for both bikes & cars. Dont waste the time or money. It only crosses the study area, but the Cozine Creek Greenway in the City's Parks Plan that was never implemented would be a useful way to talk through part of this area without dealing with cars. There is a real lack of adherence to bicycle etiquette and rules among riders (especially young people). I'm surprised by how many cyclists ride on the wrong side of the road and without helmets. When I was young, we used to participate in annual bike safety fairs, where we went through the basics of safe riding, registered our bikes, and received a certificate for our participation. All of the kids I knew tox part in It. It was free and was held in the parking lot of the local school. It would be hice if we want to encourage ridership, that we ensure that our riders know the rules of the road. I would love to cycle to work (coming from Carlton into McMinnville) but there aren't many safe places to enter the highway/road ways, especially in busy and high traffic areas. I see many bikers on sidewalks even when there are bike lanes or it a slow moving residential area. That indicates to me they do not feel safe. However, by being on the sidewalks they present a safety hazard for themselves, pedestrians and for cars pulling out of driveways or sidestreets. I bike about 30 miles per week in McMinnville. When I answered that I was comfortable riding 99W as is (above). I ot is but would prefer one of the options being discussed. I often use Davis St. from NW 12th St. to Booth Bend Rd. I also often cross 99W at traffic signaled intersections throughout the study area. My favorite crossing is on NW 12th because the signal does not require activation of Dubid sensors to change. My leaval favorite are at more att

motorists face adjacent oncoming bike traffic on the "wrong" side of the street. Physical separators like curbing tends to get broken up by wayward vehicles and can trip a distracted bicyclist into oncoming traffic. A curbed separator was tried on Farmington Road in the 1970's and eventually had to be taken out because of the hazards. They would be a safety and maintenance nightmare.

33	For kids and teens what are the routes that would be the most convenient and safest?	2/26/2021 4:30 PM
34	Thank you for the opportunity for citizen input!	2/26/2021 1:43 PM
35	I have had several dangerous incidents while walking and attempting to cross Adams Street from the NW corner with Second St. Vehicles traveling south on Adams Street that are approaching or stopped at a yellow red light and want to turn right (west) on Second Street oftentimes threaten walkers who legally enter the crosswalk there.	2/26/2021 1:37 PM
36	Please make this more public, not just a little side ad in the online News Register! Traffic is horrible now and very few people walk or use bikes! Everyone has to know this before you start getting excited about changing everything!	2/26/2021 7:05 AM
37	As cyclists road conditions like pot holes, bumps, debris are important considerations for any proposed bike route. Also important for routes to get to shopping areas, recreational areas and to outer areas	2/25/2021 6:46 PM
38	Keep in mind accessibility for those who are disabled and people who use these modes of transportation a lot but don't have the means to fill out a survey like this.	2/25/2021 6:19 PM
39	I believe that education and enforcement are important components to integrating cycling into the transportation model. Enforcement in particular is lacking too many cyclist flaunt laws, anger/ endanger motorists and pedestrians, and suffer no legal consequences for doing so. This creates a hostile environment for all cyclists.	2/25/2021 2:54 PM
40	I am very excited for all bike improvements along hwy 99. If crosswalk signals are in consideration, I highly recommend ones at 8th and Adams and Baker.	2/25/2021 2:45 PM
41	I think if the crossing signals could allow for "head start" for pedestrians, it would be safer at the major signals (at Albertson's/Roth, and Linfield) Drivers do not expect pedestrians crossing OR99	2/25/2021 2:19 PM
42	I enthusiastically support the creation of more trails and routes connecting our community for peds and bikes! Thank you!	2/25/2021 11:58 AM

Appendix B Public Open House Meeting Notes

LIVESTREAMED VIRTUAL MEETING

A livestreamed virtual meeting was held on Thursday, March 4 from 6:30 to 8:00 PM. This meeting was attended by 17 people: Jenna Berman, Larry Sherwood, Heather Richards, Marc Butorac, Nick Gross, Amy Griffiths, Galen McBee, Barb Jones, Katherine Martin, Mark Davis, Karen Willard, Jamie Fleckenstein, Bill Wilson, Kathy McBee, Bonnie Laux, Peter Higbee and Roger Hall.

The group was asked how many times they walked, biked, or rolled along the OR 99W couplet in McMinnville this past year. Figure 2 shows a word cloud of the responses.



Figure 2: Participants' Walking, Biking, and Rolling Frequency along OR 99W

Participants were also asked how they currently feel walking, biking, and/or rolling along the Adams Street/Baker Street Couplet. Figure 3 shows a word cloud of the responses. Participants feel uncomfortable, apprehensive, and unsafe walking, biking, and rolling along the couplet today.

Figure 3: How Participants Feel Walking, Biking, and Rolling along the Couplet

 It's loud when walking.

 A little tentative

 Apprehensive to Bike

 Not comfortable

 Not comfortable

 Not comfortable

 Not very unpleasant

 Not safe

 Would not bike there.

 Not very safe for biking

Participants were asked what the greatest barriers are to walking, biking, and/or rolling in the study area. As shown in Figure 4, almost half of participants selected traffic conditions as the greatest barrier to walking, biking, and/or rolling in the study area.

Figure 4: Barriers to Walking, Biking, and Rolling in the Study Area



The group discussed the three preliminary concepts to address the need for safer, more comfortable walking, biking, and rolling facilities in McMinnville. The following items were brought up by the participants:

- A participant stated that they felt that Concept 1 seems to work very well. Another participant
 expressed concerns about maintenance and sweeping the two-way separated bike lane. Special
 equipment would be needed to sweep the bike lanes under Concept 1 due to the constrained
 width and vertical separation.
- A participant mentioned that the little bit of extra space associated with a buffer on Concept 2 makes it more comfortable. Another participant asked if vertical separation can be added to Concept 2 as a future phase of work. The project team mentioned that the Concept Plan could include long-term recommendations for vertical separation.
- A participant asked about the cost of adding traffic diverters to Concept 3. The project team mentioned that the cost of diverters can range from about \$7,000 to \$25,000 per intersection depending on needs.
- A participant mentioned that Davis Street from Linfield Avenue to 1st Street is very busy and has lots of parked cars. If Concept 3A moves forward based on public input, the project team will consider traffic calming features like speed humps and chicanes to slow traffic in this segment.
- A participant highlighted the importance of the enhanced crossing at Baker Street / Cowls Street because they feel it is "very dangerous" to cross there now.

The participants expressed support for this project's efforts to create safe, comfortable, and accessible active transportation facilities.



Meeting Notes

McMinnville OR 99W (NE McDonald Road to Linfield Avenue) Active Transportation Concept Plan

PAC Meeting #1

Thursday, December 10 | 3:00 – 5:00 PM

Attendance:

- Kittelson & Associates, Inc.: Marc Butorac, Nick Gross, Amy Griffiths
- Oregon Department of Transportation: Jenna Berman, Daniel Fricke
- The City of McMinnville: Larry Sherwood, Heather Richards
- Barb Jones, Accessibility Advocate
- Cyrus Scarboro-Ford, McMinnville High School Student
- Chuck Hillestad, Former Planning Commissioner, Board of Yamhill County Historic Society
- Dave Rucklos, Director of McMinnville Downtown Association
- Jack Crabtree, McMinnville School District
- Jamie Fleckenstein, McMinnville Planning Department and cyclist
- Cole Mullis, ODOT District Manager
- Peter Higbee, Bicyclist Community
- Steve Macartney, Public Safety
- Zach Geary, McMinnville City Council
- 1. Action Items
 - a. PAC to complete Concept Development Workshop Homework and share completed homework with Amy Griffiths. **Due December 17**
 - b. PAC to review background documents and provide comments to Amy Griffiths. Due December 17
- Kittelson provided a review of background documents, including the Corridor Vision, TM #1: Performance Based Design Decision Framework, TM #2: Plans and Policy Review, Evaluation Criteria and Performance Measures, and TM #3: Analysis Methodology and Assumptions. Kittelson provided the following clarifications based on questions from the PAC:
 - a. This project is planning to provide facilities while maintaining existing curb-to-curb width and will not require right-of-way acquisition.
 - b. For considering crash history, people using motorized scooters and/or wheelchairs are coded as pedestrians.

- 3. Kittelson reviewed TM #4: Existing Conditions and Future Needs and the PAC provided input based on their firsthand knowledge of the corridor.
 - a. Steve mentioned that he hopes for this project to be included in a STIP-funded multimodal project.
 - b. Steve commented that this plan has to be part of a greater program that looks at intersections, traffic calming, speeds. This exercise is part of a greater thing that needs to occur on OR 99W. Multiple intersections on the corridor are broken. He also mentioned that there are long crossing distances and crossings that do not intersect perpendicularly, which is challenging for people crossing the street.
 - c. Chuck mentioned that he finds it unlikely that a bicyclist would use OR 99W (including the couplet) by preference unless they were unaware of alternate routes. Jenna mentioned that she observed more bicyclists along the couplet than expected when she was conducting the parking inventory.
 - d. Peter mentioned that even where there are bike lanes, they are too dirty to ride in. Jenna mentioned that maintenance is important to this project, and that Cole Mullis is on the PAC to provide a maintenance perspective for this project.
 - e. Jenna mentioned that ODOT will be bringing all of the ADA ramps into compliance as a result of a lawsuit, so there will be a ramp project along the corridor. Larry mentioned that we need to focus on improving driveway cross slopes and ADA ramps to improve pedestrian access. Jamie asked if bulb-outs/curb extensions are included in ADA work. Jenna clarified that they can be, and that the team is looking to the PAC to determine where they consider the extensions to be valuable. Jamie asked how curb extensions would work with dedicated bike lanes on OR 99W. Jenna mentioned that the extensions may only occur on one side. Peter mentioned that the curb extensions can force people biking into the vehicle traffic lane. Cyrus mentioned that the bike lanes could pop up onto the sidewalk to limit bike-driver contact. This would be fleshed out in the alternatives development.
 - f. Chuck mentioned that data suggests that there will be in increase in the people who need motorized scooters and wheelchairs.
 - g. Heather mentioned that she sees a lot of people in wheelchairs or scooters in the street. They did a survey and found that the concrete joints made an uncomfortable ride and it was unpleasant to make all the ups and downs for driveways and ramps. Jaime mentioned that materials is important for accessibility. Chuck mentioned that the slope of driveways crossing sidewalks discourages people from using the sidewalks.
 - h. Chuck mentioned that drivers do not always look closely at the crosswalks they are turning onto, which caused a crash with a handicapped pedestrian in a motorized

scooter at the NE corner of Baker Street/2nd Street a few years ago. Chuck also mentioned that when people in scooters cross multiple lanes and a car stops to allow crossing the driver may assume that the car was stopping to make a left turn and not see the person in the scooter because the scooter is too low. Barb mentioned general visibility concerns people in wheelchairs have. For this reason, she feels that it a parallel route along Evans may be preferred.

- i. Chuck mentioned that bicycle lanes are often incompatible with someone on a scooter because of speed. He is concerned that the bicycle has to swerve out of traffic when it is occupied by a scooter, which can be dangerous for both parties. Chuck also mentioned that he feels that the potential for "dooring" where there is high parking turnover is a concern for people biking.
- j. Barb emphasized the importance in driver education that supports visibility for people biking, walking, rolling along and across the street. Marc mentioned that this plan can include recommendations for educational components.
- k. Steve mentioned that single side crosswalk markings may be something to consider so that pedestrians cross on the upstream side of potential left turns on the one way streets. Marc mentioned that we take the upstream side of the intersection when recommended enhanced crossings.

I. Action Item: PAC to review background documents and provide comments to Amy Griffiths.

- 4. The concept development workshop homework is provided to gather input on the preferred facility types and alignments to be considered as part of the alternatives development. Members of the PAC provided initial comments on the alignment:
 - a. Barb mentioned that two-way facilities along Adams may provide better access to the highway and be a more pragmatic and cost-effective approach to providing facilities along the couplet.
 - b. Dave mentioned that the Farmer's Market is held on Cowls Street, and that bicycle activity is not allowed along Cowls when the market is open. This would add complexity to route along Cowls because it would have to be re-routed frequently. Cowls should not be considered as a parallel route for this project.
 - c. Chuck recommends Davis Street due to low traffic volumes. He mentioned that it would require abundant signage to redirect users to that corridor.
 - d. Peter mentioned that Davis Street has a big hill that people must travel up and down if they travel the extent of the corridor.

- e. Cyrus mentioned that he observed that Evans Street has the most significant flow of pedestrian traffic to/from the high school. Evans Street would therefore be a good candidate for a parallel route.
- f. Action Item: PAC to complete Concept Development Workshop Homework and share completed homework with Amy Griffiths.
- 5. Next PAC Meeting (Marc)
 - a. Date/Time: Thursday, February 18 | 3:00 5:00PM
 - b. Agenda: Alternatives Development and Preferred Alternative Concept



McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan

PAC Meeting #2

Thursday, February 18 | 3:00 – 5:00 PM

Attendance:

- Marc Butorac, Nick Gross, and Amy Griffiths; Kittelson & Associates, Inc.
- Jenna Berman, Oregon Department of Transportation
- Larry Sherwood and Heather Richards, The City of McMinnville
- Barb Jones, Accessibility Advocate
- Bahram Refaei, Linfield University
- Cyrus Scarboro-Ford, McMinnville High School Student
- Chuck Hillestad, Former Planning Commissioner, Board of Yamhill County Historic Society
- Dave Rucklos, Director of McMinnville Downtown Association
- Jack Crabtree, McMinnville School District
- Lori Schanche, Planning Commission, Active Transportation Planner
- Peter Higbee, Bicyclist Community
- Steve Macartney, Public Safety
- Zack Geary, McMinnville City Council

Action Items:

- a. PAC to review draft TM #5: Alternatives Development and Preferred Alternative Concept and provide comments to Amy Griffiths. **Due February 25.**
- b. PAC to spread the word about and participate in the Virtual Open House. February 25th to March 11th.
- c. The consultant team to update concepts based on the feedback summarized below and input received during the Virtual Open House.

Meeting Summary:

The consultant team reviewed draft TM #5: Alternatives Development and Preferred Alternative Concept. The PAC provided input during breakout discussions based on their firsthand knowledge of the corridor.

1. Action Item: PAC to review draft TM #5 and provide comments to Amy Griffiths.

- 2. Concept 1: Adams Street Separated Bike Lane
 - a. A participant mentioned that this concept must be part of a corridor plan that includes access management at several intersections.
 - b. Concept 1 would be more permanent than Concept 2. Incremental construction is not feasible for Concept 1.
 - c. A participant mentioned that a traffic study would be needed to consider the viability and safety of crossing at 2nd Street & 15th Street in peak hours.
 - d. A participant mentioned that flex post delineators "are targets for vehicles" and have high maintenance costs.
- 3. Concept 2: OR 99W Buffered Bike Lanes
 - a. The group discussed that Concept 2 is not as "permanent" as Concept 1 and would allow for more flexibility in the future. Concept 2 could have phased construction.
 - b. Participants asked if it would be feasible to add vertical separation (e.g. flex post delineators) to this concept because vertical separation would increase safety and utility. The following challenges were mentioned:
 - i. Maintenance requirements for flex post delineators and other forms of vertical separation are costly.
 - ii. The pre-approved ODOT toolbox for vertical separation is limited.
 - iii. Parallel parking could not be maintained.
 - iv. Vertical separation reduces available width of the roadway, which poses feasibility challenges since the road is a Reduction Review Route for freight.
 - c. Three feet is the minimum width requirement for adding vertical separation on an ODOT facility. Adjusting the buffering width from two feet to three feet supports future addition of vertical separation.
 - i. Action Item: The consultant team to modify the cross section to show 5-foot bike lanes and 3-foot painted buffers (rather than 6-foot bike lanes and 2-foot buffers).
- 4. Concept 3: Neighborhood Greenway
 - a. A participant mentioned that OR 99W is safer for people in scooters and wheelchairs because there are better ADA ramps. Therefore, the recommendation of constructing both facilities on OR 99W and a neighborhood greenway route is valuable.
 - b. The group discussed the route of the neighborhood greenway alignment. The following modifications were discussed:
 - i. One participant mentioned that the greenway alignment on Davis Street should extend below Linfield Avenue to Booth Bend Road. This connection is outside

the study area. Future greenway connections to Booth Bend Road could be added in the future.

- ii. The group discussed that 13th Street, 14th Street, or 19th Street may be better connections back to OR 99W than the "zig-zag" along 17th Street and 18th Street.
 - 1. 14th Street is narrow, which deters people from using 14th Street as a through-street.
 - 13th Street is wider than 14th Street which provides better visibility; 13th Street has greater separation from inexperienced drivers around the high school.
 - 3. 19th Street provides a direct westward connection. Based on traffic volumes, 19th Street may require bike lanes to be a comfortable option.
- iii. The group discussed connections to Baker Creek Road. The group liked the idea of a multi-use path on Evans Street between 17th Street and OR 99W; however, they noted that it would be a high-cost addition to the projects.
- iv. Action Item: The consultant team to modify the neighborhood greenway route based on public input received during this meeting and the Virtual Open House.
- c. Participants mentioned that the segment of Davis Street south of 2nd Street has higher traffic volumes and speeds. A fatal crash involving a child biking occurred in the "dip" on Davis Streets. The group suggested using bike lanes instead of sharrows in this section.
 - i. Action Item: The consultant team to consider the feasibility of providing bike lanes in the segment of Davis Street between Linfield Avenue and 2nd Street.
- d. The group discussed adding traffic diverters to Concept 3 to calm traffic and make Davis Street more comfortable. The intersections of 10th Street and 7th Street were identified as candidate locations for traffic diverters.
 - i. Action Item: The consultant team to include traffic diverters in the public open house to gauge public response on traffic diverters. Based on this input, diverters may be added to Concept 3.
- e. A couple of participants did not support shifting stop signs off Davis Street. Stop signs on Davis Street help discourage through-movement for people driving. The "Idaho stop" law allows people biking to travel through an intersection without stopping.
- 5. Enhanced Crossing Concepts
 - a. The group mentioned that Adams Street/Handley Street is not an ideal location for enhanced crossing treatments because of sight distance challenges, a lack of active transportation generators at Handley Street, topographic challenges with the adjacent creek, and high vehicle speeds through the segment. The group discussed two alternate

locations for enhanced crossings: Adams Street parallel with Cowls Street or Adams Street/3rd Street. Based on activity generators and location of existing sidewalks, Adams Street/3rd Street is a more promising location.

- i. Action Item: Kittelson to replace the enhanced crossing concept at Adams Street/Handley Street with a concept at Adams Street/3rd Street.
- b. The PAC was supportive of the other five recommended crossing locations. According to the homework, the order of preference for implementation is Adams Street & Baker Street/15th Street, then Baker Street/Cowls Street, then Adams Street & Baker Street/8th Street, then Adams Street/3rd Street.
- c. A participant inquired about using recessed street surface flashing lighting. The concepts use RRFB's because maintenance of recessed street lighting is difficult and research shows that RRFB's achieve greater driver compliance.
- 6. Upcoming Meetings
 - a. Virtual Open House open February 25th March 11th
 - b. Livestreamed Virtual Open House Meeting: March 4th from 6:30 8:00PM
 - i. Action Item: PAC to spread the word about and participate in the Virtual Open House.
 - c. PAC Meeting #3: April 15th from 3:00 5:00PM



McMinnville OR 99W (NE McDonald Lane to Linfield Avenue) Active Transportation Concept Plan

PAC Meeting #3

Thursday, April 15 | 3:00 – 5:00 PM

Attendance:

- Marc Butorac, Nick Gross, and Amy Griffiths; Kittelson & Associates, Inc.
- Jenna Berman, Oregon Department of Transportation
- Larry Sherwood and Heather Richards, The City of McMinnville
- Barb Jones, Accessibility Advocate
- Bahram Refaei, Linfield University
- Cyrus Scarboro-Ford, McMinnville High School Student
- Chuck Hillestad, Former Planning Commissioner, Board of Yamhill County Historic Society
- Dave Rucklos, Director of McMinnville Downtown Association
- Lori Schanche, Planning Commission, Active Transportation Planner
- Peter Higbee, Bicyclist Community
- Steve Macartney, Public Safety
- Zack Geary, McMinnville City Council

Action Items:

- a. City to submit 35 Day Notice to Department of Land Conservation and Development (DLCD)
- b. Consultant team to incorporate enhanced crossing location at Adams Street/Walgreens near transit stop at future consideration.

Meeting Summary:

The consultant team reviewed the draft Concept Plan with the PAC and solicited input on the layout and content of the document. The purpose of PAC#3 is to gain consensus to recommend the draft Concept Plan to Planning Commission/City Council.

1. Planning Commission/City Council

- a. Planning Commission/City Council Work session is scheduled for April 27.
- b. PAC comments must be provided to project team by close of business April 16 to be incorporated into packet that goes to Planning Commission/City Council

c. City to submit 35 Day Notice to Department of Land Conservation and Development (DLCD)

2. Overview of Plan

a. The consultant team walked the PAC through the draft Concept Plan including the background material, draft layouts, and enhanced crossing location.

3. General Discussion

- a. A crossing at Adams Street near the Walgreens is needed. A lot of transient people live west of Adams Street in the Cozine Creek area and cross to go to Walgreens. There is also a transit stop in that vicinity.
 - i. Consultant team to incorporate enhanced crossing location at Adams Street/Walgreens near transit stop at future consideration.
- b. Concerned about loss of parking along Adams Street south of 1st Street.
 - i. Discussion of tradeoffs; parking on east vs. west side of roadway
 - ii. There will be an associated risk regardless; people crossing Adams Street to access parking on the east side; keeping parking does not allow for bicycle facility. If parking is on the east side, it shifts the entire roadway over and introduces more curves.
 - iii. The bicycle facility is the priority and needs to be there.
- c. Concerns about speed of vehicular travel along Davis Street south of 1st Street
 - i. Opportunity to limit parking; people are currently parking where parking is prohibited forcing people biking into the center of the travel lane.
 - 1. Potential enforcement issue
- d. When is this project expected to be implemented?
 - i. ODOT has a paving project coming in the next 4-6 years. The goal is to incorporate the paving related improvements (bicycle facilities) into that project.
 - ii. ODOT has an ADA improvement project coming sooner. The goal is to incorporate the enhanced crossing projects into that project.
 - iii. The timing for the neighborhood greenway is up to the City since it is not a ODOT facility. Depends on City budget.



ATTACHMENT D



Transportation System Plan

Proposed amendments to Chapter 6, Bicycle System Plan, of the McMinnville Transportation System Plan are on page 6-3 and delineated with bold, underlined, italicized text.





6 Bicycle System Plan

McMinnville commuters reacted to recent increases in the price of gasoline in a couple of ways: some long-distance commuters joined carpools or switched to intercity bus services (see Chapter 7), while other local commuters switched to riding their bicycle to work. Historical bicycle volume counts are unavailable, but the rise in local bicycle traffic was noticeable, if even by anecdotal observation. Also noticeable were the concerns raised by commuter, recreational and

student cyclists relating to the number of significant gaps in McMinnville's bicycle system.

Fluctuating gas prices are partly responsible for the increase in bicycle traffic. Given the city's relative compact geography, generally flat topography, future population (compared to larger cities), and increasing costs for driving, cycling will likely become a larger, more popular and viable alternative. Further, as growth generates more vehicle and bicycle traffic in the city there will be increased desire and need to complete McMinnville's bicycle system.



Bike Lane Use on 2nd Street

The Bicycle System Plan outlines recommended steps and projects to increase the role of the bicycle with a system of connected and well-maintained facilities in McMinnville.

Bicycle System Policies

The Bicycle System Plan goal for McMinnville emphasizes the importance of providing a completed system of direct on-street bicycle facilities, and on increasing the percentage of trips made by bicycle.

Bicycle System Goal

To provide a comprehensive system of connecting and direct on-street bicycle facilities that will encourage increased ridership and safe bicycle travel.

Three objectives are recommended in the TSP to help the City of McMinnville achieve its bicycle system goal:

- Create a comprehensive and connected system of bicycle facilities;
- Encourage programs that support bicycle systems and promote cycling activity; and,
- Encourage programs that enhance bicycle safety.

Each objective is to be met through applying policies that pursue particular strategies, develop specified programs, or engage in defined courses of action. The policies for McMinnville's bicycle system are developed consistent with federal policy guidelines and the Oregon Bicycle and Pedestrian Plan.

To increase the role of the bicycle as a viable mode of transportation a system of connected and well-maintained facilities should be provided.

- Provide Bicycle Facilities on Arterials and some Collector Streets – To the extent possible, arterial and some collector streets undergoing overlays or reconstruction will either be restriped with bicycle lanes or sharrow (bicycle/auto shared-lane) routes as designated on the Bicycle System Plan Map (see Exhibit 6-3). Every effort will be made to retrofit existing arterials and selective collectors with bicycle lanes, as designated on the Bicycle System Plan Map.
- Eliminate Barriers to Bicycle Travel The City will actively pursue a comprehensive system of bicycle facilities through designing and constructing projects, as resources are available,

and implementing standards and regulations designed to eliminate barriers to bicycle travel. As a result of this policy, new developments or major transportation projects will neither create new, nor maintain existing, barriers to bicycle travel.

- **Bicycle Routes and Signage** as resources are available, the City will periodically consult with local bicyclists to review existing and proposed bicycle lanes, and identify improvements needed to make these routes function better for bicyclists. These routes shall be identified by signage on the routes and shown on updates of the bicycle route map.
- Complete the Major Bicycle System A completed system of major bicycle facilities is one of the most important factors in encouraging bicycle travel. The City will work toward annually completing a minimum 10 percent addition (measured in street centerline miles of newly-constructed bicycle lanes, bicycle lane striping and sharrow route designations) to the bicycle system, as designated on the Bicycle System Plan Map, with priority given to projects that fill critical missing links in the bicycle system or address an identified safety hazard.
- Establish Minimum Standards for Bicycle Facility Maintenance - the City shall develop minimum standards that will keep bicycle facilities clean of debris, properly striped, and clearly marked and signed.
- **Zoning Ordinance Requirements for Bicycle Parking** the McMinnville Zoning Ordinance (17.60.140) contains bicycle parking supply requirements and standards that require new developments to provide a minimum amount of bicycle parking, based on the needs of the specific zone or land use type.
- **Bicycle Parking at Transit Facilities** the City will work with the Yamhill County Transit Authority to encourage the installation of public bicycle parking facilities at transit stations and other inter-modal facilities, and encourage the provision of bicycle racks on all public transit vehicles.

- Target and Eliminate Key Behaviors that Lead to Bicycle Accidents - The City will encourage schools, safety organizations, and law enforcement agencies to provide information and instruction on bicycle safety issues that focus on the most important accident problems.
- Safe Routes To School The City will work with the McMinnville School District to: evaluate existing bicycle access to local schools and supporting infrastructure (bicycle racks, lockers, etc.), estimate the current and potential use of bicycling as a travel mode, evaluate safety needs, and propose changes to increase the percentage of children and young adults safely using this mode.

Existing Conditions

Two fundamental building blocks are needed in understanding the study of McMinnville's bicycle system: (1) a baseline definition of the various terms and language used in describing bicycle facilities, and (2) understanding the various types of bicycle system users.

Revising the Bicycle Planning Language

The City of McMinnville can begin more proactive planning for bicycle facilities by first expanding upon and clarifying the definitions of the various bicycle facilities, especially for the on-street bicycle system. Historical plan documentation in McMinnville has concluded in text and mapping a "Bikeway" or "Bikeway Route" network, some of which is may be implied to mean on-street bicycle lanes. What are bikeway routes? Are they separate lanes for cyclists or a series of signs and painted symbols that indicate for both motorists and cyclists the need to share the outside travel lane? There is need for further clarity in these definitions, otherwise planners, engineers, policy officials and the general public might be unclear what the TSP full intentions are. **Exhibit 6-1** illustrates the basic forms of bikeway facilities as defined by AASHTO. Pavement markings and signing guidance is provided by the Manual of Uniform Traffic Control Devices (MUTCD). Consistent with the MUTCD, the City of McMinnville should²adhere to the following definition of terms concerning bicycle facilities:

Bicycle Facilities

This is a general term denoting improvements and provisions that accommodate or encourage bicycling, including parking and storage facilities, and shared roadways not specifically designed exclusively for bicycle use.

Bikeway

Bikeway is a generic term for any road, street, or path that in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for exclusive bicycle use or are to be shared with other travel modes.

Bicycle Lane

A bicycle lane is a portion of a roadway that has been designated by signs and pavement markings for preferential or exclusive use by

bicyclists. Bicycle lanes are facilities that are placed on both sides of a street, and they carry bicyclists in the same direction as adjacent vehicle traffic. <u>Bicycle lanes can be buffered from</u> <u>adjacent traffic by vertical barriers or can be</u> identified by lane striping and signage.



Designated Bicycle Routes

Designated bicycle routes consist of a system of bikeways designated by the roadway's jurisdictional authority with appropriate directional and informational route signs, with or without specific bicycle route numbers. Bicycle routes, which might be a combination of various types of bikeways, should



SHARE

THE

ROAD

establish a continuous routing. Designated bicycle routes can be divided into *shared roadway* and *shared-use path* facilities.

Shared Roadway

On a shared roadway, bicyclists and motorists use the same travel lane. Shared roadway bicycle routes can be placed on streets with wide outside travel lanes, along streets with bicycle route signing, or along local streets where motorists have to weave into the lane in order to safely pass a bicyclist.



A shared-use path is a bikeway physically separated from motorized vehicular traffic by an open space or barrier, and is either within the public right-of-way or within an independent alignment. Shared-use paths are also used by pedestrians (including skaters, users of manual and motorized wheelchairs, and joggers) and other authorized

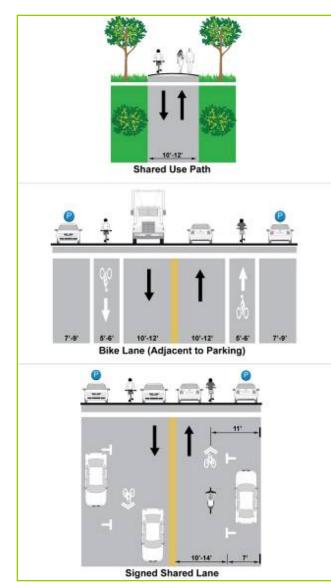


motorized and non-motorized users. Shared-use paths primarily attract recreational users, because they typically wind through and connect destinations; they also offer an opportunity to function as emergency motorized transportation routes. Shared-use paths may be the preferred facility for any cyclist uncomfortable with riding on public roadways alongside motor vehicles.

Neighborhood Greenways

Neighborhood Greenways are residential streets designed to prioritize bicycling and enhance conditions for walking. Vehicles should travel 20 mph or less. There should be a daily average of approximately 1,000 cars per day wiht the upper limit set at 2,000 cars. Neighborhood greenways typically include two shared travel lanes and two parking lanes. In order to keep people from jusing neighborhood greenways as automobile cut-through routes, speed bumps and traffic diverters are commonly installed on greenways.

Exhibit 6-1 Bikeway Facility Definitions



Implementation of these specific terms will help advance consistent dialogue between the City of McMinnville and the community regarding bicycle facility planning and design, within the context of multi-modal systems development.

Defining Bicycle Users

There are a variety of bicyclists traveling within the study area, depending on their skills, confidence and preferences. According to AASHTO,

"some riders are confident riding anywhere they are legally allowed to operate and can negotiate busy and high speed roads that have few, if any, special accommodations for bicyclists. Most adult riders are less confident and prefer to use roadways with a more comfortable amount of operating space, perhaps with designated space for bicyclists, or shared use paths that are away from motor vehicle traffic. Children may be confident riders and have excellent bike handling skills, but have yet to develop the traffic sense and experience of an everyday adult rider."

For the purpose of this study the following categories of bicycle user types are applied as the impact of different bicycle facility types are determined:

Advanced or experienced riders are generally using their bicycles as they would a motor vehicle. They are riding for convenience and speed and want direct access to destinations with a minimum of detour or delay. They are typically comfortable riding with motor vehicle traffic; however, they need sufficient operating space on the traveled way or shoulder to eliminate the need for either themselves or a passing motor vehicle to shift position.



Source: www.canada.com/ottawao/ceu/rews

Basic or less confident adult riders may also be using their bicycles for transportation purposes, e.g., to get to the store or to visit friends. This category comprises the majority of bicycle riders in any jurisdiction. They prefer to avoid roads with fast and busy motor vehicle traffic unless there is ample



roadway width to allow easy overtaking by faster

motor vehicles. Thus, basic riders are comfortable riding on neighborhood streets and shared use paths and prefer designated facilities such as bike lanes or wide shoulder lanes on busier streets.

Children, riding on their own or with their parents, may not travel as

fast as their adult counterparts but still require access to key destinations in their community, such as schools, convenience stores and recreational facilities. Residential streets with low motor vehicle speeds, linked with shared use paths and busier streets with well-defined pavement markings between bicycles and motor vehicles can accommodate children without encouraging them to ride in the travel lane of major arterials.



Source: www.indygreenways.org

Bicycle System Inventory

McMinnville's bicycle system has many excellent features but is lacking cohesiveness and connectivity. Older arterial streets were originally constructed without bicycle lanes while several of the newer arterial streets like Lafayette Avenue now have bicycle lanes. **Exhibit 6-2** maps the current bicycle system within the McMinnville urban area. As Exhibit 6-2 illustrates, several arterial streets such as Hill Road, portions of Old Sheridan Road and Highway 99W remain without designated bicycle facilities.

The McMinnville bicycle system has all three types of bicycle facilities (bike lane, shared-use path and unmarked shared roadway) illustrated in Exhibit 6-1, and these facilities are spread throughout the city.

Bicycle lanes are located throughout the City, mainly on major arterials such as Lafayette, Baker Creek Road, West Second Street and Highway 99W. There are almost seven miles of bicycle lanes on McMinnville arterial streets.

Although McMinnville's bicycle facilities cover most of the city, there are connections that need



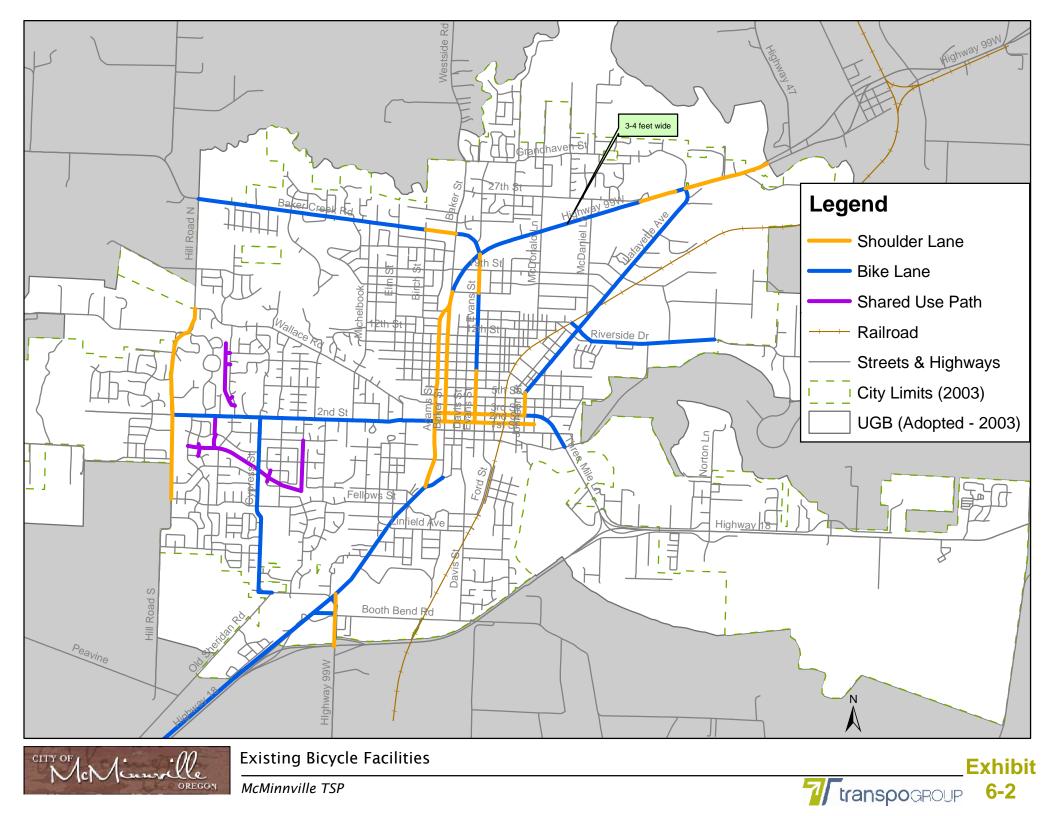
Bike Lane on Highway 99W

to be made and activity centers that should be served by adequate bicycle facilities. As mentioned above, Hill Road, Old Sheridan Road

and Booth Bend Road do not have any bicycle facilities. This lack of connectivity is a large gap in McMinnville's bicycle system. Also, as schools often serve as community hubs in addition to educational facilities, the presence of bicycle facilities near schools is a priority. Older sectors of McMinnville have schools and activity centers disconnected from bicycle facilities.



Bike Lane on Baker Creek Rd



Shared-Use Paths

Shared-use paths can be used by both bicyclists and pedestrians. As noted in Chapter 5, there are two shared-use path facilities in McMinnville: (1) the Southwest Greenway, which was also designed and functions as a linear park and a stormwater detention facility, and (2) the newly constructed shared use path, located between West Second Street and Wallace Road Combined, these facilities provide good connectivity amongst southwest and northwest neighborhoods, but do not provide significant networking capacity for cross-town cycling., nor is there much opportunity to expand the shared-use path system., except for that portion planned for extension north of Wallace Road through the Shadden Claim to Baker Creek Road

Safety Conditions

One way to improve safety conditions for cyclists is to ensure that the transportation network allows for the appropriate separation of modes. For cyclists, modal separation along high volume arterials could improve safety and increase the efficiency of the nonmotorized transportation system. Some recommendations for these types of improvements are discussed in the next section.

Bicycle Projects

A recommended list of bicycle improvement projects is generated to improve the overall safety and efficiency of McMinnville's system. An evaluation of existing bicycle conditions as well as traffic operations, safety, and connectivity issues all contributed to producing the project list.

These projects are intended to make better connections within McMinnville for all types of bicycle users. Together, these projects help complete McMinnville's bicycle system, as shown in the Bicycle System Plan Map in **Exhibit 6-3**. There are three types of projects that include bicycle elements.

Complete Street Projects – New Bicycle Lanes

As noted in Chapter 4, a number of *Complete Street* projects are recommended for reconstruction of minor arterials to include pedestrian facilities and on-street bicycle lanes. These projects add slightly more than five miles (street centerline miles) of bike lane facilities. Hill Road, Old Sheridan Road, Booth Bend Road and North Baker Street are *Complete Street* projects that will include new bicycle lanes.

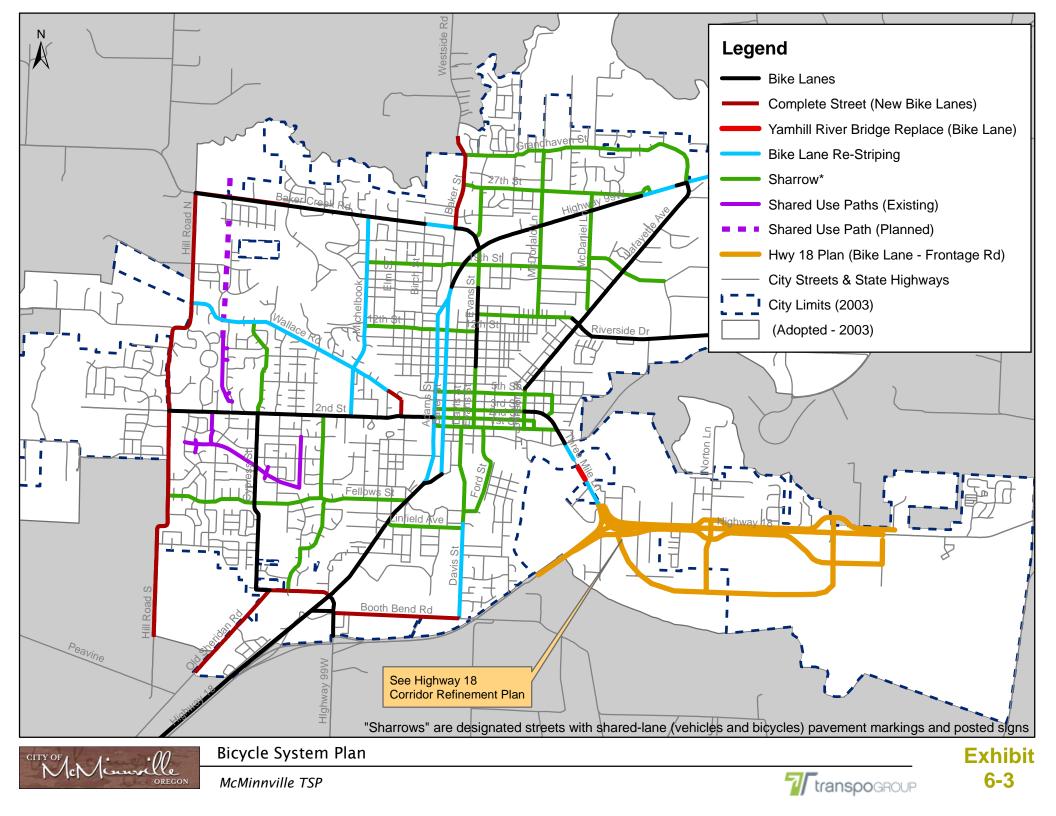
Road Diets – Re-Striping Streets to Add Bicycle Lanes

As the City considers re-striping some of its arterials with on-street bike lanes it may encounter the need to reduce travel lane widths and parking space. An excellent guide for consideration when reducing travel lane widths is Institute of Transportation Engineer's *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities.* Several existing arterial and collector streets have sufficient width that, with minor re-striping of existing travel lanes and on-street parking, can be retrofitted with on-street

bicycle lanes. These restriping projects are sometimes referred to as *Road Diets*. Approximately 5.5 miles of collector and arterial streets are recommended for re-striping.³.



Candidate for Bike Lane Striping: Michelbook



A range of streets are well-suited for Road Diet improvements. **Exhibit 6-4** shows a "before and after" example of re-striping Baker Creek Road at the Baker Street intersection. New bike lanes can be added to a short section of Baker Creek Road to complete the corridor, by reducing the travel lane widths⁴.

Exhibit 6-4 Road Diet – Baker Creek Road

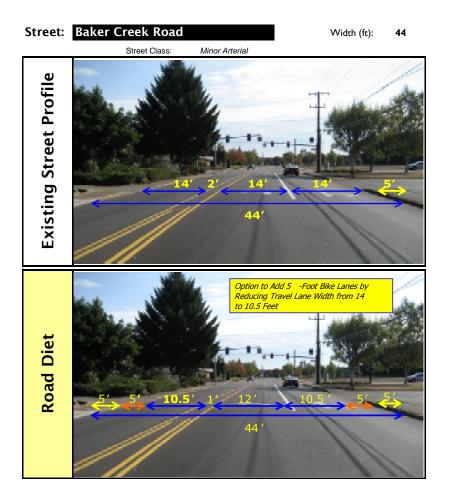


Exhibit 6-5 illustrates a similar Road Diet application on Wallace Road. Wallace Road serves largely residential traffic. The Road Diet application would yield new bicycle lanes, and with reduced travel lane widths the presiding traffic speeds may also slow to desired levels.



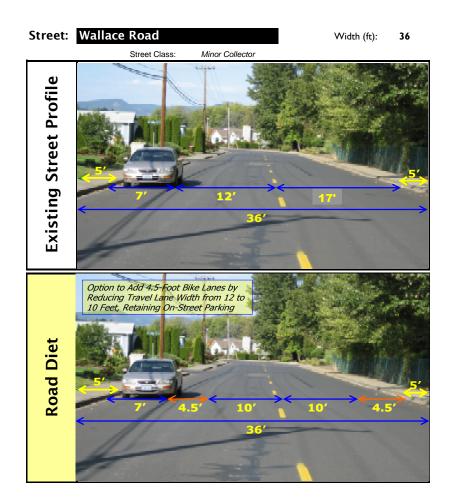
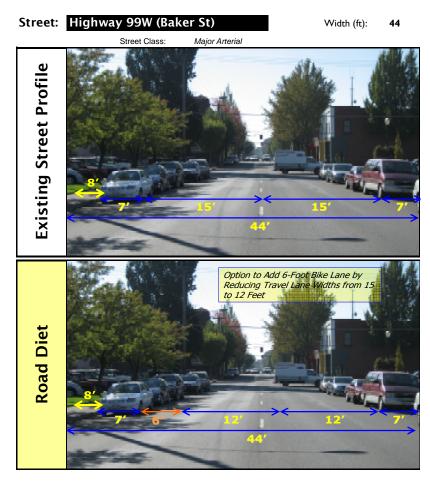


Exhibit 6-6 illustrates another Road Diet application, in this example on Highway 99W (Baker Street) within the one-way couplet section. By reducing travel lanes from 15 to 12 feet, a new 6-foot bike lane can be added.

Exhibit 6-6 Road Diet – Highway 99W (Baker Street)



Re-Striping "Sharrows" – Shared-Lane Facilities

Many other collector street and important "connector" streets in McMinnville provide direct connections for cyclists, linking neighborhoods and important activity centers. These routes, however, lack sufficient width to accommodate bicycle lanes even by employing *Road Diet* modifications. The combination of both vehicle and bicycle traffic will require additional route designation signing and markings as shared-lane facilities, routes where motor vehicles and bicyclists share the travel lane. Examples of candidate routes for sharrow designation are shown in **Exhibit 6-7**.

Exhibit 6-7 Candidate Sharrow Routes





Grandhaven

19th Street





These types of route designations are described further in the Bicycle Design Guide section below, and illustrated in **Exhibit 6-8**.

Bicycle Design Guide

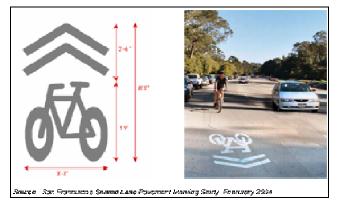
This chapter also includes recommendations for new or revised bicycle facility design guides as part of the McMinnville TSP.

Shared-Lane Symbols and Markings

In the absence of sufficient space to include on-street bicycle lanes on several of McMinnville's major streets, it is important to provide greater route designation for shared travel lanes. These shared lanes, if posted and marked appropriately, indicate presence of bicycle traffic to both the motorists and cyclists. The use of "sharrow" pavement markings has been adopted by the state of California for these conditions. Example "sharrow" pavement markings are illustrated in **Exhibit 6-8**. ODOT is expecting to include sharrows in the update of the Oregon Bicycle and Pedestrian Plan⁵.

Further statewide policy consideration may be required before application and appropriate designation of sharrow pavement markings within the City of McMinnville. The City should exercise caution in "sharrow" pavement marking placement, particularly along streets with on-street parking. See San Francisco's research and findings in report titled "San Francisco's Shared-Lane Pavement Marking Study⁶."

Exhibit 6-8 "Sharrow" Symbol and Pavement Marking



Bike Lane Symbols and Markings

The City's current design standards for bike lane symbols and markings require some minor refinement for consistency with the MUTCD. **Appendix G** summarizes the recommendations of the MUTCD.

Bicycle Route Signing

Auxiliary signs may be used with standard bicycle route signs to inform cyclists of route continuity and major cycling attractions. Examples are also shown in Appendix G. These types of signs can be effectively coordinated through a new wayfinding system.

Other Bicycle Design Features

Bicycle Parking

Some potential bicyclists are hesitant to ride for utilitarian trips because they fear their bicycles will get stolen. There is a perception that any bicycle rack or hardware is not very helpful in deterring theft. The real and perceived fear of bicycle theft is an impediment to greater bicycle ridership.

The City of McMinnville should review and consider appropriate revisions to its building code and development ordinance to help ensure the appropriate placement (convenient and safe) and number of bicycle racks through the following measures:

- Placement an adequate number of bicycle parking racks and/or lockers as needed at the appropriate destinations, such as schools and colleges, public gathering places, transit stations, bus stops, and shopping centers.
- Design—the recommended style of bicycle rack is the inverted "U" Bike Rib bicycle rack or the equivalent.
- Security—encourage employers and property owners to either provide secure bike parking near building entrances

and protected from rain, or allow secure storage inside buildings.

• Convenience—encourage merchants to provide secure, practical bicycle parking for customers (e.g. unique design requirements for the downtown McMinnville).



Difficult Intersections

Most conflicts between bicycles and motor vehicles occur at intersections and, not surprisingly, most accidents occur there. Care should be taken to design intersections that allow safe movement of cyclists. There are numerous intersection design treatments for consideration. At the very least, intersections on arterials and collectors should have clearly marked crossover zones where rightturning vehicles can mix with through bicycle traffic (see MUTCD). See Appendix G for further discussion of possible "bike box" treatments.

Drainage Grates

Drainage grates are part of the street drainage system. They capture storm water runoff that has flowed from the roadway into the gutter to be taken away via a subsurface system of pipes or to enter the groundwater through a sump. The City has already revised



their street construction standards to include bicycle-safe drainage

grates. A "bicycle safe" grate must let water pass without allowing routine types and amounts of debris to clog the inlets--and without trapping bicycle wheels. McMinnville should continue its systemwide replacement of older drainage grates with bicycle-safe grates.

Transit Access

YCAP provides bicycle racks on the front of all of their buses serving McMinnville. On the typical weekday, depending on weather conditions, these racks are often full indicating a high level of utilization. The City should continue to coordinate with YCAP to ensure that YCAP's bus fleet maintains bicycle rack access.

Bicycle Implementation Strategies

In implementing the non-motorized section of the TSP, several methods of providing bicycle facilities are currently available to the City:

- Inclusion in STIP. McMinnville should recommend to ODOT that future updates of the Statewide Transportation Improvement Program include re-striping of Highway 99W (especially the Adams-Baker one-way couplet) with bike lanes, which are prioritized in the TSP.
- Conduct further operational studies in follow-up to recommended Road Diet and Sharrow projects to document motorist and bicycle volume, speed and safety characteristics. These data can be used to determine if other sharrow designations should be replaced with onstreet bicycle lanes, which will likely require removal of some on-street parking (one or perhaps both sides of street).
- In coordination with Yamhill County and other major employers (both public and private), consider establishing a bike facility (secure parking, showers, and changing rooms) and other bicycle amenities in the downtown core area and at other major activity and employment centers.

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¹ Association of American State Highway Transportation Officials. Guide for the Development of Bicycle Facilities, Washington, D.C. 1999.

² Manual of Uniform Traffic Control Devices, U.S. Department of

Transportation - Federal Highways Administration, 2004.

³ Context Sensitive Solutions in Designing Major Urban Thoroughfares for

Walkable Communities, Institute of Transportation Engineers, 2006.

⁴ National Cooperative Highway Research Program Report 3-72. Harwood, Douglas 2008. The research found no general indication that the use of lanes narrower than 12 feet on urban and suburban arterials increases crash frequencies. This finding suggests that geometric design policies should provide substantial flexibility for use of lane widths narrower than 12 ft. ⁵ Oregon Bicycle and Pedestrian Plan, 1995, Oregon Department of

⁵ Oregon Bicycle and Pedestrian Plan, 1995, Oregon Department of Transportation.

⁶ Shared-Lane Pavement Marking Study, City of San Francisco, February 2004.



EXHIBIT 3 – STAFF REPORT

DATE: October 21, 2021

TO: McMinnville Planning Commission

FROM: Heather Richards, Planning Director

SUBJECT: G 5-21, Yamhill County Transit Area (YCTA) Transit Development Plan (TDP)

STRATEGIC PRIORITY & GOAL:

GROWTH & DEVELOPMENT CHARACTER Guide growth & development strategically, responsively & responsibly to enhance our unique character.

OBJECTIVE/S: Strategically plan for short and long-term growth and development that will create enduring value for the community

<u>Report in Brief:</u>

This is a work session to discuss the 2018 Yamhill County Transit Area (YCTA) Transit Development Plan (TDP) to the planning commission.

Due to size of the documents, they are linked below for online access, and pertinent excerpts are provided as attachments to this staff report.

Volume I of the Yamhill County Transit Area Transit Development Plan, (October, 2018) http://ycbus.org/wp-content/uploads/2018/11/YCTA-TDP_Volume-I-FINAL-10-2018.pdf

Volume II of the Yamhill County Transit Area Transit Development Plan (October, 2018) https://www.co.yamhill.or.us/sites/default/files/YCTA%20TDP_Volume%20II%20Technical %20 Memos%20%26%20Meeting%20Notes%20FINAL%2010-2018.pdf

Volume I Appendices

http://ycbus.org/wp-content/uploads/2018/11/YCTA-TDP_Volume-I-Appendices-A-G-FINAL-10- 2018.pdf

Background:

Transit service In McMinnville and the surrounding Yamhill County area comes in several forms, fixed-route bus services, dial-a-ride and commuter link bus service to other Willamette Valley cities. Yamhill County Transit Area (YCTA) operates the fixed-route. dial-a-ride and inter-city bus services in McMinnville. While the City does not directly own and operate public transit, there are many ways in which it supports transit through multl-modal system operations and project and program development. McMinnville's stated Transit System Goal per the Transportation System Plan is "to support YCTA in their goal to provide a city-wide street and sidewalk system that result in efficient transit operations (current and future) as well as safe and convenient pedestrian and bicycle access to public transportation services and facilities".

In 2017, YCTA initiated an update to their Transit Development Plan (TDP). The City of McMinnville participated in the update of the plan through the Yamhill County Transit Area Project Advisory Committee. (YCTA/PAC). The YCTA/PAC approved and recommended approval of the TDP to the YCTA Board of Directors and the Board of County Commissioners on October 2, 2018. On October 18, 2018, the Yamhill County Board of Commissioners approved the TDP.

The purpose of the TDP is to provide strategic guidance to help YCTA provide a sustainable and innovative transit system serving both urban and rural users over a 20-year period.

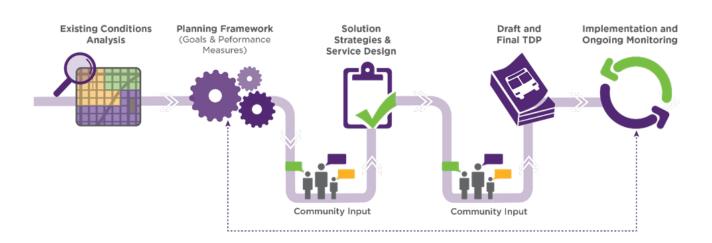
There were five strategic outcomes desired for this effort:

- Optimize and/or reorganize existing service
- Enhance physical transit infrastructure
- Provide revenue-neutral and increased funding scenarios
- Promote full range of transportation options
- Identify transit-supportive land use policies and provide local jurisdictions with guidance for planning and decision-making

This discussion will focus on the fifth outcome of identifying transit-supportive land-use policies and provide local jurisdictions with guidance for planning and decision-making.

Creating an implementable TDP required both technical analysis as well as continual input from the community and stakeholders. Figure 1-1 illustrates how the various phases of the project fit together. The process included:

- Assessing existing conditions related to usage of the current transit system, community demographics and travel patterns, and future transportation needs.
- Creating a planning framework with goals and objectives used to assess service strategies.
- Gathering community input at multiple points in the process, which provided insights into existing issues and feedback on service opportunities.
- Developing service strategies that meet the transportation needs identified through existing conditions analysis and community input. These strategies were refined and turned into a service plan covering all aspects of the system from routing and schedules to fleet, technology, system management, and fares.
- Distilling findings into a TDP document, reflecting the preferred vision for transit in Yamhill County and providing a phased approach for implementing the vision.
- Establishing a performance monitoring program based on peer analysis and industry standards to set performance measure benchmarks for YCTA to use in regularly assessing system and route-level progress.



Discussion:

Some of McMinnville's Comprehensive Plan policies that impact land-use decisions is based on an adopted Transit Plan (for example, the location of high density residential development). Currently the City of McMinnville's adopted Transit Plan is the 1997 YCTA Transit Feasibility Study. The City needs to update its 1997 adopted Transit System Plan and adopt the 2018 YCTA Transit Development Plan as a supplemental document to the McMinnville Transportation System Plan, as well as amend its Comprehensive Plan goals and policies and development code as appropriate.

Chapter X of Volume I of the YCTA TDP provides some guidance on supporting public transit with local land use policies. (Please see Attachment A). And Appendix G of Appendices of Volume I of the YCTA TDP provides a detailed assessment of McMinnville's current comprehensive plan and development code relative to supporting the YCTA TDP. (Please see Attachment B).

Since the City of McMinnville will be updating its Transportation System Plan in 2022 and 2023, staff is recommending that only the YCTA TDP is adopted as a supplemental document to the Transportation System Plan at this time and that all references to the 1997 Transit Feasibility Analysis in the McMinnville Transportation System Plan, McMinnville Comprehensive Plan and McMinnville Municipal Code be changed to the Yamhill County Transit Area Transit Development (October, 2018). Comprehensive Plan policies and the development code will be evaluated for further amendments during the Transportation System Plan update.

Provided for reference are the following documents:

Attachment C is the Transit System Plan chapter of the Transportation System Plan.

Attachment D is the highlighted transit references of the McMinnville Comprehensive Plan.

Attachment E is the highlighted transit references of the McMinnville Development Code.

Attachments:

- Attachment A: Chapter X of Volume I of the Yamhill County Transit Area Transit Development Plan, (October, 2018), *Supporting Public Transit with Local Land Use Policies*
- Attachment B: Appendix G of Appendices of Volume I of Yamhill County Transit Area Transit Development Plan, (October, 2018), *Detailed Land Use Policy Assessment*
- Attachment C: Chapter 7 of the McMinnville Transportation System Plan, *Transit System Plan*

- Attachment D: *Highlighted Transit References, McMinnville Comprehensive Plan, Volume II, Goals and Policies*
- Attachment E: *Highlighted Transit References, McMinnville Municipal Code, Title 17 McMinnville Development Code*

Fiscal Impact:

There is no immediate fiscal impact to the City of McMinnville with this action.

Recommendation:

Staff is seeking Planning Commission in put and direction on staff's recommendation regarding the phased adoption of the YCTA TDP.



Yamhill County Transit Area Transit Development Plan

Volume I

October 2018



ACKNOWLEDGEMENTS

This Project is partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation (ODOT) and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by the federal Moving Ahead for Progress in the 21st Century Act (MAP-21), local government, and State of Oregon funds. The contents of this document do not necessarily reflect views or policies of the State of Oregon.

This project was made possible by the energy and time dedicated by the project advisory committee, ODOT representatives, the Yamhill County Board of Commissioners, and members of the public who provided input at focus groups and other meetings, surveys, and events, including the Friends of the Bus.

YCTA Project Advisory Committee

Josh Simonson, City of Amity	Frank Sheridan, City of Sheridan
Andrew (Andy) Eldien, City of Carlton	Kenna West, City of Willamina – City Manager
Scott Pingel, City of Dayton	Craig Johnson, City of Willamina
Tim Weaver, City of Dundee	Bob Sivick, City of Willamina, Past City Manager
David Sword, City of Lafayette	Ken Moore, City of Yamhill
Kellie Menke, City of McMinnville	Chris Mercier, Grand Ronde
Heather Richards, City of McMinnville - Planning Director	Kristi Long, NW Senior and Disabled Services
Scott Essin, City of Newberg - City Councilor	Gregorio Benavides, Unidos (affiliate)
Pat Johnson, City of Newberg - City Councilor	Stan Primozich, YCTA Board of Directors - Transit Liaison
Joe Hannan, City of Newberg - City Manager	Rick Olson, YCTA Board of Directors – Past Transit Liaison
Brad Allen, City of Newberg - Assistant City Planner	Paul Patridge, Yamhill County, Program Mgr DD & Veterans Services
Paula Necas, City of Sheridan	

Oregon Department of Transportation Representatives

Transportation Growth Management Program (TGM)	Rail and Public Transit Division
Adam Argo, Principal Planner – Grant Manager Naomi Zwerdling, Program and Policy Lead - Past Grant Manager Michael Duncan – Sr. Planner/TGM Project Manager, Region 2	Arla Miller, Regional Transit Coordinator

YCTA Board of Commissioners

Mary Starrett, Chair Richard L. "Rick" Olson, Vice-Chair - Past Transit Liaison Stan Primozich, Commissioner - Transit Liaison

YCTA Project Team

УСТА	First Transit
Cynthia Thompson, YCTA Transit Manager	Renee Guerrero, First Transit General Manager
Shana Reid, YCTA Transit Assistant	Michael Barr, Service Supervisor
	First Transit bus drivers, dispatchers, and other staff provided valuable input and observations to the project team

Consultant Team

DKS & Associates	Nelson\Nygaard Consulting Associates	Angelo Planning Group
Bob Schulte, Project Lead	Oren Eshel, Project Manager	Darci Rudzinski
Edith Victoria, Emily Guise, Maggie Lin, and Alexis Biddle	Stephanie Wright, Jamey Dempster, Dan Sommerville, and Bryan Blanc	Shayna Rehberg

10 SUPPORTING PUBLIC TRANSIT WITH LOCAL LAND USE POLICIES

Coordinated land use and development policies can strengthen YCTA's voice in local land use changes, as well as the maintenance of bus stops and the space around them. Providing input on local zoning and development reviews, and coordinating with local business alliances can be effective in encouraging transit-supportive land uses and drawing businesses to active transit corridors. This chapter addresses transit-supportive land use policies and development code language. It identifies policy and development code elements related to transit-supportive land use and provides "model" or recommended code language that is consistent with TDP recommendations and is suitable for adoption by local jurisdictions with some modifications. Based on this model language, the project team evaluated existing comprehensive plans and development codes of jurisdictions in the YCTA service area in order to gauge what changes may be needed in order to most effectively implement the TDP.

TRANSIT-SUPPORTIVE POLICY AND CODE LANGUAGE

The vision, strategies, and solutions developed during the TDP process are implemented in a number of ways, including through local land use policies, procedures, and development requirements. Given that the local jurisdictions within the YCTA service area have land use planning and development authority, the TDP should recommend local land use policy and procedures that support transit and are consistent with the recommendations from this planning process.

Comprehensive plan policies provide long-range land use and transportation planning direction. Specific policies are recommended to provide consistency with the TDP as well as a solid foundation for transit-supportive land use and transportation implementation going forward.

Development requirements support the implementation of transit-supportive improvements in several ways, including locally adopted provisions required by the Oregon Transportation Planning Rule (TPR) for communities with existing or planned transit service.²¹ Adopting transit-supportive development requirements may entail replacing or otherwise modifying existing local development requirements, adding to existing requirements, or some combination thereof.

Recommended Comprehensive Plan Policies

The recommended policies below draw from a number of references and resources and reflect the TDP project scope, TDP recommendations, and TPR requirements. Model policies also provide a basis for recommended development code amendments, discussed in the next sub-section. Recommended policy language addresses the following overarching topic areas:

- Planning for transit-dependent populations
- Establishing the YCTA TDP as a guidance document
- Coordinating with YCTA
- Implementing transit-supportive improvements

²¹ Oregon Administrative Rules (OAR) 660-012-0045(4)

The full suite of recommended policies is not necessarily appropriate in the smallest communities in the YCTA service area, where transit service may be limited and it is sufficient to more broadly address the topic areas represented by the recommended policies. All policies can be modified to fit local plan format and better reflect specific local conditions and interests.

Figure 10-1 Recommended Comprehensive Plan Policies

	Planning for Transit-Dependent Populations
1	
1.	The [City/County] will facilitate transit service for its community members, with special attention to the needs of members who may be classified as "transit dependent" due to factors such age, income, and/or disabilities.
	Establishing the YCTA TDP as a Guidance Document
2.	The Yamhill County Transit Area Transit Development Plan provides the policy and implementation direction for [City/County] transit planning, which includes route development, financing, and physical improvements necessary to maintain and improve public transit service for [City/County] residents, businesses, and visitors.
3.	Transit improvements within the [city/county] shall be guided by the findings and recommendations of the Yamhill County Transit Area Transit Development Plan.
4.	The [City/County] will seek to implement, through capital improvement projects and private development requirements, improvements that encourage increased transit use and are consistent with and supportive of the Yamhill County Transit Area Transit Development Plan recommendations.
5.	The [City/County] will support higher-density and mixed-use land use around transit stops and in transit corridors to make transit service more feasible and effective.
6.	In lower-density areas, the [City/County] will support park-and-ride/rideshare facilities, demand-responsive and flexible transit services, and other facilities and services that are appropriate where it is less feasible to serve the area with fixed-route transit.
	Coordinating with YCTA
7.	The [City/County] will invite transit service providers to participate in long-range and comprehensive land use planning projects in order to optimally coordinate land use and transit service.
8.	The [City/County] will invite transit service providers to participate in the review of land use applications that may have implications for transit service or impacts to transit facilities.
9.	In planning for and implementing capital projects, the [City/County] will coordinate with Yamhill County Transit Area, Oregon Department of Transportation (ODOT), and other road authorities if applicable to preserve or improve existing and planned transit stop amenities and connections (e.g., sidewalks).
10.	The [City/County] will work with Yamhill County Transit Area to site and implement needed transit stops and park-and-ride lots within the [city/county] in support of the district-wide public transit system, with an emphasis on sites that are safe and convenient for riders.
11.	The [City/County] will participate in Yamhill County Transit Area's efforts to promote and implement rideshare and other transportation demand management programs for reducing motor vehicle travel demand on State highways.
	Implementing Transit-Supportive Improvements
12.	The [City/County] will prioritize the improvement of pedestrian and bicycle network gaps and substandard facilities along and adjacent to transit corridors in its long-range transportation planning and capital improvement programming.
13.	The [City/County] will support improvements such as pedestrian and bicycle connections, shelters, easements for shelters and/or landing pads, and lighting to complement transit service and encourage increased transit use. Transit stop improvements shall be coordinated with the transit service provider.
14.	The [City/County] will work to improve safety for transit riders through the local planning and development review process, helping to ensure safe locations of transit stops and safe connections to transit stops, including roadway crossings.
15.	The [City/County] will prioritize improvements to the [City's/County's] pedestrian environment that increase safe and attractive access to transit, including lighting, landscaping, public art, marked and protected crossings, and curb ramps.
16.	The [City/County] will establish and implement development requirements that provide preferential parking for ridesharing and allow parking areas to be used for park-and-ride, rideshare, and transit-related facilities.

Summary of Local Policy Assessment

Existing transportation policies (Comprehensive Plans and Transportation System Plans or TSPs) were reviewed for consistency with recommended policies. Key findings are provided below; Appendix G provides the overall assessment (Figure G-1).

Overall, the evaluation found that all the jurisdictions should adopt more specific transit-supportive polices into their comprehensive plan policies, particularly related to establishing transit plans as guiding documents and instituting planning and permitting coordination between local jurisdictions and transit agencies. The following is an overview of evaluation findings by policy category and by jurisdiction size:

- Planning for transit-dependent populations. This policy area showed the most consistency between existing and recommended policy. Many jurisdictions make supportive policy statements about low-income, disabled, and senior populations in their communities, although not always explicitly in relation to transit service.
- **Establishing the YCTA TDP as a guidance document.** Existing policies were partially to minimally consistent in this category; typically, while policy may commit to improving and promoting transit, transit plans are not identified as a basis for these actions.
- **Coordinating with YCTA.** The highest levels of inconsistency were found in this category, where coordination with transit service providers is generally not addressed, whether for land use planning and development, transit-supportive improvements, or transit-supportive programs.
- Implementing transit-supportive improvements. Jurisdictions varied widely (from minimally to mostly consistent) in how their policies committed to transit-supportive requirements, including transit stop improvements, safe crossings, pedestrian environment improvements, prioritization of improved pedestrian and bicycle connections to transit, parkand-ride facilities, and TDM/ridesharing programs.
 - McMinnville provides the strongest transit-supportive policy basis of the larger jurisdictions. However, as discussed in the development code review (see Appendix G), its development code does not appear to have been updated recently and it does not robustly reflect these policies.
 - Of the smaller jurisdictions, Carlton's and Willamina's policies are among the most consistently transit-supportive. Their policies commit to serve the transportationdisadvantaged, ensure transportation improvements are consistent with transportation plans, coordinate with transit service providers in addressing transit service needs, and implement transit-supportive improvements.

Local policies, even those found to be largely consistent with recommended policies, should be strengthened using recommended transit-supportive language when amendment opportunities arise (e.g., a TSP update). These opportunities are further discussed in the Best Practices section below.

See Appendix G for detailed policy language recommendations and the assessment of local policies (Figure G-1).

Recommended Development Code Language

This section identifies areas of the development code that relate to transit (see Figure 10-2); Appendix G provides sample code language that reflects the TDP objectives and the recommendations, is supported by the Comprehensive Plan policies recommended above, and is consistent with the TPR. The recommended development code language is intended to be a reference for code updates in all of the jurisdictions in the YCTA service area.

Coo	ordination with Transit Agencies
1.	Pre-Application Conference
2.	Application Review
3.	Hearing Notice
Acc	cess to Transit and Transit-Supportive Improvements
Site	Access
4.	Access between the Site and the Street
5.	Access to the Transit Stop and Supportive Improvements
Are	a Access
6.	Off-Site Access to Transit Stops
Oth	er Transit-Related Development Requirements
Veł	nicle Parking
7.	Transit-Related Uses/Facilities in Parking Areas
8.	Carpool/Vanpool Parking
9.	Maximum Parking Requirements
10.	Reduced Parking Requirements
11.	Parking Area Landscaping
Bic	ycle Parking
12.	Minimum Bicycle Parking Requirements
Urb	an Form
13.	Maximum Building Setbacks

Figure 10-2 Recommended Development Code Language

See Appendix G for detailed recommended development code language.

Summary of Local Development Code Assessment

An evaluation of existing development code language in YCTA service area jurisdictions revealed the need for strengthened language related to transit. This section provides key findings; Appendix G (Figure G-2) provides the detailed evaluation.

As established in Technical Memo #3 (Planning Framework) and summarized in TDP Chapter 2, the largest amount of development is expected to occur in Newberg and McMinnville. These two cities are a focus of service improvements proposed in the TDP; consequently, the evaluation of existing development code also focused on these cities. The evaluation, provided in Appendix G (Figure G-2), shows varying levels of consistency between recommended transit-supportive development code language and existing Newberg and McMinnville development code language. Even though McMinnville is the larger of the two jurisdictions, it appears that Newberg's development code has been updated more recently and has sets of transit-specific development requirements that McMinnville's does not. However, both of the cities can improve the transit orientation of their communities by adopting recommended development code language into code sections found to be less than consistent, either as new code sections or as modifications to existing code sections.

The evaluation indicates several opportunities for McMinnville and Newberg to improve existing development code provisions, particularly regarding application review coordination and requirements for transit stop improvements and other transit-related improvements. The following is an overview of evaluation findings by development code category:

- Coordination with transit agencies. Newberg and McMinnville may have a practice of consulting with YCTA about land use applications, but this practice is not formalized in their development codes. In addition, code requirements that address coordination and notification do not clearly differentiate notice of application review from notice of public hearing, which are potentially two separate opportunities in which to engage transit agencies.
- Access to transit and supportive improvements. While both Newberg and McMinnville require pedestrian access from development sites to the street, only Newberg has requirements specific to transit access and transit stop improvements. McMinnville more strongly supports offsite access to transit in terms of smaller required block sizes and clearer language about pedestrian and bicycle access ways.
- Other transit-supportive requirements:
 - Vehicle parking. Only Newberg has code provisions allowing transit-related uses in parking areas and requiring preferential parking for carpools and vanpools. Neither jurisdiction establishes maximum off-street parking requirements. However, the cities have adopted other effective forms of parking management (e.g., no parking requirements and large reductions in requirements in the densest parts of the cities).²² Both cities require some level of parking lot landscaping; these requirements could be enhanced to provide even better pedestrian environments.
 - Bicycle parking. Existing development code requirements in Newberg address bicycle parking for transit transfer stations, but not regular transit stops. McMinnville's code requires bicycle parking for uses only in commercial zones and does not address transit uses in any zone.
 - Urban form. Newberg requires minimum setbacks and relatively large maximum setbacks in commercial zones; McMinnville establishes maximum setbacks in the central commercial zone only in downtown. Both cities should review existing setback requirements and consider setbacks for development on OR 99W that will enhance the pedestrian environment and promote transit.

Incorporating more transit-supportive language into each city's development code could be dovetailed with a legislative amendment process such as a TSP update. This is discussed in more detail in the Best Practices section.

See Appendix G for detailed development code language recommendations and the assessment of local development codes (Figure G-2).

²² While existing development code language in Newberg and Dundee does not include maximum off-street parking requirements, there are cases where the cities do not require off-street parking, which is an even more robust measure for managing parking and encouraging transit, or they allow drastically reduced parking requirements. (See the evaluation summarized in Figure G-2 for more details.) It is recognized that these parking strategies are most appropriate and effective in the densest, most urbanized parts of the YCTA service area.

BEST PRACTICES FOR TRANSIT-SUPPORTIVE LAND USE

Best practices to strengthen the connection between transit and land use generally fall into two arenas: increased collaboration between transit agencies and local jurisdictions during long-range transit and land use planning and transit agency participation in land use (development) permitting.

Long-Range Planning

Both transit agencies and local jurisdictions engage in long-range planning processes, and transit and land use can become more integrated through coordination between agencies during their respective long-range planning activities. Transit agencies can engage a variety of local jurisdiction staff, in addition to other community stakeholders, in their long-range planning processes. Local jurisdiction staff can include departments such as planning and community development, public works and engineering, and business and finance. In some unique cases, cities and counties have staff dedicated to transit services and coordination. Cities and counties conduct multiple long-range, comprehensive planning processes that can have a bearing on transit. Including transit agencies on advisory committees is particularly important for the development of concept or area plans and TSPs. Concept and area plans are prepared for new urban growth areas. TSPs, pursuant to the TPR, must include a transit element. Therefore, both of these planning processes present prime opportunities to create more transit-oriented land use and transportation plans.

Transit-Supportive Policy and Code

Long-range transit and land use planning processes should involve the development and adoption of transit-supportive policy and code language. These plans are typically adopted through a legislative process that involves public hearings, which is also the level of review needed for changes to city and county comprehensive plan policies and development code language.

While the TDP policy and code language constitutes a strong base of model language to draw from, the language is built on best practices to-date. Model language should continue to be strengthened, and one example of this is related to development code thresholds for requiring developers to make or plan for transit stop improvements. Conversations with transit and transportation planners have suggested that the threshold be not just sites that are adjacent to existing or planned transit stops (and more particularly stops with frequent service), but sites where a minimum number of employees are projected. Additionally, the thresholds could include comprehensive plan and zoning changes that increase density.

As found in the reviews of policy and development code consistency (previous section), all jurisdictions in the YCTA service area could benefit from integrating recommended transit-supportive policy language and development requirements into their comprehensive plan policies and development codes. A TSP update process provides a natural opportunity to address implementation measures, including new transit-supportive policies and code. However, if a jurisdiction has been through a TSP update process in the last few years, another update is not likely in the near term. For these jurisdictions, adoption of recommended policy and code language could potentially be folded in with other legislative amendment procedures (e.g., other comprehensive plan and development code updates).

Development Permitting

Development permitting presents numerous opportunities for collaboration between transit agencies and local jurisdictions. As indicated in the recommended transit-supportive development requirements, there are multiple points in the development permitting process during which transit service providers could participate—at the pre-application stage where the development proposal is first vetted with the local jurisdiction; after the development proposal is submitted and the jurisdiction's review of the proposal begins; and shortly before and during the public hearing and permitting decision stage, when the local jurisdiction's staff report is being completed and testimony regarding the proposal is collected. Involvement at these points in the process can translate into needed transit improvements being identified early and, thus, included in the development proposal and/or transit improvements being required as a condition of development approval.

In some transit districts, local jurisdiction planning staff already have a practice of informing transit service providers about development applications, or transit service providers routinely inquire about new development applications, whether through informal contact with planning staff or through relationships with developers. In this way, transit service providers can be involved in the development process and advocate for transit improvements that are generally or specifically called for in a transit plan. In some cases, notice and involvement is required by the development code and in some cases, it is not. Similarly, in some instances, transit-supportive improvements are required in code (e.g., transit stop access and improvements) and the transit agencies ensure that the requirement is fulfilled consistent with their own transit planning. When the improvements are not required in code, it is still possible that they will be implemented if planning staff or the transit service provider are present at key points in the development review process to identify improvements called for in the agency's transit plan. These cases underline that, while transit-supportive coordination and improvements may occur without codification, their implementation will be stronger and more consistent if codified.



Yamhill County Transit Area Transit Development Plan

Volume I Appendices

October 2018



Adopted October 18, 2018

This Project is partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation (ODOT) and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by the federal Moving Ahead for Progress in the 21st Century Act (MAP-21), local government, and State of Oregon funds. The contents of this document do not necessarily reflect views or policies of the State of Oregon.

APPENDIX G

Detailed Land Use Policy Assessment

APPENDIX G DETAILED LAND USE POLICY ASSESSMENT

This section supplements Chapter 10 in the TDP. It provides an assessment of local jurisdiction's Comprehensive Plan policies and development codes for consistency with TDP objectives and recommendations.

TRANSIT-SUPPORTIVE POLICY AND CODE LANGUAGE

Recommended Comprehensive Plan Policies

Chapter 10 of the TDP provides comprehensive plan recommendations.

Recommended Development Code Language

This section presents sample development code language that reflects the TDP objectives and the recommendations, is supported by the Comprehensive Plan policies recommended above, and is consistent with the TPR. The recommended code language includes the following topic areas:

- Coordination with transit agencies
- Access to transit
- Transit-supportive improvements
- Other transit-related development requirements (vehicle parking, bicycle parking, and urban form)

The recommended development code language is intended to be a reference for code updates in all of the jurisdictions in the YCTA service area. Source material includes the State of Oregon Transportation and Growth Management Model Development Code for Small Cities, 3rd Edition ("Model Code") as well as exemplary language from other locally adopted code and ordinances in Oregon. While all of the recommended language should be reviewed for local applicability and modified as needed, language shown [in brackets] is text that must be customized to the jurisdiction.

An evaluation of existing development code language in YCTA service area jurisdictions revealed the need for strengthened language related to transit. The evaluation is summarized in Figure G-2. While the evaluation targets the two largest cities in the YCTA service area, the following sets of model development code language are intended for consideration by all the jurisdictions in the service area, as code update opportunities arise.

Coordination with Transit Agencies

Improving coordination with transit agencies is a key part of implementing the TDP and improving transit service and facilities in Yamhill County. Therefore, it is recommended that YCTA, or transportation

facility and service providers generally, be included in the development application process when applications may affect an existing or planned facility or service.

1. Pre-Application Conference

The following language would ensure that YCTA and other transportation service providers have the opportunity to be involved in development review early in the project evaluation process.

The [City/County Community Development/Planning Director/City Manager or designee] shall invite [City/County] staff from other departments to the pre-application conference to provide technical expertise applicable to the proposal, as necessary. Other staff from public agencies whose facilities or services may be affected by the proposal, including transportation and transit agency staff, shall also be invited to participate in the pre-application conference.

2. Application Review

Cities have discretion in involving other agencies in application review. Notification of transit service providers, or transportation facility providers more generally, is typically not explicitly required. The lack of requirements that would allow providers to participate in application review does not reflect the need for stronger coordination between agencies – particularly local jurisdictions, ODOT, and YCTA – that have been identified during the TDP process.

For applications that involve administrative review with notice (e.g., Type II procedures) and quasijudicial review (e.g., Type III procedures), the following language is recommended:

Referrals [requests to review and comment on the application] shall be sent to interested and affected agencies. Interested agencies include but are not limited to [City/County] departments, police department, fire district, school district, utility companies, and applicable City, County, and State agencies. Affected agencies include but are not limited to the Oregon Department of Transportation and Yamhill County Transit Area.

3. Hearing Notice

Another opportunity for involving transit and transportation agencies in the development review process occurs at the time of public hearing, including the time soon before the hearing when the staff report is being completed. It is recommended that hearing notice provisions be clearly differentiated from application notice provisions, and that they require that notice be sent to agencies such as YCTA, whose facilities or services may be affected by the proposed land use action.

Notice of a pending quasi-judicial public hearing shall be given by the [City/County Community Development/Planning Department] in the following manner:

A. At least [twenty] days prior to the scheduled hearing date, notice shall be sent by mail to:

Any governmental agency or utility whose property, services, or facilities may be affected by the decision. Agencies include and are not limited to: [list of agencies appropriate to jurisdiction, e.g., counterpart County or City Planning/Community Development, ODOT, ODOT Rail, ODOT Transit, railroad, Port, school district, Yamhill County Transit Area, and other transit/transportation service providers].

Access to Transit and Transit-Supportive Improvements

A fundamental set of development requirements to support transit includes provisions that ensure that community members can easily get to transit stops and that the stops are appropriately furnished with transit-supportive facilities and features. The following recommended language addresses active transportation access to transit facilities.

Site Access

4. Access between the Site and the Street

One element of providing access to transit is establishing connections between the site and the street where there is existing or planned transit service. In particular, development plans should show how pedestrians safely and conveniently travel through the site and to facilities such as sidewalks and transit stops that are adjacent to or near the proposed development. Existing development code provisions in the two cities require connections between the building entrances and street and sidewalk for at least some forms of development.

The following recommended language should be established for all development and zones that may be served with transit.

Pedestrian Access and Circulation

Standards. Developments shall conform to the following standards for pedestrian access and circulation:

A. Continuous Walkway System. A pedestrian walkway system shall extend throughout the development site and connect to adjacent sidewalks, if any, and to all future phases of the development, as applicable.

5. Access to the Transit Stop and Supportive Improvements

Requiring safe and convenient connections between buildings and transit stops can also benefit transit riders. As suggested below, pedestrian access to transit can be part of a larger section of transit-specific development code provisions addressing building orientation, as well as the features and improvements that are needed as part of the transit stop itself. Requirements could be specified to be applicable only to existing or planned transit stops with higher-frequency service (e.g., headways of 30 minutes or less).

Transit Access and Supportive Improvements

Proposed development that includes or is adjacent to an existing or planned transit stop shall provide or plan for access to the transit stop and, where determined necessary in consultation with [applicable transit service providers], provide transit-supportive improvements consistent with adopted or approved transportation and/or transit plans. Requirements apply where the subject parcel(s) or portions thereof are within [200] feet of a transit stop. Required transit-supportive improvements may include, but are not limited to, the following:

- <u>A.</u> Intersection of mid-block traffic management improvements to allow for pedestrian crossings at transit stops.
- B. Reasonably direct pedestrian connections between building entrances on the site and adjacent streets with planned or existing transit stops. For the purpose of this Section, "reasonably direct" means a route that does not deviate

Yamhill County Transit Development Plan | Appendix G

unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.

- C. Building placement within [20] feet of one of the following:
 - 1. the existing or planned transit stop;
 - 2. a pedestrian plaza adjacent to the transit stop;
 - 3. a street with an existing or planned transit stop;
 - <u>4.</u> a street that intersects the street with an existing or planned transit stop; or
 - 5. a pedestrian plaza at the intersection of streets where one street has an existing or planned transit stop.
- D. Transit passenger landing pads that are ADA accessible and built to transit agency standards.
- E. An easement or dedication for transit stop improvements and an underground utility connection if improvements are identified in an adopted or approved plan.
- F. Lighting at the transit stop, to transit agency standards.
- <u>G.</u> Other improvements for the transit stop adjacent to the site identified in an adopted or approved plan and coordinated with the transit agency.

Area Access

6. Off-Site Access to Transit Stops

Access to transit may require improvements that extend off-site, beyond the site adjacent to the stop. Offsite access is provided through a combination of:

- 1. A connected roadway system (with pedestrian and bicycle facilities), which is primarily addressed in the transportation system planning process; and
- 2. Pedestrian and bicycle access ways between roadways, which can be addressed in the development code.

The following recommended language addresses access ways.

Pedestrian and Bicycle Access Ways

The [decision body] in approving a land use application with conditions may require a developer to provide an access way where the creation of a street consistent with street spacing standards is infeasible and the creation of a cul-de-sac or dead-end street is unavoidable. An access way provides a connection through a block that is longer than established standards or connects the end of the street to another right-of-way or a public access easement. An access way shall be contained within a public right-of-way or public access easement, as required by the [City/County]. An access way shall be a minimum of [10]-feet-wide and shall provide a minimum [6]-foot-wide paved surface or other all-weather surface approved by the [City/County decision body]. Design features should be considered that allow access to emergency vehicles but that restrict access to non-emergency motorized vehicles.

Other Transit-Related Development Requirements

Other development code provisions that can implement the TDP and policies recommended in this memorandum include requirements related to vehicle parking, bicycle parking, and urban form. These provisions may appear less directly related to transit than the previous recommendations regarding coordination with transit agencies, access to transit stops, and transit stop improvements. However, they contribute to creating safe and inviting pedestrian and bicycling environments; a successful transit system relies on safe and convenient access to transit by multiple modes. Therefore, the following suggested code requirements are part of a comprehensive set of strategies to support and promote transit in the YCTA service area.

Vehicle Parking

7. Transit-Related Uses/Facilities in Parking Areas

Bus stops and designated park-and-ride areas in parking lots may informally exist in parking areas in the YCTA service area. To codify these uses and to comply with a subsection of the TPR specifically addressing these uses²⁸, the language below is recommended for integration into code sections regarding off-street parking.

Parking spaces and parking areas may be used for transit-related uses such as transit stops and park-and-ride/rideshare areas, provided minimum parking space requirements can still be met.

8. Carpool/Vanpool Parking

As recommended in the TDP, ridesharing can complement transit and may be more accessible to parts of communities within the YCTA service area that are less dense and more distant from fixed route service. Accordingly, it is important to support ridesharing, and providing preferential parking is one way of supporting ridesharing through development requirements. The following recommended language targets commuting and reflects TPR language specific to this topic.²⁹

Parking areas that have designated employee parking and more than 20 automobile parking spaces shall provide at least 10% of the employee parking spaces (minimum two spaces) as preferential carpool and vanpool parking spaces. Preferential carpool and vanpool parking spaces shall be closer to the employee entrance of the building than other parking spaces, with the exception of ADA accessible parking spaces.

9. Maximum Parking Requirements

Maximum off-street parking requirements help manage parking and encourage the use of transit, typically in denser, urban areas. While these requirements are recommended in the YCTA service area, their applicability can be specified for sites adjacent to transit stops and transit routes and/or for more urban-oriented zones where transit stops may be most likely to be located (e.g., central or general commercial zones).

Maximum Number of Off-Street Automobile Parking Spaces. The maximum number of offstreet automobile parking spaces allowed per site equals the minimum number of required spaces, pursuant to Table [____], multiplied by a factor of:

²⁸ OAR 660-012-0045(4)(e)

²⁹ OAR 660-012-0045(4)(d)

- A. [1.2] spaces for uses fronting a street with adjacent on-street parking spaces; or
- B. [1.5] spaces, for uses fronting no street with adjacent on-street parking; or
- C. A factor determined according to a parking analysis.

10. Reduced Parking Requirements

Similar to maximum parking requirements, allowing reductions in off-street parking requirements – where, for example, a site is adjacent or close to a transit stop – helps manage parking and supports the use of transit.

Modification of Off-Street Parking Requirements

The applicant may propose a parking space standard that is different than the standard in Section [____], for review and action by the [Community Development Director] through a [variance procedure], pursuant to [____]. The applicant's proposal shall consist of a written request and a parking analysis prepared by a qualified professional. The parking analysis, at a minimum, shall assess the average parking demand and available supply for existing and proposed uses on the subject site; opportunities for shared parking with other uses in the vicinity; existing public parking in the vicinity; transportation options existing or planned near the site, such as frequent transit service, carpools, or private shuttles; and other relevant factors.

The [Community Development Director/Planning Director] may reduce the off-street parking standards without a [variance procedure] for sites with one or more of the following features:

- A. Site has a transit stop with existing or planned frequent transit service (30-minute headway or less) located adjacent to it, and the site's frontage is improved with a transit stop shelter, consistent with the standards of the applicable transit service provider: Allow up to a 20 percent reduction to the standard number of automobile parking spaces;
- B. Site has dedicated parking spaces for carpool/vanpool vehicles: Allow up to a 10 percent reduction to the standard number of automobile parking spaces;
- <u>C.</u> Site has dedicated parking spaces for motorcycle and/or scooter or electric carts: Allow reductions to the standard dimensions for parking spaces and the ratio of standard to compact parking spaces;
- D. Site has more than the minimum number of required bicycle parking spaces: Allow up to a 10 percent reduction to the number of automobile parking spaces.
- E. On-street parking spaces are adjacent to the subject site in amounts equal to the proposed reductions to the standard number of parking spaces.

11. Parking Area Landscaping

Parking area landscaping is a significant, yetoften underestimated, element in creating an attractive environment for walking, rolling, and taking transit. Requirements for landscaping around the perimeter of parking areas help to screen and soften the effect of large areas of pavement and create an inviting active transportation environment. Internal parking area landscaping breaks up large areas of pavement and, along with walkways, provides an inviting and less intimidating experience of crossing a parking area to access a sidewalk and a transit stop.

The following recommended language addresses both perimeter and internal parking area landscaping.

Parking Lot Landscaping. All of the following standards shall be met for each parking lot or each parking bay where a development contains multiple parking areas:

- A minimum of [10] percent of the total surface area of all parking areas, as measured around the perimeter of all parking spaces and maneuvering areas, shall be landscaped. Such landscaping shall consist of canopy trees distributed throughout the parking area. A combination of deciduous and evergreen trees, shrubs, and ground cover plants is required. The trees shall be planned so that they provide [a partial / # percent] canopy cover over the parking lot within [#] years. At a minimum, one tree per [12] parking spaces on average shall be planted over and around the parking area.
- B. All parking areas with more than [20] spaces shall provide landscape islands with trees that break up the parking area into rows of not more than [10-12] contiguous parking spaces. Landscape islands and planters shall have dimensions of not less than [48] square feet of area and no dimension of less than [6] feet, to ensure adequate soil, water, and space for healthy plant growth;
- C. All required parking lot landscape areas not otherwise planted with trees must contain a combination of shrubs and groundcover plants so that, within [2] years of planting, not less than [50-75] percent of that area is covered with living plants; and
- D. Wheel stops, curbs, bollards or other physical barriers are required along the edges of all vehicle-maneuvering areas to protect landscaping from being damaged by vehicles. Trees shall be planted not less than [2] feet from any such barrier.
- <u>E.</u> Trees planted in tree wells within sidewalks or other paved areas shall be installed with root barriers, consistent with applicable nursery standards.

Screening Requirements. Screening is required for outdoor storage areas, unenclosed uses, and parking lots, and may be required in other situations as determined by the [City/County decision body]. Landscaping shall be provided pursuant with the standards of subsections [-], below:

A. Parking Lots. The edges of parking lots shall be screened to minimize vehicle headlights shining into adjacent rights-of-way and residential yards. Parking lots abutting sidewalk or walkway shall be screened using a low-growing hedge or low garden wall to a height of between [3] feet and [4] feet.

Maintenance. All landscaping shall be maintained in good condition, or otherwise replaced by the property owner.

Bicycle Parking

12. Minimum Bicycle Parking Requirements

In addition to generally encouraging active transportation and addressing TPR provisions, ³⁰ establishing minimum bicycle parking requirements also supports the use of transit, accommodating customers bicycling to a transit stop. To this end, it is recommended that requirements for the minimum number of bicycle parking spaces at transit stops and transit centers be established.

³⁰ OAR 660-012-0045(3)(a)

Bicycle Parking

Table Minimum Required Bicycle Parking Spaces		Long- and Short-Term Bicycle Parking
Use	Minimum Number of Spaces	As % of Minimum Required Bicycle Parking Spaces
Transit Stops	2 spaces	100% short-term ^a
Transit Centers	4 spaces or 1 per 10 vehicle spaces, whichever is greater	50% long-term ^b 50% short-term ^a

a. Short-term bicycle parking is parking intended to be used for durations less than two hours. Short-term bicycle parking shall consist of a stationary rack or other approved structure to which the bicycle can be locked securely and shall be located within 50 feet of the main building entrance or one of several main entrances, and no further from an entrance than the closest automobile parking space. Shelter or cover may be required for a specified percentage of short-term parking.

b. Long-term bicycle parking is parking intended to be used for durations over two hours. Long-term parking shall consist of a lockable enclosure, a secure room in a building on-site, monitored parking, or another form of fully sheltered and secure parking.

Urban Form

13. Maximum Building Setbacks

Buildings that are built to the front property line, or close to it, are recognized as a key urban design element in creating pedestrian-friendly, walkable environments. One mechanism for achieving building presence on the street frontage is establishing maximum front yard setbacks, requiring buildings to be located no more than a certain distance from the right-of-way. Maximum setbacks in urban commercial areas typically vary from 0 to 10 feet. A related but slightly less powerful mechanism is establishing no minimum front yard setbacks, allowing buildings to be located up to the right-of-way but also allowing them to be set further back, without a limit on that distance.

This development code concept is reinforced by questions raised during the TDP process about buildings along OR 99W being set far back, making transit stops along the highway less accessible and viable. To that end, front yard setback requirements in zones that front OR 99W in Newberg and McMinnville – the Community Commercial (C-2) and Central Business District (C-3) zones in Newberg and General Commercial (C-3) zone in McMinnville – were evaluated against the recommended language presented below. While maximum setback requirements or no minimum setback requirements are established in two of these three zones, the requirements should be further strengthened specifically for development along OR 99W.

As a note, maximum setback requirements can be refined to allow for a front yard setback, or a greater setback, when a plaza or other pedestrian amenity is provided.

Development Standards.

Setback Requirements.

- 1. Minimum front yard setback: none
- 2. Maximum front yard setback: [0-10] feet

EVALUATION OF LOCAL JURISDICTION POLICIES AND DEVELOPMENT CODE

Policy Consistency

This section supplements the Summary of Local Policy Assessment section in Chapter 10 of the TDP. It describes an assessment of existing transportation policies found in the Comprehensive Plans and Transportation System Plans (TSPs) of each jurisdiction in the YCTA service area. These policies were reviewed for consistency with the recommended policies. Findings of consistency are summarized in Figure G-1.

In general, the evaluation checked to see whether existing policies address topics covered in the recommended policies. In the larger jurisdictions where more robust transit service is expected, the evaluation sought to find each of the recommended policies represented in existing policies in some way. In smaller jurisdictions, the evaluation determined whether the four categories of recommended policies were more generally represented in existing policies. To this end, findings of "consistent," "mostly consistent," "partially consistent," "minimally consistent," and "inconsistent" were made, and are supported by brief explanations in Figure G-1.

Figure G-1 Evaluation of Policy Consistency

	Planning for Transit-Dependent Populations	Establishing the YCTA TDP as a Guidance Document	Coordinating with YCTA	Implementing Transit-Supportive Improvements
		Larger Jurisdict	ions	
Yamhill County	CONSISTENT Existing policy addresses transit accessibility for transportation- disadvantaged groups.	PARTIALLY CONSISTENT Existing policy addresses service improvements but in a very general way and without a connection to a transit agency plan. (The Yamhill County Coordinated Human Services Public Transportation Plan is referred to in existing policy.)	PARTIALLY CONSISTENT Existing policy calls for implementing transit stops/centers and park-and- rides identified in the Coordinated Human Services Public Transportation Plan and generally for provision of basic improvements (shelters and benches).	MINIMALLY CONSISTENT An existing goal generally calls for working with transit agencies to provide transit service and improvements, but more detailed policy is not provided beyond this goal.
Newberg	CONSISTENT Existing policy commits the City to supporting a regional transit service that addresses the needs of disadvantaged residents, as well as ensuring that transit services and transportation facilities are ADA accessible.	PARTIALLY CONSISTENT Existing policy identifies a number of potential service improvements (e.g., commuter service to the Portland area) and commits to higher density development near transit corridors but does not establish that these transit-supportive actions and improvements are based on a transit plan	MINIMALLY CONSISTENT Existing policy commits the City to providing transit options for area residents, supporting the formation of a regional transit service district, and coordinating between local transit service providers and TriMet, but does not refer to land use planning and development coordination with YCTA, nor coordination of transit- related improvements or transportation demand management (TDM).	PARTIALLY CONSISTENT Existing policy establishes the City's support for planning and developing park-and-rides, enhancing commuter transit services, and instituting ridesharing and other TDM programs, but does not get down to the level of transit stop improvements. Existing policy addresses prioritization of pedestrian and bicycle improvements, but does not link them to transit corridors.

	Planning for Transit-Dependent Populations	Establishing the YCTA TDP as a Guidance Document	Coordinating with YCTA	Implementing Transit-Supportive Improvements
McMinnville	MOSTLY CONSISTENT Existing policy addresses City support for ensuring transportation services and facilities meet the needs of the transportation-disadvantaged (transit not singled out). Existing policy regarding complete streets focuses on the safety of children, seniors, and people with disabilities in all phases of transportation and development project implementation.	PARTIALLY CONSISTENT Existing policy establishes City support for transit service improvements that meet residents' needs and are consistent with City goals, policies, and plans. Existing policy commits the City to street design and development requirements consistent with the "Transit System Plan" (which may only be a reference to the City's TSP and not to transit agency-specific planning), and does not address transit-supportive density.	MOSTLY CONSISTENT Existing policy directs the City to study the feasibility of forming a transportation district in collaboration with Yamhill County. Existing policy calls for coordination with YCTA in providing multimodal access to transit stops, streets and sidewalks that can accommodate transit stops and improvements, and support for TDM programs, but does not does not refer to land use planning and development coordination.	MOSTLY CONSISTENT Existing policy expresses support for hosting an intercity/intracity transit terminal in the city. Existing policy commits the City to transit-supportive development requirements with a focus on pedestrian connectivity; requirements for transit stop improvements and other transit- supportive improvements (e.g., park- and-rides) are not called out. Ways that the City can support TDM (development requirements) are also not specified.
Dundee	MOSTLY CONSISTENT Existing policy generally addresses City support for developing a transportation system that is safe, accessible, and efficient for all users including the transportation- disadvantaged (transit not singled out).	MINIMALLY CONSISTENT Existing policy addresses service improvements but does not tie those improvements to a long-range transit plan.	INCONSISTENT Coordination of land use planning, development, TDM, transit stop improvements, and/or other transit- supportive improvements with transit service providers is not addressed. ³¹	MINIMALLY CONSISTENT Existing policy establishes the goal of a safe, continuous, and direct network of streets, access ways, and other facilities (including crossings) and commits to providing bike and pedestrian facility connections to local and regional travel routes, but does not specify or prioritize connecting to transit. Improvements related to transit stops, the pedestrian environment, and TDM are not addressed.

³¹ Policy proposed during the Dundee TSP update process in 2015 addressed coordination of transit stop access and improvements with transit service providers. However, the policy amendments have not been adopted.

Yamhill County Transit Development Plan | Appendix G

	Planning for Transit-Dependent Populations	Establishing the YCTA TDP as a Guidance Document	Coordinating with YCTA	Implementing Transit-Supportive Improvements
	Smaller Jurisdictions			
Dayton	MOSTLY CONSISTENT Existing policy commits the City to promoting transportation actions and improvements that address the needs of low-income, disabled, and senior populations (transit not specified).	MINIMALLY CONSISTENT Existing policy states that the City will support public transportation but does not refer to long-range transit planning guidance.	INCONSISTENT Existing policy states that the City will support public transportation programs but does not address coordination with transit service providers.	PARTIALLY CONSISTENT Existing policy prioritizes sidewalk maintenance and improvements on arterials, collectors, and where they improve connectivity, but does not address access to transit or other transit-supportive improvements and programs.
Lafayette	CONSISTENT Existing policy commits to a street network that is safe, accessible, and efficient for the transportation- disadvantaged, as well as a convenient, safe, and economical public transportation system for the transportation-disadvantaged.	PARTIALLY CONSISTENT Existing policy generally addresses service improvements but does not tie those improvements to a long- range transit plan. (Public transportation policy commits to implementation of the 1998 Regional Transportation Enhancement Plan.)	INCONSISTENT Coordination of land use planning, development, and/or transit- supportive improvements with transit service providers is not addressed.	PARTIALLY CONSISTENT Existing policy establishes the goal of a safe, continuous, and direct network of streets, access ways, and other facilities (including crossings) and addresses pedestrian environment improvements in the Central Business District, but does not address access to transit or other transit-supportive improvements and programs.
Yamhill	MOSTLY CONSISTENT Existing policy commits the City to promoting transportation actions and improvements that address the needs of low-income, disabled, and senior populations (transit not specified).	MINIMALLY CONSISTENT Existing policy states that the City will encourage carpooling and alternative forms of transit, but does not refer to long-range transit planning guidance.	INCONSISTENT Existing policy states that the City will encourage carpooling and alternative forms of transit, but does not address coordination with transit service providers.	MINIMALLY CONSISTENT Sidewalk improvements are prioritized for Main Street and Maple Street, but access to transit or other transit- supportive improvements and programs are not addressed.
Carlton	CONSISTENT Existing policy commits the City to providing increased access, safety, and service related to walking, biking, transit, and ridesharing particularly for the transportation-disadvantaged.	PARTIALLY CONSISTENT Existing policy expresses strong support for transit service and improvements, including coordination with other agencies, but does not tie improvements or requirements to long-range transit planning.	MOSTLY CONSISTENT Existing policy refers to coordination with other agencies regarding transit opportunities, including studying the needs for park-and-ride facilities, but does not specifically address coordination of land use planning and development.	MOSTLY CONSISTENT Existing policy addresses transit- supportive improvements including safe crossings, park-and-ride, and TDM/ridesharing programs, but not transit-related development requirements or pedestrian facility improvements that are prioritized related to transit.

	Planning for Transit-Dependent Populations	Establishing the YCTA TDP as a Guidance Document	Coordinating with YCTA	Implementing Transit-Supportive Improvements
Amity	MOSTLY CONSISTENT Existing policy commits the City to transportation improvements that address the needs of low-income, disabled, and senior populations (transit not specified).	PARTIALLY CONSISTENT Existing policy commits the City to support and promote transit and related coordination, but does not tie these efforts to a long-range transit plan.	MOSTLY CONSISTENT Existing policy refers to coordination with YCTA regarding service changes, but does not address coordination related to other transit- supportive improvements.	PARTIALLY CONSISTENT Existing policy addresses opportunities to improve the transit system very generally, but does not provide more specific guidance related to access to transit and other transit-supportive improvements and programs.
Sheridan	MOSTLY CONSISTENT Existing policy commits the City to transportation improvements that address the needs of low-income, disabled, and senior populations (transit not specified).	MINIMALLY CONSISTENT Existing policy commits the City to support and promote transit, but does not tie these efforts to a long-range transit plan.	PARTIALLY CONSISTENT Existing policy states support for transit and commits the City to coordinating transportation planning and implementation with transportation facility and service providers, but does not address land use and development coordination nor specify transit agencies.	PARTIALLY CONSISTENT Existing policy address improvements very generally for the transportation- disadvantaged, for promoting transit, and for promoting walking and biking, but does not provide more specific guidance related to access to transit and other transit-supportive improvements and programs.
Willamina	CONSISTENT Existing policy commits the City to work with Yamhill and Polk Counties to address the transit needs of the disadvantaged.	MOSTLY CONSISTENT Existing policy commits the City to make transportation planning and improvements consistent with transportation plans, although the plans are not specified as transit plans.	MOSTLY CONSISTENT Existing policy states support for transit and commits the City to coordinating transit service and meeting the needs of the disadvantaged with Yamhill and Polk Counties, but does not address land use and development coordination.	PARTIALLY CONSISTENT Existing policy addresses improvements very generally for the transportation- disadvantaged, promoting transit, and safe and intermodal pedestrian and bicycle facilities, but does not provide more specific guidance related to access to transit and other transit- supportive improvements and programs.

Development Code Consistency

This section supplements the Summary of Local Development Code Assessment section in Chapter 10 of the TDP.

Figure G-2 Evaluation of Development Code Consistency

		Newberg	McMinnville		
Сос	Coordination with Transit Agencies				
1.	Pre-application conference	INCONSISTENT A pre-application form is available on the City's website, but there are not code provisions regarding a pre-application conference, let alone specifying that transit agencies need to be invited to participate.	INCONSISTENT A pre-application form is available on the City's website, but there are not code provisions regarding a pre-application conference, let alone specifying that transit agencies need to be invited to participate.		
2.	Application review	MINIMALLY CONSISTENT The Community Development Director has discretion to require that notice be mailed to parties that the Director believes may be affected by the application, which could include transit agencies, but notice is not required. (Section 15.100.210(C))	MINIMALLY CONSISTENT Notice of a Director Review proposal must be sent to property owners and notice of a Public Hearing Review proposal must be sent to agencies that the Planning Director determines to have an interest in the proposal, neither of which requires notice to be sent to transit agencies or other transportation providers. (Section 17.72.110 and Section 17.72.120)		
3.	Hearing notice	(Notice of the hearing is not addressed separately from notice of the proposal. See #2 above.)	(Notice of the hearing is not addressed separately from notice of the proposal. See #2 above.)		
Ac	cess to Transit and Supp	ortive Improvements			
Sit	e Access				
4.	Access between the site and the street	CONSISTENT On-site walkways are required to connect from the building entrance(s) to the street and may be required to connect to adjoining development. (Section 15.440.140)	MOSTLY CONSISTENT Pedestrian walkways are required to connect between building entrances and the street/sidewalk for large format commercial development; there are no requirements related to connecting to adjoining development. (Section 17.56.050(C)(2)) Buildings are required to have a zero setback and primary entrances are required to open onto the public right-of-way in downtown. (Section 17.59.050) A similar level of connection is not required for development that is not downtown or is not large format commercial.		

Yamhill County Transit Development Plan | Appendix G

		Newberg	McMinnville
5.	Access to transit stop and supportive improvements	CONSISTENT Existing code includes access requirements (addressed in #4 above) and requirements for transit stop improvements including reasonably direct access, a landing pad, an easement, and lighting, consistent with the TSP or an adopted transit plan. (Section 15.505.030(V))	INCONSISTENT Other than basic requirements regarding access (addressed in #4 above), code provisions do not address transit-specific access or improvements.
Are	ea Access		
6.	Access to transit stops from beyond the site	MINIMALLY CONSISTENT Existing requirements establish maximum block lengths of 800- 1,200' in residential and institutional zones, with allowances for longer blocks where there is a mid-block public walkway, but code does not require or encourage this type of access way for long blocks or other situations where a street connection is not practical. (Section 15.505.030(O))	CONSISTENT Land division standards limit block length to 400' and perimeter to 1,600'. "Pedestrian ways" (access ways) are allowed to be provided in the cases of long blocks, dead-end streets, and other sub-standard situations. (Section 17.53.103)
Oth	ner Transit-Supportive Re	equirements	
Vel	hicle Parking		
7.	Transit-related uses/facilities in parking areas	CONSISTENT Transit-related uses permitted in parking areas. (Section 15.440.060(J))	INCONSISENT Parking spaces are permitted to be used only for car parking; transit- related uses are not addressed. (Section 17.06.040)
8.	Preferential parking for employee ridesharing	CONSISTENT Preferential carpool/ vanpool parking is established in existing code. (Section 15.440.010(D))	INCONSISTENT Existing code does not address carpool/vanpool parking.
9.	Maximum parking requirements	MOSTLY CONSISTENT Off-street parking is not required in the Central Business District and 50 percent parking requirement reductions are permitted for non-residential uses in the Riverfront District and for commercial uses within 200 feet of a public parking lot. (Sections 15.440.010(B) and (C) and Section 15.440.050(C))	MOSTLY CONSISTENT Off-street parking is not required and 50 percent parking requirement reductions are allowed in designated parts of downtown. (Sections 17.60.060 and 17.60.100)

Yamhill County Transit Development Plan | Appendix G

	Newberg	McMinnville
10. Reduced parking requirements	PARTIALLY CONSISTENT See #9 above for parking requirement reductions. Residential development is permitted to credit on-street parking when 10 spaces or more are required, and reductions are allowed for affordable housing sites with pedestrian connections or routes to a transit stop. (Section 15.440.030)	PARTIALLY CONSISTENT See #9 above for parking requirement reductions. A reduction of one vehicle parking space for each 15 required vehicle spaces is permitted for five bicycle parking spaces provided (all zones). (Section 17.60.140(A)(3))
11. Parking area landscaping	MOSTLY CONSISTENT Parking areas with 10 or more spaces must provide at least 25 square feet of landscaping per parking space. Perimeter landscaping and landscaped islands are required. (Section 15.420.010(B)(3))	PARTIALLY CONSISTENT Perimeter landscaping around surface parking lots is required in downtown. Otherwise, reduced or no landscaping is required in downtown. Five to seven percent of parking lot gross area is required to be landscaped (all zones), and islands are required to break up parking areas. (Section 17.59.060 and Section 17.57.070)
Bicycle Parking		
12. Minimum requirements for transit stops and centers	MOSTLY CONSISTENT Existing code requires bicycle parking based on required vehicle parking for transit transfer stations and park-and-ride lots. (Section 15.440.100) Bicycle parking for transit centers that do not require vehicle parking and bicycle parking for standard transit stops are not addressed.	INCONSISTENT Existing code only requires bicycle parking in commercial and office/residential zones and is based on the amount of required vehicle parking. (Section 17.60.140) The Planning Director is authorized to determine parking requirements for uses not listed. (Section 17.60.090) However, it is not clear whether these provisions apply to bicycle parking (they are grouped with other vehicle parking requirements), and without bicycle parking requirements explicitly established for transit stops and transit centers, bicycle parking is not guaranteed to be provided for these uses.
Urban Form		1
13. Maximum setbacks	PARTIALLY CONSISTENT Existing front yard setback requirements for the C-2 zone and C-3 zone – the zones that predominantly front OR 99W – require at least a 10-foot setback in the C-2 zone and no minimum setback plus a 20-foot maximum setback in the C-3 zone. (Section 15.410.020) Removing minimum setback requirements in the C-2 zone where adjacent to OR 99W and a maximum setback of 0-10 feet (with allowances for pedestrian amenities) in both zones where adjacent to OR 99W are not addressed.	MOSTLY CONSISTENT Existing front yard setback provisions do not require front yards in the C-3 zone, which is the predominant zoning fronting OR 99W. (Section 17.33.030) Except when providing pedestrian amenities, buildings are required to have no setback in downtown. (Section 17.59.050) Maximum setbacks in the C-3 zone outside of downtown and adjacent to OR 99W are not addressed.

ATTACHMENT C

Transportation System Plan





Chapter 7 Transit System and TDM Plan



7 Transit System and Transportation Demand Management Plans

As the costs of fuel and street projects increase, there will be greater demand and emphasis on public transportation services to address the mobility needs of McMinnville's residents. Furthermore, as a member of the Western Climate Initiative, Oregon is considering statewide policies to reduce greenhouse gas emissions. Local planning efforts will likely be encouraged and perhaps required to further emphasize transportation and land use plans, programs and policies that help reduce (single-occupant) vehicle miles traveled (VMT) and lower vehicle emissions per capita.

Through the Transit System and Transportation Demand Management (TDM) Plans, the City can simultaneously help relieve future traffic congestion and improve its environment by reducing drive-alone travel and their emissions.

As discussed in Chapter 3, future traffic congestion between the Highway 18 corridor and downtown and west McMinnville is generally attributed to peak hour commuting from new jobsites in and around the Airport area. Greater use of transit service and deployment of TDM measures offer viable alternatives to drive-alone travel in these corridors.

Pedestrian, bicycle and transit travel are key modal elements of McMinnville's TSP, and will become increasingly more important mobility options for McMinnville residents as the costs of transportation increase. Transportation demand management (TDM) measures, combined with the growing role for transit in McMinnville will also help to reduce VMT and carbon emissions. Both the public transit and TDM elements of the TSP are described below.

Transit System Plan

Transit service in McMinnville and the surrounding Yamhill County area comes in several forms: fixed-route bus services, dial-a-ride and commuter link bus service to other Willamette Valley cities. Yamhill Community Transit Area (YCTA) operates the local fixedroute, dial-a-ride and inter-city bus services in McMinnville. While the City does not directly own and operate public transit, there are many ways in which it supports transit through multi-modal system operations and project and program development. McMinnville's goal to support transit is:

Transit System Goal

To support YCTA in their goal to provide a city-wide street and sidewalk system that result in efficient transit operations (current and future) as well as safe and convenient pedestrian and bicycle access to public transportation services and facilities.



Transit Policies

Additional policies are identified to help guide the Transit System Plan, supplementing policies already included in the McMinnville Comprehensive Plan and summarized in Chapter 2 of the TSP.

- **Transit-supportive Street System Design** the City will include the consideration of transit operations in the design and operation of street infrastructure.
- **Transit-supportive Urban Design** through its zoning and development regulations, the City will facilitate accessibility to transit services through transit-supportive streetscape, subdivision, and site design requirements that promote pedestrian connectivity, convenience, and safety.
- **Transit Facilities** the City will continue to work with YCTA to identify and help develop supportive capital facilities for utilization by transit services, including pedestrian and bicycle access to bus stop and bus shelter facilities where need is determined and right-of-way is available.
- **Pedestrian Facilities** the City will ensure that arterial and collector streets' sidewalk standards are able to accommodate transit amenities as necessary along arterial and collector street bus routes. The City will coordinate with YCTA on appropriate locations.
- Intermodal Connectivity the City of McMinnville will encourage connectivity between different travel modes. Transit transfer facilities should be pedestrian and cyclist accessible.

1997 McMinnville Transit Feasibility Study

In 1997 McMinnville completed its Transit Feasibility Study¹. The Study assessed local travel and land use patterns, from which it identified and recommended a phased-plan to increase fixed-route

transit service hours and expand geographic coverage. In 1997 YAMCO (predecessor to YCTA) operated only two local routes within McMinnville, with limited service hours, and only two inter-city link routes (one each to Newberg and Sheridan/Willamina). The Plan recommended adding a third route in McMinnville, linking west McMinnville and the Willamette Valley Medical Center near Highway 18.

Existing Transit and Public Transportation

YCTA has essentially implemented the 1997 Transit Feasibility Study recommendations, and has increased county-wide services as well. This section describes the current transit services and facilities affecting the City of McMinnville. Included in the description is a summary of current fixed routes and service levels, effective March 2009.

Transit and public transportation facilities in the McMinnville area are operated by YCTA, a private non-profit organization serving Yamhill County. YCTA transit began as a service for the elderly and residents with physical or mental challenges. Transit operations have expanded to offer service to all residents. YCTA provides transit service in McMinnville through (1) bus transit, (2) dial-a-ride and (3) intercity commuter linking service.

McMinnville Bus Routes

YCTA currently operates three bus transit routes within McMinnville. **Exhibit 7-1** shows the YCTA bus routes. All routes are "loop" routes, where buses travel in a one-way direction around each loop. Each route operates on half hour headways on weekdays, and 90-minute headways on Saturdays. All transit routes operate between the hours of 6:00am and 7:00pm Monday through Friday and 8:00am to 7:00pm on Saturdays. There is no Sunday service.

Fares are \$1 each way, \$2 for a day-pass, or \$30 for a monthly pass. Some riders qualify based on income for a free bus pass.

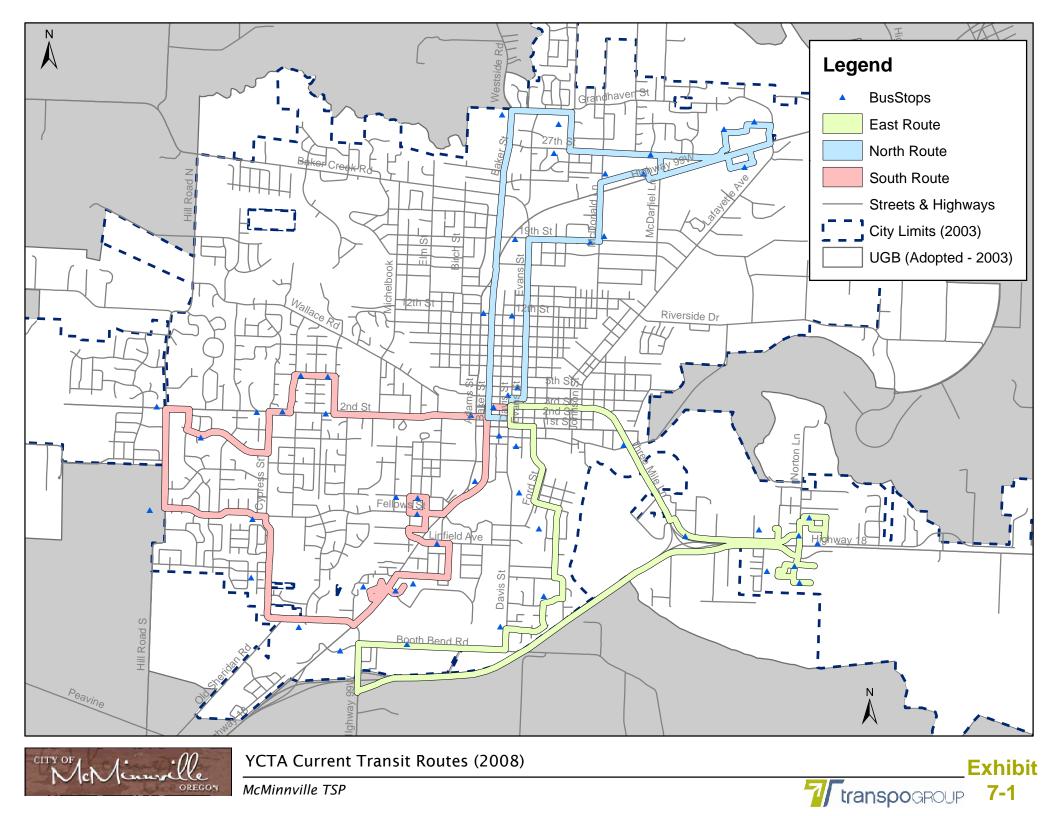
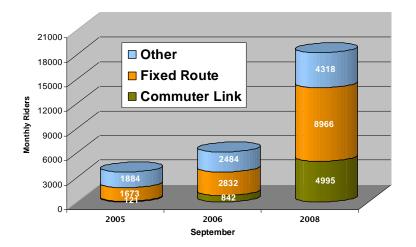


Exhibit 7-2 summarizes and compares YCTA's ridership for September in 2005, 2006 and 2008. In 2006, YCTA increased its operating hours significantly, the results were a near doubling of fixed-route ridership in McMinnville. As a result of additional service improvements, and to some degree the impact of higher gasoline prices, ridership across YCTA's system increased dramatically (again) in 2008.

Exhibit 7-2 YCTA Transit Ridership



Commuter Linking Transit

YCTA's commuter linking service is provided on four major routes, three linking to other transit systems in Hillsboro, Salem and Newberg. The commuter linking services also provide transit access to other Yamhill county communities: Amity, Carlton, Dayton, Sheridan, Willamina and Yamhill. Fares for commuter linking service are also \$1 each way, \$2 for a day-pass, or \$30 for a monthly pass.

Transit Center

YCTA currently converges its three-route and commuter linking route service on 5th Street at the Yamhill County Courthouse. Yamhill County, in support of YCTA, is currently conducting a feasibility study to locate and develop a long-term site for local and regional transit center operations In addition, Yamhill County received a large allocation of federal funding through the American Recovery and Reinvestment Act (ARRA) to include the purchase of larger buses and develop the transit mall.

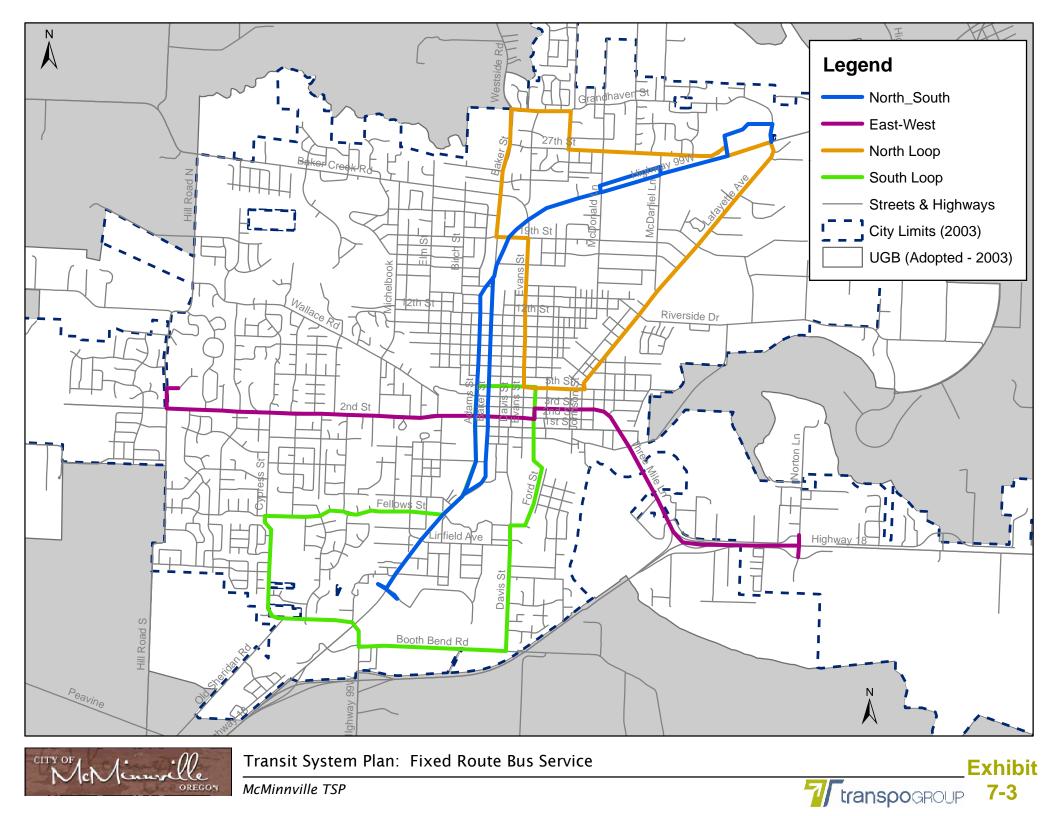
Dial-A-Ride

YCTA also operates dial-a-ride service for curb-to-curb, pick-up and drop-off service throughout Yamhill County. Dial-a-ride fares are \$1.50 general public and \$1.00 senior/disabled. Dial-a-Ride operates from 8am to 4:30pm, Monday through Friday. Dial-a-ride scheduling requires a 24-hour notice and request.

Future Transit Service

In April/May 2009 YCTA revised its fixed-route bus service in McMinnville, modifying two of its three looping routes to bidirectional, direct service. **Exhibit 7-3** maps the proposed YCTA fixed-route service plan. Compared to the current "loop" routes, the bi-directional routing along 2nd Street and Highway 99W will significantly reduce transit trip travel times, and should help to attract additional commuter travel in the future.

Along the new bi-directional routes YCTA and the City can begin an assessment of the type and location of designated bus stops and other important pedestrian and bicycle access features.



Bus Stops & Related Amenities

Within a transit system, additional factors that users consider in their travel decisions are curb-side factors. These factors affect transit users' comfort, safety, and convenience. Bus shelter design and placement are important examples of curb-side factors.

In order to implement the City's transportation policies from the Comprehensive Plan and TSP, McMinnville should consider increasing the City's curb-side factors in collaboration with YCTA. The locations at which the City may consider these factors are along the two new, bi-

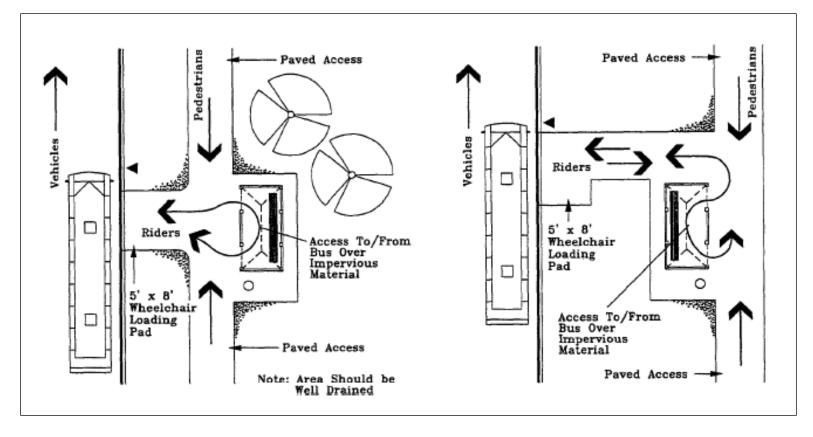


directional routes: Second Street and Highway 99W.

Amenities that would make transit a more attractive travel option include: shelters, benches, shade trees, and adequate sidewalks (see Chapter 5). All of these amenities should comply with the Americans with Disabilities Act (ADA). The federal Transit Cooperative Research Program (TCRP) outlines several of these design options in its report, *Guidelines for the Location and Design of Bus Stops.*² **Exhibit 7-4** displays options from this report that have accessibility for all users between the bus shelter and the curb.

While there is a possible new role for the City in support of these bus stop amenities, the installation and maintenance of these facilities should be administered by YCTA.

Exhibit 7-4 Bus Stop Design Examples



Transportation Demand Management Plan

Transportation Demand Management (TDM) is a general term for various strategies that increase transportation system efficiency. TDM treats mobility as a means to an end, rather than an end in itself. It emphasizes the movement of people and goods, rather than motor vehicles, and so gives priority to more energy and cost efficient modes (such as walking, cycling, ridesharing, public transit and telecommuting), particularly when the major street system will be heavily congested in the future.

As noted earlier in the TSP, the option to build more arterial streets and lanes are simply not available or desirable from a capital cost and environmental impact perspective. As McMinnville continues to grow, like other larger cities it will need to look more toward travel management programs and measures to help alleviate traffic congestion. In addition to the goals and policies identified the Comprehensive Plan, McMinnville should adopt a specific goal in support of TDM:

Transportation Demand Management Goal

To help educe single-occupant vehicle demand in McMinnville through a variety of transportation demand management strategies.

TDM Policies

As McMinnville's population has reached 30,000, the need to consider, develop and implement more specific TDM measures or programs arise. Consistent with the Street, Pedestrian and Bicycle System Plan elements, for the City to achieve its overall transportation goals it will have to seek additional ways to abate future traffic congestion in ways it hasn't had to in the past. New policies are included here as the basis for McMinnville to consider and implement effective TDM measures.

The City of McMinnville can establish several strategies to reduce transportation demand, and thereby address the city's transportation congestion. The objectives of the TDM program are to reduce the number of vehicles on the area's roads, which reduces the demand on the existing transportation network.

Coordination with Yamhill County

- The City should coordinate with Yamhill County to promote and support Transportation Demand Management investments that may include, but are not limited to, the following strategies:
 - Ride-sharing coordination with regional partners,
 - Parking management, and
 - o Transit-oriented and pedestrian-friendly design.
- The City should support Yamhill County who provides assistance to employers in designing and implementing trip reduction plans at their work sites. Trip reduction plans will include strategies to encourage employees to use alternative transportation modes and discourage them from commuting in SOVs. Alternative work hours and tele-commuting will also be recommended as a way of reducing peak hour congestion.

Assisting Yamhill Community Transit Area (YCTA)

 The City should coordinate with YCTA to promote the use of transit and vanpools, in support of vehicle trip reduction strategies.

- The City of McMinnville should coordinate with and encourage YCTA to administer its county-wide TDM Program where it affects McMinnville. The Program may include, but is not limited to, the provision of:
 - 1. 24-hour rideshare matching hotline;
 - 2. carpool and vanpool match lists;
 - 3. information and referrals to the public on McMinnville and intercity transit service, vanpools, bicycle routes, tele-commuting, park-and-ride lots, other ridesharing agencies, and transportation services for special needs;
 - 4. assistance in the formation of vanpools;
 - 5. public outreach;
 - 6. school outreach;
 - 7. services to employers, including commuting surveys and individualized trip-reduction plans;
 - 8. coordination with other agencies and organizations with similar goals; and
 - 9. marketing of alternative transportation modes.
- Support YCTA in the application for adequate and consistent funding of the Regional TDM Program.

TDM Plan

Effective TDM programs are typically focused on reducing drivealone commuter travel. Two available sources of data are useful in examining McMinnville work commuting travel behavior: (1) the U.S. Census³ and (2) local transit ridership data.

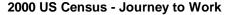
Exhibit 7-5 summarizes the year 2000 mode-share of McMinnville resident commuters, compared to other Oregon cities in the Willamette valley or outside of the Portland metropolitan area. These data reflect only the mode of travel to work. For McMinnville, this is a summary of all working McMinnville residents who work either in McMinnville, Salem, Portland or other cities and locations outside the McMinnville urban area.

By comparison, McMinnville is generally in the middle of the pack in terms of the percentage of workers who drive-alone on their trip to work. Bend and Canby have a larger proportion of tele-commuters (work from home). Newberg has a larger portion of workforce that walk to work. Bike, walk and transit mode-share in Corvallis makes up a significantly larger portion of travel than other cities.



McMinnville has a significant portion of commuters carpooling and an average portion who bike and tele-commute. However, the portion of McMinnville workers who ride transit and walk to work is very small.

Exhibit 7-5 Work Commute Comparative - Mode Share



Drive-Alone	Carpooled	🗆 Transit	Bike
Walk	Other	At-Home	

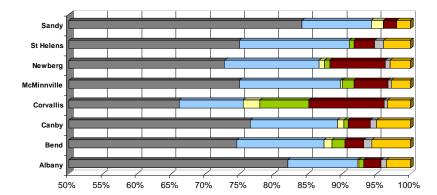


Exhibit 7-6 summarizes YCTA's historic ridership on their fixed-route and commuter link services, and a comparison to the historical price of gasoline. Two significant points are to be made in review of this historical data:

- commuter transit ridership rises and falls dramatically, commensurate with the cost of gasoline (or more generalized, the cost of drive-alone travel) – indicating that many commuters will chose transit if and when the cost of drive-alone travel becomes too great; a common characteristic found in many other U.S. cities.
- (2) current, fixed-route ridership is much less affected by gasoline price, as the predominant share of local bus riders are non-commuters.

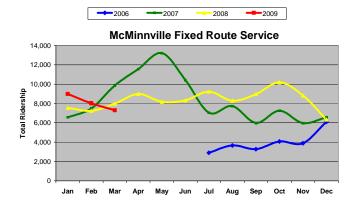
[Note: The dramatic increase in fixed-route service between February and May 2007 was the result of fare-free test program, which has since been terminated.]

Gasoline prices have declined dramatically since the summer of 2008, as has intercity transit ridership. Fixed route service in McMinnville has not been directly impacted by gasoline price; an indication that commuters are not yet a large portion of the fixed-route passenger profile.

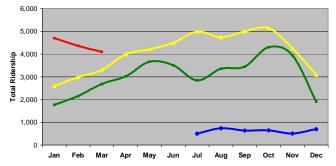
Other elements of McMinnville's TSP supplement the City's support of public transportation, mainly:

- Complete Street improvements (see Chapter 4) with space to incorporate transit stops and amenities, and
- Enhance non-motorized modes travel systems with improved linkages to transit⁴ by walking (see Chapter 5) and bicycle (see Chapter 6).

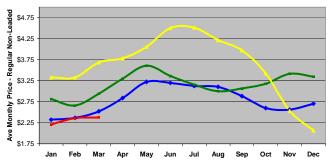












The City of McMinnville has a strong basis for transit growth in the coming years. The City's coordination with Yamhill County regarding future improvements will be instrumental in serving a growing community. With the appropriate TDM strategies in place, McMinnville could significantly reduce the number of single-occupant vehicles on the transportation network and in turn reduce VMT per capita and emissions.

Transit and TDM program and plan improvements can have a significant affect on McMinnville's congested corridors, especially the links to the planned employment center near the McMinnville Airport (see Chapter 3).

¹ McMinnville Transit Feasibility Study, 1997, David Evans & Associates.

² TCRP, *Report 19- Guidelines for the Location and Design of Bus Stops.* Washington, DC: National Academy Press, 1996. See online copy at: http://www.trb.org/news/blurb_detail.asp?id=2597

Willamette Valley Cities, U.S. Census website.

⁴ City of McMinnville Comprehensive Plan.

³ U.S. Census Bureau, 2000 Journey-To-Work patterns for

McMINNVILLE COMPREHENSIVE PLAN – HIGHLIGHTED TRANSIT REFERENCES

McMinnville's Comprehensive Plan has been divided into three interrelated volumes. Volume I, providing the background information, is both the narrative of and supporting documentation for the goals and policies developed by the community. It is a reference resource that can be used to interpret the intent of the goal and policy statements. Volume II contains the actual goal and policy statements. These statements are the culmination of the research, inventories, and projections of Volume I and reflect the directives expressed through the citizen involvement process in adopting the plan. All future land use decisions must conform to the applicable goals and policies of this volume. Volume III consists of the implementing ordinances and measures created to carry out the goals and policies of the plan. Principle among these are the comprehensive plan and zoning maps, the annexation, zoning and land division ordinances, and the planned development overlays placed on areas of special significance.

VOLUME II GOALS AND POLICIES

Volume II, Goals and Policies, contains the goal, policy, and proposal statements which shall be applied to all land use decisions. Goal, policy, and proposal statements each have different purposes: goal statements are the most general principles; policy statements are directed to specific areas to further define the goal statements; and proposals are possible courses of action open to the City which shall be examined to further implement the goal and policy requirements. Each of these statement types is further defined below:

GOALS: are the broadly-based statements intended to set forth the general principles on which all future land use decisions will be made. Goals carry the full force of the authority of the City of McMinnville and are therefore mandated.

POLICIES: are the more precise and limited statements intended to further define the goals. These statements also carry the full force of the authority of the City of McMinnville and are therefore mandated.

PROPOSALS: are the possible courses of action available to the City to implement the goals and policies. These proposals are not mandated; however, examination of the proposals shall be undertaken in relation to all applicable land use requests.

The implementation of these goal, policy, and proposal statements shall occur in one of two ways. First, the specific goal, policy, or proposal shall be applied to a land use decision as a criterion for approval, denial, or modification of the proposed request. In this case the goal, the policy, or the proposal is directly applied. The second method for implementing these statements is through the application of provisions and regulations in ordinances and measures created to carry out the goals and policies. This method involves the indirect application of the statements. These ordinances and measures are included in Volume III of the McMinnville Comprehensive Plan.

HOW TO USE THIS PLAN—VOLUME II

The goal, policy, and proposal statements are segregated to correspond to the chapter headings used in Volume I of the McMinnville Comprehensive Plan. Reference to Volume I can be made through the list of goals and policies cross-referenced with the chapters in Volume I which is appended to this volume.

VOLUME II INDEX

The chapter number indicates in which chapter of Volume I the background material can be found to support the goal or policy.

Natural Resources (Chapter II)	Policies
Natural Resources (Chapter II) Land Air Water Noise	01.00 - 04.00 05.00 - 07.00 08.00 - 11.00 12.00
Cultural, Historical, & Educational Resources (Chapter III) Cultural and Social Services Historic Preservation Education	13.00 – 14.00 15.00 – 17.14 18.00 – 20.00
Economy of McMinnville (Chapter IV) Employment and Diversification Commercial Development General Policies Locational Policies Design Policies Downtown Development Policies Industrial Development General Policies Locational Policies	21.00 - 21.05 22.00 - 24.00 24.50 - 28.00 29.00 - 35.00 36.00 - 46.03 47.00 - 48.00 49.00 - 57.00
Housing and residential Development (Chapter V) Affordable, Quality Housing General Housing Policies Housing Rehabilitation Policies Low-cost Housing Policies Development Pattern General Policies Westside Density Policy Planned Development Policies Residential Design Policies Low-cost Housing Development Policies Multi-family Development Policies Manufactured Home Development Policies Urban Policy Lot Sales Policy	58.00 - 61.00 62.00 - 63.00 64.00 - 67.00 68.00 - 71.00 71.01 - 71.13 72.00 - 78.00 79.00 - 83.00 84.00 - 85.00 86.00 - 92.03 93.00 - 98.00 99.00 99.01

Transportation System (Chapter VI)	Policies
Mass Transportation	100.00 – 105.00
Transportation Disadvantaged	106.00 - 107.00
Rail 108.00 – 112.10	100.00 107.00
Air	113.00 – 116.00
Streets	117.00 – 125.00
Parking	126.00 - 128.00
Bike Paths	129.00 - 132.15
System Plan	132.23.00
Complete Streets	132.24.00
Multi-Modal Transportation System	132.25.00
Connectivity and Circulation	132.26.00 – 132.26.05
Supportive of General Land Use Plan Designations	
and Development Patterns	132.27.00
Regional Mobility	132.28.00
Growth Management	132.29.00 – 132.29.05
Transportation System and Emergency Efficiency	132.30.00 – 132.30.05
Transportation Safety	132.31.00
Public Safety	132.32.00
Accessibility for Persons with Disabilities	132.33.00
Economic Development	132.34.00 – 132.34.05
Livability	132.35.00
Health and Welfare	132.36.00
Transportation Sustainability	132.37.00
Aesthetic and Streetscaping	132.38.00
Intergovernmental Coordination and Consistency	132.39.00
Growth Management	132.40.00 – 132.40.15
Circulation	132.41.00 – 132.41.30
Street Width – Human Scale	132.42.00
Neighborhood Traffic Management	132.43.00 - 132.43.10
Access Management	132.44.00
Impervious Surface Area	132.45.00
Environmental Preservation	132.46.00 - 132.46.10
Aesthetics	132.47.00
Safety and Maintenance	132.48.00 - 132.49.00
Street Inventory	132.50.00
System Development	132.51.00 - 132.51.15
Americans with Disabilities Act	132.52.00
System Maintenance	132.53.00
Pedestrian Programs	132.54.00 - 132.55.00
Bicycle System Plan	132.56.00 - 132.56.45
Transit System Plan Transportation Demond Management Plan	132.57.00 - 132.57.20
Transportation Demand Management Plan	132.58.00 - 132.58.20
Freight Mobility, Air, Rail and Pipeline Plans	132.59.00 – 132.59.20 132.60.00 – 132.60.20
Capital Improvements	132.61.00 - 132.61.20
Pavement Management McMinnville TSP Implementation	132.62.00 - 132.62.25
	152.02.00 - 152.02.25

Policies

Community Facilities (Chapter VII)	
Public Administration and Storage Facilities	133.00 – 135.00
Sanitary Sewer System	136.00 – 141.00
Storm Drainage	142.00 - 143.00
Water System	144.00 – 150.00
Water and Sewer—Land Development Criteria	151.00
Police and Fire Protection	152.00 – 155.00
Solid Waste 156.00 – 158.00	
Parks and Recreation	159.00 – 170.05
Energy (Chapter VIII)	
Energy Supply and Distribution	171.00 – 177.00
Energy Conservation	178.00 – 180.50
0,	
Urbanization (Chanter IV)	
Urbanization (Chapter IX) Urban Growth Boundary	181.00 – 182.00
General Development Pattern	183.00 - 184.00
Land Use Development Tools	185.00 - 187.00
Great Neighborhood Principals	187.10 - 187.50
Great Neighborhood Phincipais	107.10 - 107.50
Citizen Involvement and Plan Amendment (Chapter X)	
General Policies	188.00 – 196.00

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CHAPTER II NATURAL RESOURCES

GOAL II 1: TO PRESERVE THE QUALITY OF THE AIR, WATER, AND LAND RESOURCES WITHIN THE PLANNING AREA.

LAND

Policies:

- 1.00 Urbanizable lands outside the city limits, but inside the Urban Growth Boundary, shall be retained, whenever possible, in agricultural use until such time as they are needed for urban development.
- 2.00 The City of McMinnville shall continue to enforce appropriate development controls on lands with identified building constraints, including, but not limited to, excessive slope, limiting soil characteristics, and natural hazards.
- 3.00 The City of McMinnville shall review any identified mineral and aggregate resource locations to determine the quality of the material, the likelihood that it will be extracted and the compatibility of the site with surrounding land uses. The City shall seek to resolve any conflicts between aggregate resource locations and surrounding land uses, and shall protect, whenever possible, mineral and aggregate resources from future encroachment by incompatible uses, especially residential uses.
- 4.00 The City of McMinnville, in cooperation with the Oregon Department of Geologic and Mineral Industries, shall insure that aggregate sites are reclaimed after their usefulness has expired.

AIR

Policies:

- 5.00 The quality of the air resources in McMinnville shall be measured by the standards established by the Oregon Environmental Quality Commission and the Federal Environmental Protection Agency.
- 6.00 The City of McMinnville shall cooperate with the Oregon Department of Environmental Quality to insure that applications for air quality related permits are examined for compatibility with the City's comprehensive plan.
- 7.00 Land use decisions involving new major emission sources or expansion of existing sources shall be reviewed for the effects the emission source will have on the local and regional airshed. Maintenance of the quality of the air resources, within established federal and state standards, shall be a criterion for approval of these land use decisions.

WATER

Policies:

- 8.00 The City of McMinnville shall continue to seek the retention of high water quality standards as defined by federal, state, and local water quality codes, for all the water resources within the planning area.
- 9.00 The City of McMinnville shall continue to designate appropriate lands within its corporate limits as "floodplain" to prevent flood induced property damages and to retain and protect natural drainage ways from encroachment by inappropriate uses.
- 10.00 The City of McMinnville shall cooperate with the Oregon Department of Environmental Quality, the Mid-Willamette Valley Council of Governments, and other appropriate agencies and interests to maintain water quality and to implement agreed upon programs for management of the water resources within the planning area.
- 11.00 The City of McMinnville shall cooperate with McMinnville Water and Light, the Bureau of Land Management, and Yamhill County to insure that the land use development actions allowed in and around the municipal watershed do not lessen the water quality of the municipal water system below acceptable federal, state, and local standards.

NOISE

Policies:

12.00 The City of McMinnville shall insure that the noise compatibility between different land uses is considered in future land use decisions and that noise control measures are required and instituted where necessary.

- 0.50 The City should develop, adopt and maintain a Natural Hazards Inventory as part of the McMinnville Comprehensive Plan (Volume I). The inventory shall include maps and text that identify the location, type and risk level for three types of natural hazards: geological hazards (including steep slopes, earthquakes and landslides), flood hazards (land within the 100-year floodplain) and wildfire hazards within the urban growth boundary and the unincorporated land outside of the urban growth boundary.
- 0.75 The City should develop and adopt a Natural Hazards (NH) overlay zone to manage the cumulative effects of inventoried natural hazards within the urban growth boundary on people and property. (Ord. 5098, December 8, 2020)

CHAPTER III CULTURAL, HISTORICAL, AND EDUCATIONAL RESOURCES

GOAL III 1: TO PROVIDE CULTURAL AND SOCIAL SERVICES AND FACILITIES COMMENSURATE WITH THE NEEDS OF OUR EXPANDING POPULATION, PROPERLY LOCATED TO SERVICE THE COMMUNITY AND TO PROVIDE POSITIVE IMPACTS ON SURROUNDING AREAS.

Policies:

- 13.00 The City of McMinnville shall allow future community center type facilities, both public and private, to locate in appropriate areas based on impacts on the surrounding land uses and the community as a whole, and the functions, land needs, and service area of the proposed facility.
- 14.00 The City of McMinnville shall strive to insure that future public community facilities, where possible and appropriate, are consolidated by locating the new structures in close proximity to other public buildings. This will be done in order to realize financial benefits, centralize services, and positively impact future urban development.

HISTORIC PRESERVATION

GOAL III 2: TO PRESERVE AND PROTECT SITES, STRUCTURES, AREAS, AND OBJECTS OF HISTORICAL, CULTURAL, ARCHITECTURAL, OR ARCHAEOLOGICAL SIGNIFICANCE TO THE CITY OF McMINNVILLE.

Policies:

- 15.00 The City of McMinnville shall establish a program for the identification and preservation of significant sites, structures, objects, and areas.
- 16.00 The City of McMinnville shall support special assessment programs as well as federal grants-in-aid programs and other similar legislation in an effort to preserve structures, sites, objects, or areas of significance to the City.
- 17.00 The City of McMinnville shall enact interim measures for protection of historic sites and structures. Those measures are identified in the McMinnville Comprehensive Plan, Volume I, Chapter III.
- 17.01 The City of McMinnville will, by the time of the first plan update (1985), conduct a thorough study (consistent with the requirements of Statewide Planning Goal #5) of the 515 resources included in the 1980 Historical Survey and the properties listed on the 1976 Inventory of Historical Sites (Figure III-1, Volume I, McMinnville Comprehensive Plan) and place those structures and sites which

are found to warrant preservation on a list of historic buildings and places. The City shall also study other buildings and sites which were not included on the 1976 and 1980 inventories and place those so warranted on the list of historic buildings and places. The City shall then adopt an historic preservation ordinance which is consistent with the requirements of Statewide Planning Goal #5 and which protects the structures and sites included on the list. (Ord. 4218, November 23, 1982)

- 1.00 Create a Historic Landmarks Committee, similar in scope and purpose to the Landscape Review Committee, to serve in an advisory capacity to the Planning Commission and the City Council.
- 2.00 Draft an historic preservation ordinance addressing the following concerns:
 - 1. Membership on the Historic Landmarks Committee. Membership should include interested citizens and local experts in history, architecture, and archaeology, if available.
 - 2. Duties of the Historic Landmarks Committee. The Historic Landmarks Committee should:
 - a. Maintain and circulate a list of historically designated landmarks which include information of historical interest, significance (architectural, cultural, etc.), and present use of the landmark, as well as dates on which it is open to the public.
 - b. Continue inventorying resources in those areas not covered in Phase I of the historic resource inventory of the City of McMinnville. This should be a priority concern of the committee, and every attempt should be made to complete this inventory as soon as possible after establishment of the committee.
 - c. Recommend to the Planning Commission sites or structures for designation to a local historical landmarks register.
 - d. Recommend to the Planning Commission review procedures for alterations and/or destruction of landmarks designated to the local register. Specific provisions and powers to maintain the unique character of the landmark should be developed.
 - e. Provide information on financial incentives (and disincentives) available for restoration or rehabilitation of historic landmarks.
 - f. Provide information and assistance to owners of sites, structures, and objects in designating local landmarks to state and national registers.

- g. Coordinate with local historical and tourism group's activities and projects, including promotion of historical awareness in the City.
- h. Coordinate activities with local, regional, and statewide agencies connected with historical preservation.
- i. Record through photographs, descriptions, artifacts, and other appropriate measures those landmarks of significance that cannot be preserved.

GOAL III 3: INCREASE PUBLIC AWARENESS AND UNDERSTANDING OF <u>McMINNVILLE'S HISTORY AND ITS HISTORIC PRESERVATION</u> <u>PROGRAM</u>

Policies:

17.02 Promote Historic Preservation Month every May.

Proposals:

- 3.00 Continue to host an annual McMinnville Historic Preservation Awards program and invite community input. Consider creating categories for the nominations to promote a variety of projects. Examples could include: Downtown Rehabilitation, Residential Rehabilitation, Leadership in Preservation, Organization in Preservation, or Community Engagement.
- 3.01 Host (or co-host) at least one other preservation-related activity or event during the month of May and encourage HLC members to participate. Potential events include This Place Matters, a trivia night at a local coffee shop or pub, a walking tour, or scavenger hunt. Staff time is limited, so try to co-sponsor events or partner with other groups already hosting events.

Policies:

17.03 Partner with related organizations on programs to establish connections between historic preservation and other city interests.

- 3.02 Consider hosting or sponsoring additional events, either during Preservation Month or the rest of the year.
- 3.03 Set up a booth at the McMinnville Farmers Market. Have informational brochures available on the historic preservation program and the Historic Resources Inventory along with the Stroll Mac walking tour. The Farmers Market is located near the downtown historic district and provides an opportunity to encourage residents to take in their historic resources.

- 3.04 Collaborate with the Yamhill County Historical Society and McMinnville Downtown Association to host a lunchtime walking tour or host a tour in conjunction with McMinnville's 3rd on 3rd (Monthly on the 3rd Friday, 27 storefronts and galleries along McMinnville's historic downtown 3rd Street are open late).
- 3.05 Host research sessions (parties) for property owners or neighborhood residents to bring in an address and get help researching the history of the property. Work with the historical society to identify historic photographs of neighborhoods and streetscapes and then take contemporary photographs to do a "then" and "now" profile. Work with volunteers to research a brief (250 words maximum) write up on what changes occurred between the two photos and the significance of the view or neighborhood.
- 3.06 Attend and present information about the historic preservation program at a meeting of the Yamhill County Association of Realtors to help educate real estate agents on the Historic Resources Inventory, financial incentives, and design review.
- 3.07 Work with the Urban Renewal Board to utilize historic preservation as a key revitalization tool supporting both the historic character and regional destination draw of downtown and the larger Urban Renewal Area. Historic preservation can anchor place identity and support an authentic experience for visitors while providing a context for compatible new development. This would support Goal 7 Historic Preservation of the Urban Renewal Plan.
- 3.08 Partner with tribal organizations or consultants to further research and document the history of human settlement in the McMinnville area prior to European explorer arrival to expand the Historic Context section of the Historic Preservation Plan.

Policies:

17.04 Increase interpretation efforts of the city's historic resources.

- 3.09 Reprint the existing walking tour brochure (Stroll Historic McMinnville) and distribute it to downtown businesses, the library, and various city offices with public interaction.
- 3.10 Develop additional walking tours through McMinnville, possibly offshoots from the downtown historic district into the residential neighborhoods. Utilize content from survey work recommendations outlined in the preservation plan. Work with neighborhood groups to develop and participate in these tours.
- 3.11 Support the character and place identity of neighborhoods within the city through survey and historic context research to understand the unique history and their role relative to the growth and development of McMinnville. This can help support a connection between residents and their neighborhood's history, the preservation of buildings, and education through walking tours.

Policies:

17.05 Increase and streamline the historic preservation program's media presence.

Proposals:

- 3.12 Add "Historic Preservation" as a sub-category under Planning on the city webpage's prominent toolbar under the "Government" tab
- 3.13 Streamline the historic preservation program's website. Consider using dropdown menus or collapsible lists to make information easy to find at-a-glance. There is a lot of good information on the website, but a visitor needs to know what they're looking for or else they could be overwhelmed. Move the Supporting Documents PDF links up before the Historic Resource Inventory List or add them to the Informational Brochures page. Add a map to the Zoning & Maps tab that is the Historic Resource Inventory showing the color coded ranking and resource number as an alternate means for residents to find out which properties are on the inventory. Convert the Historic Resource Inventory list to a collapsible list.
- 3.14 Make design review easier to find on the website. The guidelines are currently located in Chapter 17.59 of the Zoning Ordinance. They should be copied into their own document to make them easy to find for applicants.
- 3.15 Incorporate GIS mapping of historic properties on the website, either as an interactive map or a PDF. (*Ord.5068, April 23, 2019*)

GOAL III 4: ENCOURAGE THE PRESERVATION AND REHABILITATION OF HISTORIC RESOURCES

Policies:

17.06 Promote local, state, and federal incentives available to historic resources.

- 3.16 Create a list of all the incentives available to historic resources and place it on the city's historic preservation website. Consider creating a graphic handout to have available at any public outreach events (e.g. workshops with real estate and construction professionals).
- 3.17 Consider increasing the maximum individual grant amount of the facade grant program to \$5,000 to allow for projects with a greater impact.
- 3.18 Consider making the facade grant program available to houses (either active rentals or owner-occupied) that are listed on the Historic Resource Inventory as distinctive or significant and to assist with in-kind repairs to character-defining features to directly support integrity retention. This would support work such as repainting, or repairs to wood windows, but would not include the replacement of wood windows.

3.19 Explain what properties are eligible for using the Free Design Assistance Program. This appears to be the only local incentive that is available to singlefamily residential properties, albeit just those located in the Urban Renewal District.

Policies:

17.07 Strengthen the integration of historic preservation in city planning to capitalize on neighborhood history and character as city assets.

Proposals:

- 3.20 Update city zoning per recommendations in this plan to encourage the retention of historic residential character in key areas around the downtown.
- 3.21 Coordinate city guiding policies with preservation planning by keeping city departments/boards/committees apprised of HLC actions and priorities.
- 3.22 Research the use of conservation district overlays in other communities as an alternative to zoning changes.
- 3.23 Consider establishing a conservation district overlay to help retain historic residential character in key areas around the downtown.
- 3.24 Work with utility providers to develop standards for the provision of modern utility services to historic resources and historic buildings. Provision of modern utility services shall be coordinated and integrated into the design process to ensure the preservation of the resource or building's historic character. (Ord.5068, April 23, 2019)

GOAL III 5: DOCUMENT AND PROTECT HISTORIC RESOURCES

Policies:

17.08 Regularly update the Historic Resources Inventory.

- 3.25 HLC and staff review per Zoning Ordinance section 17.65.030 of survey work conducted since 1984 to classify surveyed properties as "distinctive," "significant," "contributory," or "environmental." Conduct public notice and public meetings per Zoning Ordinance section 17.65.070 associated with applying these changes to the inventory.
- 3.26 Update the inventory after each survey project so the field work, research, and inventory updates are all closely related.

- 3.27 Work with Yamhill County to include the Historic Resources Inventory classification on property titles. This would start with new transactions and would not be retroactive. This would support the network of real estate agents in their effort to inform prospective property owners of any regulatory requirements associated with a new home and also provides a measure of predictability for new home buyers that the character of the neighborhood they are buying into will not change dramatically and reduce their property value.
- 3.28 Develop and promote an application process for historic resource designation so that property owners can volunteer to designate their properties for consideration.
- 3.29 Encourage volunteers to help with updating the local inventory and establish a mechanism which can allow them to share information they gather with the City.

Policies:

17.09 Create tools to better assist applicants through the design review process.

Proposals:

- 3.30 Develop illustrated design guidelines, grounded in the Secretary of the Interior's Standards, to ensure consistency and fairness in design review.
- 3.31 Consider posting an example completed application on the city website to demonstrate to applicants how to successfully navigate the design review process.
- 3.32 Consider establishing multi-family design standards for the residential properties which surround downtown.

Policies:

17.10 Train the HLC and staff.

- 3.33 Encourage HLC members and staff to regularly attend SHPO trainings for CLGs. This provides an important opportunity for HLC members to talk with other commission members and experience how other communities approach historic preservation.
- 3.34 Work with Yamhill County to host CLG training
- 3.35 Continue internal conversations between planning staff and the city's building official to ensure departments are working well together.
- 3.36 Invite the city's building code official to workshops and other continuing education events to ensure they are up-to-date on historic preservation efforts and policies in the city.

Policies:

17.11 Continue to explore National Register nominations.

Proposals:

- 3.37 Evaluate the viability of a north downtown residential nomination.
- 3.38 Work with Linfield College on a Historic Resources Inventory and potential campus nomination.
- 3.39 Evaluate a MPD for "Historic Granaries of McMinnville"
- 3.40 Explore a landscape nomination for City Park.

Policies:

17.12 Implement survey recommendations identified in Chapter 4 of the Historic Preservation Plan.

Proposals:

- 3.41 Review findings from survey work conducted since 1984 to update the Historic Resource Inventory.
- 3.42 Conduct a reconnaissance level survey in the Hayden, Saylors, Baker, and Martin Additions.
- 3.43 Conduct a reconnaissance level survey to document the residential properties around the downtown area, particularly Rowlands Addition.
- 3.44 Conduct a reconnaissance level survey of Chandler's 2nd Addition to include properties built through 1969 (or 50 years prior to whatever year the survey is conducted).
- 3.45 Conduct a reconnaissance level survey along SE Baker Street.
- 3.46 Develop design review guidelines for the properties along SE Baker Street (or establish a conservation district) to retain the concentration of historic character at this entry to the city. (*Ord.5068, April 23, 2019*)

Policies:

17.13 Provide resources for historic property owners to protect their historic properties.

Proposals:

- 3.47 Consider conducting a survey of the downtown historic district to identify those properties which may be vulnerable to damage during a seismic event.
- 3.48 Assist property owners within the district as they carry out seismic retrofitting. This could be making them aware of any available financial incentives or working with groups of owners (with adjacent properties on a single block) to jointly tackle retrofits. (*Ord.5068, April 23, 2019*)

GOAL III 6: INCREASE HERITAGE TOURISM

Policies:

17.14 Amplify the heritage tourism program for McMinnville.

Proposals:

- 3.49 Work with Visit McMinnville to expand visitor awareness of McMinnville's heritage and historic resources online as a heritage tourism attractor.
- 3.50 Coordinate efforts to promote McMinnville as a destination for visitors with Visit McMinnville during Historic Preservation month. (*Ord.5068, April 23, 2019*)

EDUCATION

GOAL III 7: TO PROVIDE FOR THE EDUCATIONAL NEEDS OF McMINNVILLE THROUGH THE PROPER PLANNING, LOCATION, AND ACQUISITION OF SCHOOL SITES AND FACILITIES.

Policies:

- 18.00 The City of McMinnville shall cooperate with the McMinnville School District in the planning for future schools.
- 19.00 The location of future school sites shall be coordinated between the City and the McMinnville School District.
- 20.00 The City of McMinnville shall encourage the joint purchase, maintenance, and usage of recreational facilities with the McMinnville School District where acceptable to both parties.

Proposals:

4.00 A task force for school planning should be created. The task force should consist of some members from the Planning Commission, City Council, and School

Board. City and school administration and planning staffs should serve as advisors.

The functions of this group will be to exchange information and ideas on school planning projects, recommend school site locations to the School Board, and examine joint parks-school sites.

5.00 The Planning Department should assist the McMinnville School District in the development of a common student population projection scheme.

CHAPTER IV ECONOMY OF McMINNVILLE

GOAL IV 1: TO ENCOURAGE THE CONTINUED GROWTH AND DIVERSIFICATION OF McMINNVILLE'S ECONOMY IN ORDER TO ENHANCE THE GENERAL WELL-BEING OF THE COMMUNITY AND PROVIDE EMPLOYMENT OPPORTUNITIES FOR ITS CITIZENS.

COMMERCIAL DEVELOPMENT

GOAL IV 2: TO ENCOURAGE THE CONTINUED GROWTH OF McMINNVILLE AS THE COMMERCIAL CENTER OF YAMHILL COUNTY IN ORDER TO PROVIDE EMPLOYMENT OPPORTUNITIES, GOODS, AND SERVICES FOR THE CITY AND COUNTY RESIDENTS.

Policy:

- 21.00 Commercial uses and services which are not presently available to McMinnville residents will be encouraged to locate in the City. Such uses shall locate according to the goals and policies in the comprehensive plan.
- 21.01 The City shall periodically update its economic opportunities analysis to ensure that it has within its urban growth boundary (UGB) a 20-year supply of lands designated for commercial and industrial uses. The City shall provide an adequate number of suitable, serviceable sites in appropriate locations within its UGB. If it should find that it does not have an adequate supply of lands designated for commercial or industrial use it shall take corrective actions which may include, but are not limited to, redesignation of lands for such purposes, or amending the UGB to include lands appropriate for industrial or commercial use. (Ord.4796, October 14, 2003)
- 21.02 The City shall encourage and support the start up, expansion or relocation of high-wage businesses to McMinnville.
 - 1. The City shall coordinate economic efforts with the Greater McMinnville Area Chamber of Commerce, McMinnville Industrial Promotions, McMinnville Downtown Association, Yamhill County, Oregon Economic and Community Development Department, and other appropriate groups.
 - 2. Economic development efforts shall identify specific high-wage target industries and ensure that adequately sized, serviced, and located sites exist within the McMinnville urban area for such industries. (Ord.4796, October 14, 2003)
- 21.03 The City shall support existing businesses and industries and the establishment of locally owned, managed, or controlled small businesses. (Ord.4796, October 14, 2003)

- 21.04 The City shall make infrastructure investments that support the economic development strategy a high priority, in order to attract high-wage employment. (Ord.4796, October 14, 2003)
- 21.05 Commercial uses and services which are not presently available to McMinnville residents will be encouraged to locate in the city. Such uses shall locate according to the goals and policies in the comprehensive plan. (Ord.4796, October 14, 2003)

GOAL IV 3: TO ENSURE COMMERCIAL DEVELOPMENT THAT MAXIMIZES EFFICIENCY OF LAND USE THROUGH UTILIZATION OF EXISTING COMMERCIALLY DESIGNATED LANDS, THROUGH APPROPRIATELY LOCATING FUTURE NEIGHBORHOOD-SERVING AND OTHER COMMERCIAL LANDS, AND DISCOURAGING STRIP DEVELOPMENT.

General Policies:

- 22.00 The maximum and most efficient use of existing commercially designated lands will be encouraged as will the revitalization and reuse of existing commercial properties.
- 23.00 Areas which could in the future serve as commercial sites shall be protected from encroachment by incompatible uses.
- 24.00 The cluster development of commercial uses shall be encouraged rather than auto-oriented strip development. (Ord.4796, October 14, 2003)

Locational Policies:

- 24.50 The location, type, and amount of commercial activity within the urban growth boundary shall be based on community needs as identified in the Economic Opportunities Analysis. (Ord.4796, October 14, 2003)
- 25.00 Commercial uses will be located in areas where conflicts with adjacent land uses can be minimized and where city services commensurate with the scale of development are or can be made available prior to development.
- 26.00 The size of, scale of, and market for commercial uses shall guide their locations. Large-scale, regional shopping facilities, and heavy traffic-generating uses shall be located on arterials or in the central business district, and shall be located where sufficient land for internal traffic circulation systems is available (if warranted) and where adequate parking and service areas can be constructed.
- 27.00 Neighborhood commercial uses will be allowed in <u>neighborhood activity centers</u> and in other suitable neighborhood locations. These commercial uses will consist only of neighborhood oriented businesses and will be located on collector or arterial streets. More intensive, large commercial uses will not be considered compatible with or be allowed in neighborhood commercial centers. (Ord. 5098, December 8, 2020)

- 27.10 Neighborhood activity centers shall be located in areas of McMinnville that meet the goals and policies of Chapter IX (Urbanization) of the Comprehensive Plan and the provisions of the McMinnville Zoning Ordinance. (Ord. 5098, December 8, 2020)
- 28.00 A commercial planned development should be encouraged in the proximity of the intersection of Hill Road and West Second Street. Such a development should service the needs of people in western McMinnville. The development should be anchored by a grocery store.

Design Policies:

- 29.00 New direct access to arterials by large-scale commercial developments shall be granted only after consideration is given to the land uses and traffic patterns in the area of development as well as at the specific site. Internal circulation roads, acceleration/deceleration lanes, common access collection points, signalization, and other traffic improvements shall be required wherever necessary, through the use of planned development overlays.
- 30.00 Access locations for commercial developments shall be placed so that excessive traffic will not be routed through residential neighborhoods and the traffic-carrying capacity of all adjacent streets will not be exceeded.
- 31.00 Commercial developments shall be designed in a manner which minimizes bicycle/pedestrian conflicts and provides pedestrian connections to adjacent residential development through pathways, grid street systems, or other appropriate mechanisms. (Ord.4796, October 14, 2003)
- 32.00 Where necessary, landscaping and/or other visual and sound barriers shall be required to screen commercial activities from residential areas.
- 33.00 Encourage efficient use of land for parking; small parking lots and/or parking lots that are broken up with landscaping and pervious surfaces for water quality filtration areas. Large parking lots shall be minimized where possible. All parking lots shall be interspersed with landscaping islands to provide a visual break and to provide energy savings by lowering the air temperature outside commercial structures on hot days, thereby lessening the need for inside cooling. (Ord.4796, October 14, 2003)
- 34.00 The City of McMinnville shall develop and maintain guidelines concerning the size, placement, and type of signs in commercial areas.
- 35.00 The City of McMinnville shall encourage the development of a sign system that directs motorists to parking areas.

GOAL IV 4: TO PROMOTE THE DOWNTOWN AS A CULTURAL, ADMINISTRATIVE, SERVICE, AND RETAIL CENTER OF McMINNVILLE.

Downtown Development Policies:

- 36.00 The City of McMinnville shall encourage a land use pattern that:
 - 1. Integrates residential, commercial, and governmental activities in and around the core of the city;
 - 2. Provides expansion room for commercial establishments and allows dense residential development;
 - 3. Provides efficient use of land for adequate parking areas;
 - 4. Encourages vertical mixed commercial and residential uses; and,
 - 5. Provides for a safe and convenient auto-pedestrian traffic circulation pattern. (Ord.4796, October 14, 2003)
- 37.00 The City of McMinnville shall strongly support, through technical and financial assistance, the efforts of the McMinnville Downtown Steering Committee to implement those elements of Phase II of the "Downtown Improvement Plan" that are found proper, necessary, and feasible by the City. (Ord.4796, October 14, 2003)
- 38.00 The City of McMinnville shall encourage the renovation and rehabilitation of buildings in the downtown area, especially those of historical significance or unique design.
- 39.00 The City of McMinnville shall encourage and allow the development of pocket parks, landscaping, and other natural amenities to provide a visual contrast between streets and parking lots and buildings to enhance the general appearance of the downtown.
- 40.00 The City of McMinnville shall encourage and develop a policy of cooperation with federal, state, and local governments and agencies regarding the location of public administrative and service facilities in the downtown area and further encourage these same agencies to develop off-street parking opportunities and transportation alternatives for their employees.
- 41.00 The City of McMinnville shall encourage the expansion of retail and other commercial enterprises east of the railroad tracks and north and south of Third Street consistent with the adopted "Downtown Improvement Plan." (Ord.4796, October 14, 2003)
- 42.00 The City of McMinnville shall continue to redesignate streets and traffic patterns in and around the downtown area to facilitate the movement of automobile traffic and provide for the safety and convenience of pedestrians.
- 43.00 The City of McMinnville shall allow the closing and/or vacating of streets to provide additional areas for off-street parking where such closure will not affect the ability of the police and fire departments, and public utilities to provide their

designated service functions or where such closures will not negatively affect the overall traffic circulation in the downtown area.

- 44.00 The City of McMinnville shall encourage, but not require, private businesses downtown to provide off-street parking and on-site traffic circulation for their employees and customers.
- 45.00 The City of McMinnville shall study the feasibility of developing bicycle and pedestrian paths and/or lanes between residential areas, <u>neighborhood activity</u> <u>centers, downtown, and employment areas</u>. (Ord. 5098, December 8, 2020; Ord.4961, January 8, 2013)
- 46.00 The City shall work to implement the recommendations of the adopted "McMinnville Downtown Improvement Plan."
- 46.01 The City shall, through its Landscape Review Committee, develop a list of street trees acceptable for planting within the public rights-of-way, parks and open spaces, and downtown. In addition, the committee shall develop standards for the planting of these trees, particularly within the downtown area, such that sidewalk and tree root conflicts are minimized. This effort should be coordinated with McMinnville Water and Light in an effort to minimize conflicts with utility lines.
- 46.02 The City shall, as funding permits and generally in the following order, periodically inventory trees within its public rights-of-way, parks and open spaces, and downtown area in order to assess the overall health of the city's urban forest and to determine those specific trees that may require maintenance, or removal and replacement. As a goal, the City seeks to maintain a diverse urban forest in terms of age and species.
- 46.03 The City shall take steps to minimize hardships to property owners situated adjacent to street trees that may have been found to be the cause of, but not limited to, the cracking or raising of a public sidewalk, or interfering with sewer lines that serve his/her property. In such cases, the City shall install root barriers, if practicable, or remove the offending tree(s). (Ord. 4816, December 14, 2004; Ord.4796, October 14, 2003)

- 6.00 A planned development overlay should be placed on the large cluster commercial development areas and the entrances to the City to allow for review of site design, on-site and off-site circulation, parking, and landscaping. The areas to be overlaid by this designation shall be noted on the zoning map and/or comprehensive plan map.
- 7.00 The City of McMinnville should study the feasibility of designating areas fronting Third Street east of the railroad tracks for retail commercial only, and designated areas on the fringes of the downtown as office residential.

- 8.00 The City of McMinnville should encourage the development of a commercial planned development center in the southwestern portion of the city large enough in scale to serve the needs of the area's population. The center should be in proximity of the intersection of Old Sheridan Road, U.S. Highway 99W, and Oregon Highway 18.
- 8.50 The City should update its commercial and industrial zones in the zoning ordinance every ten years to ensure they are serving the goals and policies of the Comprehensive Plan. (Ord. 5098, December 8, 2020)

INDUSTRIAL DEVELOPMENT

- GOAL IV 5: TO CONTINUE THE GROWTH AND DIVERSIFICATION OF McMINNVILLE'S INDUSTRIAL BASE THROUGH THE PROVISION OF AN ADEQUATE AMOUNT OF PROPERLY DESIGNATED LANDS.
- GOAL IV 6: TO INSURE INDUSTRIAL DEVELOPMENT THAT MAXIMIZES EFFICIENCY OF LAND USES, THAT IS APPROPRIATELY LOCATED IN RELATION TO SURROUNDING LAND USES, AND THAT MEETS NECESSARY ENVIRONMENTAL STANDARDS.

General Policies:

- 47.00 Industries that locate in the community shall meet federal, state, and local environmental standards. These standards shall be given full weight in evaluating the desirability of the industry. Criteria for evaluation shall include, but not be limited by the effect the industry would have on:
 - 1. The natural environment, including air and water quality, natural drainage ways, and soil properties and other physical characteristics of the land including topography.
 - 2. The human environment, including the amount of noise and traffic generated and the ability of the housing industry to provide sufficient dwelling units with at least an adequate level of required urban services.
 - 3. The physical facilities of the community, including the ability of sanitary and storm sewer systems, water supply and distribution system, energy supply distribution systems, police and fire, and schools to provide designated services.
- 48.00 The City of McMinnville shall encourage the development of new industries and expansion of existing industries that provide jobs for the local (McMinnville and Yamhill County) labor pools.

Locational Policies:

49.00 The City of McMinnville shall use its zoning and other regulatory methods to prevent encroachment into industrial areas by incompatible land uses.

- 49.01 The City shall designate an adequate supply of suitable sites to meet identified needs for a variety of different parcel sizes at locations which have direct access to an arterial or collector street without having to pass through residential neighborhoods. (Ord. 4961, January 8, 2013)
- 49.02 The location, type, and amount of industrial activity within the Urban Growth Boundary shall be based on community needs as identified in the Economic Opportunities Analysis. (Ord. 4961, January 8, 2013)
- 49.03 In designating new industrial properties, and in redesignating properties to industrial zoning from other designations, the City shall work to provide employment opportunities in locations that are reasonably accessible to McMinnville residents, while minimizing the need to drive through existing or planned residential neighborhoods. (Ord. 4961, January 8, 2013)
- 50.00 The City of McMinnville shall encourage industrial uses to locate adjacent to the airport and south of Three Mile Lane, adjacent to the existing Riverside Drive industrial area, and in existing industrial areas through the proper designation of lands on the comprehensive plan and zoning maps. Comprehensive plan and/or zoning map changes to industrial designations in other areas may be granted if all the applicable goals and policies of the plan can be met.
- 51.00 The City of McMinnville shall encourage the location of airport-related industrial uses only on the industrial land which is adjacent to the airport. Those lands so reserved shall be designated in the planned development overlay covering this area.
- 52.00 The City of McMinnville shall create a new "limited light industrial" zone which shall be placed on the industrial areas on the south side of Three Mile Lane in those areas where residential development is expected on the north side of the road. The new zone will allow only those types of industrial uses that will not conflict with the residential uses.
- 53.00 The City of McMinnville shall encourage the phased development of industrial land so that a moderate rate of growth occurs. A moderate rate of growth will be considered that rate which enables the City to provide urban services in a timely, orderly, and economic fashion, and which allows the private sector to provide for the needs of the new residents.
- 54.00 The City of McMinnville shall establish industrial planned development ordinances which shall be placed over the future industrial areas designated on the McMinnville Comprehensive Plan Map, the industrial reserve area, and certain existing industrially designated areas within the city limits. The overlay shall also be applied to any areas which are in the future designated for future industrial use through an amendment to the comprehensive plan map. The overlays shall provide standards to control the nuisance and negative environmental effects of industries. These controls shall cover, but not be limited to, the following areas:

- 1. Landscaping and screening
- 2. Noise suppression
- 3. Light and heat suppression
- 4. Pollution control for air, water, and land
- 5. Energy impacts
- 6. Traffic impacts
- 55.00 Deleted as per Ord. 4796, October 14, 2003.
- 56.00 Deleted as per Ord. 4796, October 14, 2003.
- 57.00 Agricultural activities shall be encouraged on industrially designated lands until such time as the lands are utilized for industrial purposes.

CHAPTER V HOUSING AND RESIDENTIAL DEVELOPMENT

GOAL V 1: TO PROMOTE DEVELOPMENT OF AFFORDABLE, QUALITY HOUSING FOR ALL CITY RESIDENTS.

General Housing Policies:

- 58.00 City land development ordinances shall provide opportunities for development of a variety of housing types and densities.
- 59.00 Opportunities for multiple-family and mobile home developments shall be provided in McMinnville to encourage lower-cost renter and owner-occupied housing. Such housing shall be located and developed according to the residential policies in this plan and the land development regulations of the City.
- 60.00 Attached single-family dwellings and common property ownership arrangements (condominiums) shall be allowed in McMinnville to encourage land-intensive, cost-effective, owner-occupied dwellings.
- 61.00 The City of McMinnville shall monitor the conversion of lands to residential use to insure that adequate opportunities for development of all housing types are assured. Annual reports on the housing development pattern, housing density and mix shall be prepared for city review.

Housing Rehabilitation Policies:

- 62.00 The maintenance, rehabilitation, and restoration of existing housing in residentially designated areas shall be encouraged to provide affordable housing.
- 63.00 The utilization of federal and state loan and grant programs, as well as private sector financing, shall be encouraged to rehabilitate substandard housing.

Low-Cost Housing Policies:

- 64.00 The City of McMinnville shall work in cooperation with other governmental agencies, including the Mid-Willamette Valley Council of Governments and the Yamhill County Housing Authority, and private groups to determine housing needs, provide better housing opportunities and improve housing conditions for low and moderate income families.
- 65.00 The City of McMinnville shall coordinate with the Mid-Willamette Valley Council of Governments to develop a "fair share" plan to allocate low-cost housing throughout the tri-county region.

- 66.00 The City of McMinnville shall continue to allow development of its fair share of the region's low-cost housing. The share accepted will be based on quantifiable studies which take into account the amount of the low-cost housing already in the community and the overall housing opportunities in the city and region.
- 67.00 Subsidized low-cost housing shall be dispersed throughout the McMinnville urban area. Dispersal plans shall be coordinated with appropriate agencies.

GOAL V 2: TO PROMOTE A RESIDENTIAL DEVELOPMENT PATTERN THAT IS LAND INTENSIVE AND ENERGY-EFFICIENT, THAT PROVIDES FOR AN URBAN LEVEL OF PUBLIC AND PRIVATE SERVICES, AND THAT ALLOWS UNIQUE AND INNOVATIVE DEVELOPMENT TECHNIQUES TO BE EMPLOYED IN RESIDENTIAL DESIGNS.

Policies:

- 68.00 The City of McMinnville shall encourage a compact form of urban development by directing residential growth close to the city center, <u>to designated</u> <u>neighborhood activity centers</u>, and to those areas where urban services are already available before committing alternate areas to residential use. (Ord. 5098, December 8, 2020)
- 69.00 The City of McMinnville shall explore the utilization of innovative land use regulatory ordinances which seek to integrate the functions of housing, commercial, and industrial developments into a compatible framework within the city.
- 70.00 The City of McMinnville shall continue to update zoning and subdivision ordinances to include innovative land development techniques and incentives that provide for a variety of housing types, densities, and price ranges that will adequately meet the present and future needs of the community.
- 71.00 The City of McMinnville shall designate specific lands inside the urban growth boundary as residential to meet future projected housing needs. Lands so designated may be developed for a variety of housing types. All residential zoning classifications shall be allowed in areas designated as residential on the Comprehensive Plan Map.
- 71.05 The City of McMinnville shall encourage annexations and rezoning which are consistent with the policies of the Comprehensive Plan so as to achieve a continuous five-year supply of buildable land planned and zoned for all needed housing types. (Ord.4840, January 11, 2006; Ord. 4243, April 5, 1983; Ord. 4218, November 23, 1982)
- 71.06 Low Density Residential Development (R-1 and R-2) Low-density residential development should be limited to the following:

- 1. Areas which are committed to low density development and shown on the buildable lands inventory as "developed" land;
- 2. Areas where street facilities are limited to collector and local streets;
- 3. Areas with mapped development limitations such as steep slopes, floodplains, stream corridors, natural drainageways, and wetlands; and
- 4. Areas with limited capacity for development identified in approved facility master plans, including sanitary sewer, water, drainage, and transportation facilities, <u>unless such plans specify funded and scheduled</u> <u>improvements which will alleviate the problem and which can be provided</u> <u>concurrent with adequate capacity for the use.</u> (Ord. 5098, December 8, 2020; Ord. 4796, October 14, 2003)
- 71.07 The R-1 zoning designation shall be applied to limited areas within the McMinnville urban growth boundary. These include:
 - 1. The steeply sloped portions of the West Hills;
 - 2. Neighborhoods and properties within the current urban growth boundary that are developed or have been approved for such densities (Michelbook, for example);
 - 3. Fox Ridge Road area;
 - 4. Redmond Hill Road area;
 - 5. Residential lands adjacent to existing or planned industrial areas. (Ord. 4796, October 14, 2003)
- 71.08 Slightly higher densities (R-2) should be permitted on lands that exhibit the above-listed characteristics (Policy 71.06), and following factors or areas:
 - 1. The capacity of facilities and services;
 - 2. Within one mile of existing or planned transit;
 - 3. Lower sloped areas within the West Hills;
 - 4. Riverside South area (lands more than 500 feet from planned and existing heavy industrial lands);
 - 5. Proximity to jobs, commercial areas, and public facilities and services, should be zoned for smaller lots; and

- 6. Proximity to and having potential impact upon identified floodplains and other environmentally sensitive areas (the higher the potential impact, the lower the allowed density). (Ord. 4796, October 14, 2003)
- 71.09 Medium and High-Density Residential (R-3 and R-4) The majority of residential lands in McMinnville are planned to develop at medium density range (4 8 dwelling units per net acre). Medium density residential development uses include small lot single-family detached uses, single family attached units, duplexes and triplexes, and townhouses. High density residential development (8 30 dwelling units per net acre) uses typically include townhouses, condominiums, and apartments:
 - 1. Areas that are not committed to low density development;
 - 2. Areas that have direct access from collector or arterial streets; or a local collector street within 600' of a collector or arterial street;
 - 3. Areas that are not subject to development limitations such as topography, flooding, or poor drainage;
 - 4. Areas where the existing facilities have the capacity for additional development;
 - 5. Areas within one-quarter mile of existing or planned public transportation. (Ord. 5098, December 8, 2020; Ord. 4961, January 8, 2013; Ord. 4796, October 14, 2003)
- 71.10 The following factors should be used to define appropriate density ranges allowed through zoning in the medium density residential areas:
 - 1. The density of development in areas historically zoned for medium and high density development;
 - 2. The topography and natural features of the area and the degree of possible buffering from established low density residential areas;
 - 3. The capacity of the services;
 - 4. The distance to existing or planned public transit;
 - 5. The distance to neighborhood or general commercial centers; and
 - 6. The distance from public open space. (Ord. 4796, October 14, 2003)

71.11 High-Density Residential (R-5) - High-density residential contains housing at densities of anywhere from 8 to 30 units per acre, depending on where the high-density dwellings are located (the highest densities being in the downtown

commercial core and neighborhood activity centers). (Ord. 5098, December 8, 2020)

- 71.12 Lands zoned R-5 should be located within existing or planned transit corridors. In addition, it should be dispersed throughout the community and integrated into neighborhood areas so that high density housing is not concentrated and segregated in one specific area of the city. (Ord. 5098, December 8, 2020)
- 71.13 The following factors should serve as criteria in determining areas appropriate for high-density residential development:
 - 1. Areas which are not committed to low or medium density development; unless identified for infill and/or redevelopment;
 - 2. Areas which have direct access from a major collector or arterial street;
 - 3. Areas which are not subject to development;
 - 4. Areas where the existing public facilities have the capacity for additional development;
 - 5. Areas within a one-half mile wide corridor centered on existing or planned public transit routes;
 - 6. Areas within one-quarter mile from neighborhood and general commercial shopping centers or designated neighborhood activity center; and
 - 7. Areas adjacent to, or incorporating, either private or public permanent open space. (Ord. 5098, December 8, 2020; Ord. 4796, October 14, 2003)

Planned Development Policies:

- 72.00 Planned developments shall be encouraged as a favored form of residential development as long as social, economic, and environmental savings will accrue to the residents of the development and the city.
- 73.00 Planned residential developments which offer a variety and mix of housing types and prices shall be encouraged.
- 74.00 Distinctive natural, topographic, and aesthetic features within planned developments shall be retained in all development designs.
- 75.00 Common open space in residential planned developments shall be designed to directly benefit the future residents of the developments. When the open space is not dedicated to or accepted by the City, a mechanism such as a homeowners association, assessment district, or escrow fund will be required to maintain the common area.

- 76.00 Parks, recreation facilities, and community centers within planned developments shall be located in areas readily accessible to all occupants.
- 77.00 The internal traffic system in planned developments shall be designed to promote safe and efficient traffic flow and give full consideration to providing pedestrian and bicycle pathways.
- 78.00 Traffic systems within planned developments shall be designed to be compatible with the circulation patterns of adjoining properties.

Residential Design Policies:

- 79.00 The density allowed for residential developments shall be contingent on the zoning classification, the topographical features of the property, and the capacities and availability of public services including but not limited to sewer and water. Where densities are determined to be less than that allowed under the zoning classification, the allowed density shall be set through adopted clear and objective code standards enumerating the reason for the limitations, or shall be applied to the specific area through a planned development overlay. Densities greater than those allowed by the zoning classification may be allowed through the planned development process or where specifically provided in the zoning ordinance or by plan policy. (Ord. 4796, October 14, 2003)
- 80.00 In proposed residential developments, distinctive or unique natural features such as wooded areas, isolated preservable trees, and drainage swales shall be preserved wherever feasible.
- 81.00 Residential designs which incorporate pedestrian and bikeway paths to connect with activity areas such as schools, commercial facilities, parks, and other residential areas, shall be encouraged.
- 82.00 The layout of streets in residential areas shall be designed in a manner that preserves the development potential of adjacent properties if such properties are recognized for development on the McMinnville Comprehensive Plan Map.
- 83.00 The City of McMinnville shall review the design of residential developments to insure site orientation that preserves the potential for future utilization of solar energy.

Low-Cost Housing Development Policies:

- 84.00 Multiple-family, low-cost housing (subsidized) shall be dispersed throughout the community by appropriate zoning to avoid inundating any one area with a concentration of this type of housing.
- 85.00 Deleted as per Ord. 4796, October 14, 2003.

Multiple-family Development Policies:

86.00 Dispersal of new-multi-family housing development will be encouraged throughout the City in areas designated for residential and mixed-use development to encourage a variety of housing types throughout the community and to avoid an undue concentration of multi-family development in specific areas of the community leading to a segregation of multi-family development in McMinnville from residential neighborhoods. Dispersal policies will be consistent with the Great Neighborhood Principles

In areas where there are the amenities, services, infrastructure and public facilities to support a higher density of multi-family development, and the area is commensurate with a higher concentration of multi-family development without creating an unintended segregation of multi-family development, such as McMinnville's downtown, the area surrounding Linfield University and Neighborhood Activity Centers, a higher concentration of multi-family development will be encouraged. (Ord. 5098, December 8, 2020)

- 87.00 Residential developments at densities beyond that normally allowed in the multiple-family zone shall be allowed in the core area subject to review by the City. These developments will be encouraged for (but not limited to) the provision of housing for the elderly.
- 88.00 Deleted as per Ord. 4796, October 14, 2003.
- 89.00 Zoning standards shall require that all multiple-family housing developments provide landscaped grounds. (Ord. 4796, October 14, 2003)
- 90.00 Greater residential densities shall be encouraged to locate along major and minor arterials, within one-quarter mile from neighborhood and general commercial shopping centers or within neighborhood activity centers, and within a one-half mile wide corridor centered on existing or planned public transit routes. (Ord. 5098, December 8, 2020; Ord. 4840, January 11, 2006; Ord. 4796, October 14, 2003)
- 91.00 Multiple-family housing developments, including condominiums, boarding houses, lodging houses, rooming houses but excluding campus living quarters, shall be required to access off of arterials or collectors or streets determined by the City to have sufficient traffic carrying capacities to accommodate the proposed development. (Ord. 4573, November 8, 1994)
- 92.00 High-density housing developments shall be encouraged to locate along existing or potential public transit routes.
- 92.01 High-density housing shall not be located in undesirable places such as near railroad lines, heavy industrial uses, or other potential nuisance areas unless design factors are included to buffer the development from the incompatible use. (Ord. 4796, October 14, 2003)

- 92.02 High-density housing developments shall, as far as possible, locate within reasonable walking distance to shopping, schools, and parks, or have access, if possible, to public transportation. (Ord. 4796, October 14, 2003)
- 92.03 Housing developments for the elderly shall, as far as possible, locate near community centers, parks, and shopping areas, or where transportation services can be provided to enable access to these activity areas. (Ord. 4796, October 14, 2003)

Manufactured Home Development Policies:

- 93.00 Manufactured home subdivisions shall be allowed as outright uses in the R-1, R-2, R-3 and R-4 residential zones. These subdivisions shall develop according to the requirements and standards contained in the mobile home development ordinance. (Ord. 4796, October 14, 2003)
- 94.00 Manufactured home subdivisions that allow individual ownership of lots shall be encouraged. (Ord. 4796, October 14, 2003)
- 95.00 Manufactured home parks shall be allowed as outright uses in some residential zones. These parks shall develop according to the requirements and standards set by the City and State in the mobile home development ordinance. (Ord. 4796, October 14, 2003; Ord. 4536, April 27, 1993)
- 96.00 Manufactured home developments that cater to a variety of lifestyles, including families, couples and singles, will be encouraged. (Ord. 4796, October 14, 2003)
- 97.00 Manufactured home development standards shall seek to integrate mobile homes with surrounding uses in residential zones and to adequately buffer mobile homes from surrounding uses in commercial zones. (Ord. 4796, October 14, 2003)
- 98.00 Manufactured home developments shall not be located, as far as possible, in undesirable places such as near railroad lines, heavy industrial uses, or other potential nuisance areas unless design factors are included to buffer the development from the incompatible use. (Ord. 4796, October 14, 2003)

Urban Policies:

- 99.00 An adequate level of urban services shall be provided prior to or concurrent with all proposed residential development, as specified in the acknowledged Public Facilities Plan. Services shall include, but not be limited to:
 - 1. Sanitary sewer collection and disposal lines. Adequate municipal waste treatment plant capacities must be available.
 - 2. Storm sewer and drainage facilities (as required).

- 3. Streets within the development and providing access to the development, improved to city standards (as required).
- 4. Municipal water distribution facilities and adequate water supplies (as determined by City Water and Light). (as amended by Ord. 4796, October 14, 2003)
- 5. Deleted as per Ord. 4796, October 14, 2003.

Lot Sales Policy:

99.10 The City of McMinnville recognizes the value to the City of encouraging the sale of lots to persons who desire to build their own homes. Therefore, the City Planning staff shall develop a formula to be applied to medium and large size subdivisions, that will require a reasonable proportion of lots be set aside for owner-developer purchase for a reasonable amount of time which shall be made a part of the subdivision ordinance.

Proposals:

8.70 The City should evaluate its locational policies for low, medium, and highdensity residential development to ensure they sufficiently allow for "finergrained" zoning and land use with a mix of housing types and densities within a neighborhood without segregated land use patterns that can result from conventional zoning districts uniformly applied to large land areas. (Ord. 5098, December 8, 2020)

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CHAPTER VI TRANSPORTATION SYSTEM

GOAL VI 1: TO ENCOURAGE DEVELOPMENT OF A TRANSPORTATION SYSTEM THAT PROVIDES FOR THE COORDINATED MOVEMENT OF PEOPLE AND FREIGHT IN A SAFE AND EFFICIENT MANNER.

MASS TRANSPORTATION

Policies:

- 100.00 The City of McMinnville shall support efforts to provide facilities and services for mass transportation that serve the needs of the city residents.
- 101.00 The City of McMinnville shall cooperate with local, regional, and state agencies and private firms in examining mass transit possibilities and implementing agreed upon services.
- 102.00 The City of McMinnville shall place major emphasis on the land use development implications of large-scale regional mass transit proposals. Systems which could adversely affect the goals and policies as set forth in the plan should be closely evaluated.
- 103.00 The City of McMinnville shall encourage development of mass transit systems in existing transportation corridors where possible.
- 104.00 The City of McMinnville shall encourage a centrally located bus terminal, for intercity and intracity bus services.
- 105.00 The City of McMinnville shall examine the impacts of transportation proposals involving bus and/or rail terminals on surrounding land uses.

- 9.00 The City of McMinnville should continue to support the public transit system. Efforts to continue and expand services, if found feasible, should be supported.
- 10.00 The City of McMinnville should examine the feasibility of participating with Yamhill County in the formation of a transportation district.
- 11.00 The City of McMinnville should encourage the publication of a transportation pamphlet inventorying all public and private mass transportation services.

TRANSPORTATION DISADVANTAGED

Policies:

- 106.00 The City of McMinnville, through public and private efforts, shall encourage provision of facilities and services to meet the needs of the transportation disadvantaged.
- 107.00 The City of McMinnville shall support attempts to coordinate existing and future services for the transportation disadvantaged to reduce duplication of efforts and facilitate complementary services.

Proposals:

12.00 Encourage coordination of services through the county transportation coordinator and the county transportation committee.

RAIL

Policies:

- 108.00 The City of McMinnville shall encourage the modification, relocation, or termination of rail activities that conflict with existing developed land uses in the city.
- 109.00 The City of McMinnville shall encourage the placement of future rail facilities in locations where conflicts with current and future surrounding land uses are minimal.
- 110.00 The City of McMinnville shall insure, through zoning and other regulations, the compatibility of railroad facilities and adjacent land uses. For areas outside the core, compatible uses could include open spaces, farm activities, and industrial developments.
- 111.00 The City of McMinnville shall encourage the screening of developments within the core area that are adjacent to the rail lines. Screening could include landscaping, noise barriers, fencing, or other measures.
- 112.00 The City of McMinnville shall encourage, through zoning and other regulations, the location of industrial lands adjacent to rail lines in areas where industrial uses will be compatible with surrounding land uses, and where the goals and policies of this plan are met.

- 13.00 Deleted as per Ord. 4796, Oct. 14, 2003.
- 14.00 Insure that residential and commercial uses do not encroach on existing and planned rail facilities and vice versa.

Policies:

- 113.00 The City of McMinnville shall encourage the development of a basic transport airport facility as outlined in the 2004 Airport Layout Plan Report. (Ord.4922, February 23, 2010)
- 114.00 The City of McMinnville shall support future planning efforts involving the airport to incorporate changes to federal, state, and city aviation and land use laws and policies.
- 115.00 The City of McMinnville shall encourage the development of compatible land uses in the vicinity of the airport as identified in current and future airport and comprehensive plans.
- 116.00 The City of McMinnville, acting jointly with Yamhill County, shall appoint an Airport Land Use Board which shall be responsible for the development of an airport zoning ordinance. The ordinance shall be in accordance with applicable federal, state, and local laws and shall particularly conform to the requirements of the McMinnville Municipal Airport Master Plan. (Ord. 4536, April 27, 1993; Ord. 4218, November 23, 1982)

STREETS

Policies:

- 117.00 The City of McMinnville shall endeavor to insure that the roadway network provides safe and easy access to every parcel.
- 118.00 The City of McMinnville shall encourage development of roads that include the following design factors:
 - 1. Minimal adverse effects on, and advantageous utilization of, natural features of the land.
 - 2. Reduction in the amount of land necessary for streets with continuance of safety, maintenance, and convenience standards.
 - 3. Emphasis placed on existing and future needs of the area to be serviced. The function of the street and expected traffic volumes are important factors.
 - 4. Consideration given to Complete Streets, in consideration of all modes of transportation (public transit, private vehicle, bike, and foot paths). (Ord.4922, February 23, 2010)

- 5. Connectivity of local residential streets shall be encouraged. Residential cul-de-sac streets shall be discouraged where opportunities for through streets exist
- 119.00 The City of McMinnville shall encourage utilization of existing transportation corridors, wherever possible, before committing new lands.
- 120.00 The City of McMinnville may require limited and/or shared access points along major and minor arterials, in order to facilitate safe access flows.
- 121.00 The City of McMinnville shall discourage the direct access of small-scale residential developments onto major or minor arterial streets and major collector streets.
- 122.00 The City of McMinnville shall encourage the following provisions for each of the three functional road classifications:
 - 1. Major, minor arterials.

-Access should be controlled, especially on heavy traffic-generating developments.

-Designs should minimize impacts on existing neighborhoods.

-Sufficient street rights-of-way should be obtained prior to development of adjacent lands.

-On-street parking should be limited wherever necessary.

-Landscaping should be required along public rights-of-way. (Ord.4922, February 23, 2010)

2. Major, minor collectors.

-Designs should minimize impacts on existing neighborhoods.

-Sufficient street rights-of-way should be obtained prior to development of adjacent lands.

-On-street parking should be limited wherever necessary.

-Landscaping should be required along public rights-of-way. (Ord.4922, February 23, 2010)

-As far as is practical, residential collector streets should be no further than 1,800 feet apart in order to facilitate a grid pattern of collector streets in residential areas.

3. Local Streets

-Designs should minimize through-traffic and serve local areas only.

-Street widths should be appropriate for the existing and future needs of the area.

-Off-street parking should be encouraged wherever possible.

-Landscaping should be encouraged along public rights-of-way.

- 123.00 The City of McMinnville shall cooperate with other governmental agencies and private interest to insure the proper development and maintenance of the road network within the urban growth boundary.
- 124.00 Deleted as per Ord.4922, February 23, 2010.
- 125.00 The City of McMinnville shall adopt measures to control access onto U.S. Highway 99W from heavy traffic-generating developments. Planned development overlays on new large commercially or industrially designated areas adjacent to the highway would give the City needed access controls. (Ord. 4922, February 23, 2010; Ord. 4573, November 24, 1994)

- 15.00 The City of McMinnville should develop a list of priority projects for additions and improvements to the road network. The list should include projects relating to existing streets (e.g.), widening a road, improving an intersection) and future streets (e.g.), advanced acquisition of rights-of-way for a specific road).
- 16.00 Provisions should be included in the McMinnville Urban Growth Boundary Management Agreement between the City of McMinnville and Yamhill County addressing the coordination responsibilities for roads within the Urban Growth Boundary.
- 17.00 The City should develop standards that allow flexibility in roadway widths for certain residential streets. These standards should be based on the following criteria:
 - 1. Type of street (function, service area)
 - 2. City maintenance requirements
 - 3. Parking requirements
 - 4. Safety requirements (emergency vehicles)
 - 5. Financial responsibilities of City and developer

- 6. Applicable city, state, federal regulations
- 18.00 The City should continue to monitor and evaluate the traffic circulation patterns for the core area. If and when it is necessary to establish a one-way couplet system, consideration should be given to the following areas:
 - 1. Impacts on existing and future developments in the downtown area.
 - 2. Maintenance of pedestrian safety and convenience.
 - 3. Impacts on the traffic flow of streets adjacent to the core area.

PARKING

Policies:

- 126.00 The City of McMinnville shall continue to require adequate off-street parking and loading facilities for future developments and land use changes.
- 127.00 The City of McMinnville shall encourage the provision of off-street parking where possible, to better utilize existing and future roadways and rights-of-way as transportation routes.
- 128.00 The City of McMinnville shall continue to assist in the provision of parking spaces for the downtown area.

Proposals:

19.00 The City of McMinnville should include an assessment of parking as part of future transportation plans in the City.

BIKE PATHS

Policies:

- 129.00 Deleted as per Ord.4922, February 23, 2010.
- 130.00 The City of McMinnville shall encourage implementation of the Bicycle System Plan that connects residential areas to activity areas such as the downtown core, areas of work, schools, community facilities, and recreation facilities. (Ord.4922, February 23, 2010)
- 130.05 In areas where bikeways are planned, the City may require that new development provide bikeway improvements such as widened streets, bike paths, or the elimination of on-street parking. At the minimum, new development shall be required to make provisions for the future elimination of on-street parking along streets where bikeways are planned so that bike lanes can be striped in the future. Bike lanes and bike paths in new developments shall be constructed to standards recommended in the bikeway plan.

- 131.00 The City of McMinnville shall encourage development of bicycle and footpaths in scenic and recreational areas as part of future parks and activities.
- 132.00 The City of McMinnville shall encourage development of subdivision designs that include bike and foot paths that interconnect neighborhoods and lead to schools, parks, and other activity areas. (Ord. 4922, February 23, 2010; Ord. 4260, August 2, 1983)

PEDESTRIAN WAYS

Proposals:

20.00 The City of McMinnville should develop a comprehensive bikeway plan for the urban area. The plan should include routes, design characteristics, and possible funding sources. The planning process should include citizen input with staff assistance from Public Works, Parks and Recreation, and Planning Departments.

SYSTEM PLAN

132.23.00 The McMinnville Transportation System Plan shall be updated as necessary to remain consistent with: (a) the city's land use plan; (b) regional and statewide plans; and (c) the applicable local, State, and federal law. (Ord. 4922, February 23, 2010)

COMPLETE STREETS

- 132.24.00 The safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and balanced in all types of transportation and development projects and through all phases of a project so that even the most vulnerable McMinnville residents children, elderly, and persons with disabilities can travel safely within the public right-of-way. Examples of how the Compete Streets policy is implemented:
 - 1. Design and construct right-of-way improvements in compliance with ADA accessibility guidelines (see below).
 - 2. Incorporate features that create a pedestrian friendly environment, such as:
 - a. Narrower traffic lanes;
 - b. Median refuges and raised medians;
 - c. Curb extensions ("bulb-outs");

- d. Count-down and audible pedestrian signals;
- e. Wider sidewalks;
- f. Bicycle lanes; and
- g. Street furniture, street trees, and landscaping
- 3. Improve pedestrian accommodation and safety at signalized intersections by:
 - a. Using good geometric design to minimize crossing distances and increase visibility between pedestrians and motorists.
 - b. Timing signals to minimize pedestrian delay and conflicts.
 - c. Balancing competing needs of vehicular level of service and pedestrian safety. (Ord. 4922, February 23, 2010)

MULTI-MODAL TRANSPORTATION SYSTEM

132.25.00 The transportation system for the McMinnville planning area shall consist of an integrated network of facilities and services for a variety of motorized and non-motorized travel modes. (Ord. 4922, February 23, 2010)

CONNECTIVITY AND CIRCULATION

- 132.26.00 The vehicle, pedestrian, transit, and bicycle circulation systems shall be designed to connect major activity centers in the McMinnville planning area, increase the overall accessibility of downtown and other centers, as well as provide access to neighborhood residential, shopping, and industrial areas, and McMinnville's parks and schools.
- 132.26.05 New street connections, complete with appropriately planned pedestrian and bicycle features, shall be incorporated in all new developments consistent with the Local Street Connectivity map. (Ord. 4922, February 23, 2010)

SUPPORTIVE OF GENERAL LAND USE PLAN DESIGNATIONS AND DEVELOPMENT PATTERNS

132.27.00 The provision of transportation facilities and services shall reflect and support the land use designations and development patterns identified in the McMinnville Comprehensive Plan. The design and implementation of transportation facilities and services shall be based on serving current and future travel demand—both short-term and long-term planned uses. (Ord. 4922, February 23, 2010)

REGIONAL MOBILITY

132.28.00 A balanced system of transportation facilities and services shall be designed for the McMinnville planning area to accommodate the mobility needs of residents, businesses, and industry. (Ord. 4922, February 23, 2010)

GROWTH MANAGEMENT

- 132.29.00 The construction of transportation facilities in the McMinnville planning area shall be timed to coincide with community needs, and shall be implemented so as to minimize impacts on existing development. Prioritization of improvements should consider the City's level of service standards.
- 132.29.05 Off-site improvements to streets or the provision of enhanced pedestrian and bicycle facilities in the McMinnville planning area may be required as a condition of approval for land divisions or other development permits. (Ord. 4922, February 23, 2010)

TRANSPORTATION SYSTEM AND ENERGY EFFICIENCY

- 132.30.00 The implementation of transportation system and transportation demand management measures, provision of enhanced transit service, and provision of bicycle and pedestrian facilities in the McMinnville planning area shall be embraced by policy as the first choice for accommodating travel demand and relieving congestion in a travel corridor, before street widening projects for additional travel lanes are undertaken.
- 132.30.05 The McMinnville Transportation System Plan shall promote alternative commute methods that decrease demand on the transportation system, options which also enhance energy efficiency such as using transit, telecommuting, carpooling, vanpooling, using flexible work schedules, walking, and bicycling. (Ord. 4922, February 23, 2010)

TRANSPORTATION SAFETY

132.31.00 The City of McMinnville shall make the design, construction, and operation of a safe transportation system for all modes of travel a high priority. (Ord. 4922, February 23, 2010)

PUBLIC SAFETY

132.32.00 The safe, rapid movement of fire, medical, and police vehicles shall be an integral part of the design and operation of the McMinnville transportation system. (Ord. 4922, February 23, 2010)

ACCESSIBILITY FOR PERSONS WITH DISABILITIES

132.33.00 The McMinnville transportation system shall be designed with consideration of the needs of persons with disabilities by meeting the requirements set forth in the Americans with Disabilities Act (ADA). (Ord. 4922, February 23, 2010)

ECONOMIC DEVELOPMENT

- 132.34.00 Supportive of the mobility needs of businesses and industry, the McMinnville transportation system shall consist of the infrastructure necessary for the safe and efficient movement of goods, services, and people throughout the McMinnville planning area, and between other centers within Yamhill County and the Willamette Valley. The McMinnville Transportation System Plan shall include consideration of ways to facilitate and manage the inter-modal transfer of freight. (Ord. 4922, February 23, 2010)
- 132.34.05 The McMinnville Transportation System Plan shall promote methods that employers can utilize to better facilitate employee commuting, and; to encourage employees to use alternative commute methods to the single occupancy vehicle. (Ord. 4922, February 23, 2010)

LIVABILITY

132.35.00 Transportation facilities in the McMinnville planning area shall be, to the degree possible, designed and constructed to mitigate noise, energy consumption, and neighborhood disruption, and to encourage the use of public transit, bikeways, sidewalks, and walkways. (Ord. 4922, February 23, 2010)

HEALTH AND WELFARE

132.36.00 Through implementation of its Complete Streets policy and the TSP by enhancing its pedestrian and bicycle systems, the City of McMinnville will help encourage greater physical activity and improved health and welfare of its residents. (Ord. 4922, February 23, 2010)

TRANSPORTATION SUSTAINABILITY

132.37.00 Through implementation of the TSP and the Comprehensive Plan, the City of McMinnville will, to the extent possible, seek measures that simultaneously help reduce traffic congestion, pollution, crashes and consumer costs, while increasing mobility options for non-drivers, and encouraging a more efficient land use pattern. (Ord. 4922, February 23, 2010)

AESTHETICS AND STREETSCAPING

132.38.00 Aesthetics and streetscaping shall be a part of the design of McMinnville's transportation system. Streetscaping, where appropriate and financially feasible, including public art, shall be included in the design of transportation facilities. Various streetscaping designs and materials shall be utilized to enhance the livability in the area of a transportation project. (Ord. 4922, February 23, 2010)

INTERGOVERNMENTAL COORDINATION AND CONSISTENCY

132.39.00 The City of McMinnville shall coordinate its transportation planning and construction efforts with those of Yamhill County and the Oregon Department of Transportation (ODOT). McMinnville's transportation plan shall be consistent with those developed at the regional and state level. (Ord. 4922, February 23, 2010)

GROWTH MANAGEMENT

- 132.40.00 Mobility standards will be used to evaluate the transportation impacts of long-term growth. The City should adopt the intersection mobility standards as noted in Chapter 2 of the Transportation System Plan. (Ord. 4922, February 23, 2010)
- 132.40.05 Conditions of Approval–In accordance with the City's TSP and capital improvements plan (CIP), and based on the level of impact generated by a proposed development, conditions of approval applicable to a development application should include:
 - 1. Improvement of on-site transportation facilities,
 - 2. Improvement of off-site transportation facilities (as conditions of development approval), including those that create safety concerns, or those that increase a facility's operations beyond the City's mobility standards; and
 - 3. Transportation Demand Management strategies. (Ord. 4922, February 23, 2010)
- 132.40.10 Multi-modal Improvements To manage growth, improvements to transportation facilities may include both motorized and non-motorized facilities improvements, constructed in accordance with the City's minimum design standards. (Ord. 4922, February 23, 2010)
- 132.40.15 Transportation SDCs The City should update its transportation systems development charge (SDC) to address growth-related traffic impacts. (Ord. 4922, February 23, 2010)

CIRCULATION

- 132.41.00 Residential Street Network A safe and convenient network of residential streets should serve neighborhoods. When assessing the adequacy of local traffic circulation, the following considerations are of high priority:
 - 1. Pedestrian circulation;
 - 2. Enhancement of emergency vehicle access;
 - 3. Reduction of emergency vehicle response times;
 - 4. Reduction of speeds in neighborhoods;, and
 - 5. Mitigation of other neighborhood concerns such as safety, noise, and aesthetics. (Ord. 4922, February 23, 2010)
- 132.41.05 Cul-de-sac streets in new development should only be allowed when connecting neighborhood streets are not feasible due to existing land uses, topography, or other natural and physical constraints. (Ord. 4922, February 23, 2010)
- 132.41.10 Limit Physical Barriers The City should limit the placement of facilities or physical barriers (such as buildings, utilities, and surface water management facilities) to allow for the future construction of streets that facilitate the establishment of a safe and efficient traffic circulation network. (Ord. 4922, February 23, 2010)
- 132.41.15 Establish Truck Routes To support the efficient and safe movement of goods and freight, the City should establish and identify truck routes to the city's major destinations. Such routes should be located along arterial roadways and should avoid potential impacts on neighborhood streets. (Ord. 4922, February 23, 2010)
- 132.41.20 Modal Balance The improvement of roadway circulation must not impair the safe and efficient movement of pedestrians and bicycle traffic. (Ord. 4922, February 23, 2010)
- 132.41.25 Consolidate Access Efforts should be made to consolidate access points to properties along major arterial, minor arterial, and collector roadways. (Ord. 4922, February 23, 2010)
- 132.41.30 Promote Street Connectivity The City shall require street systems in subdivisions and development that promote street connectivity between neighborhoods. (Ord. 4922, February 23, 2010)

STREET WIDTH - HUMAN SCALE

132.42.00 Generally, a major arterial street should not be widened beyond two through lanes in each direction with auxiliary turn lanes as appropriate. Minor arterials and collector streets should not be widened beyond one through lane in each direction with auxiliary left-turn lanes as appropriate. Major arterial streets with more than five lanes and minor arterial and collector streets with more than three lanes are perceived as beyond the scale that is appropriate for McMinnville. (Ord. 4922, February 23, 2010)

NEIGHBORHOOD TRAFFIC MANAGEMENT

- 132.43.00 Implementation The City should adopt and implement its Neighborhood Traffic Calming Program (see Appendix I). (Ord. 4922, February 23, 2010)
- 132.43.05 Encourage Safety Enhancements In conjunction with residential street improvements, the City should encourage traffic and pedestrian safety improvements that may include, but are not limited to, the following safety and livability enhancements:
 - 1. Traffic circles;
 - 2. Painted or raised crosswalks (see also recommended crosswalk designation in Chapter 4);
 - 3. Landscaping barriers between roadway and non-motorized uses;
 - 4. Landscaping that promotes a residential atmosphere;
 - 5. Sidewalks and trails; and
 - 6. Dedicated bicycle lanes. (Ord. 4922, February 23, 2010)
- 132.43.10 Limited Neighborhood Cut–Through Traffic Local residential streets should be designed to prevent or discourage their use as shortcuts for through traffic. Local traffic control measures should be coordinated with the affected neighborhood. (Ord. 4922, February 23, 2010)

ACCESS MANAGEMENT

132.44.00 The City should continue to coordinate with ODOT in the administration of jointly adopted plans to manage access and highway improvements as noted in Chapter 2 of the Transportation System Plan. (Ord. 4922, February 23, 2010)

IMPERVIOUS SURFACE AREA

132.45.00 Supplement Street Design Standards – McMinnville's standards should be supplemented to achieve reductions in impermeable surfaces, consistent with safety and operating standards. Innovative design and materials should be utilized to reduce impermeable surfaces. (Ord. 4922, February 23, 2010)

ENVIRONMENTAL PRESERVATION

- 132.46.00 Low impact street design, construction, and maintenance methods should be used first to avoid, and second to minimize, negative impacts related to water quality, air quality, and noise in neighborhoods. (Ord. 4922, February 23, 2010)
- 132.46.05 Conservation Streets should be located, designed, and improved in a manner that will conserve land, materials, and energy. Impacts should be limited to the minimum necessary to achieve the transportation objective. (4922, February 23, 2010)
- 132.46.10 Clean Burning Fuels The City should support the use of clean burning and/or renewable fuels through regional organizations (see U.S. Environmental Protection Agency guides). (Ord. 4922, February 23, 2010)

AESTHETICS

132.47.00 The City should update and maintain its street design standards to increase aesthetics of the street's environment through landscaping and streetscape design. (as adopted by Ord. 4922, February 23, 2010)

SAFETY AND MAINTENANCE

- 132.48.00 Pavement Maintenance Plan Implementation The City should develop and implement its pavement maintenance plan to best preserve the existing transportation infrastructure. (Ord. 4922, February 23, 2010)
- 132.49.00 Routing System Inspection The City should promote safety through continued and routine inspection and rehabilitation of existing signage, roadway striping, and street lighting; identifying and rectifying existing deficiencies as they are identified. (Ord. 4922, February 23, 2010)

SYSTEM INVENTORY

132.50.00 System Inventory – The City shall inventory and map existing pedestrian facilities. Facility inventories and selected inventory updates should be performed every five years to determine the success or failure of meeting the Plan's pedestrian goal, objectives, and policies. The city has already partially met this policy objective having completed the walking inventory of all public streets as part of the TSP. (Ord. 4922, February 23, 2010)

SYSTEMS DEVELOPMENT

- 132.51.00 Formalize New Sidewalk Construction Program To complete the pedestrian facility network, the City will formalize a New Sidewalk Construction Program that reflects the City's funding resources. This program will give priority to the construction of missing sidewalks in already developed areas of the city that would provide improved access to schools, parks, shopping, and transit services. (Ord. 4922, February 23, 2010)
- 132.51.05 Ensuring Future Sidewalk Connections All future development must include sidewalk and walkway construction as required by the McMinnville Zoning Ordinance and City Code and adopted City of McMinnville Design Standards. All road construction or renovation projects shall include sidewalks. The City will support, as resources are available, projects that would remove identified barriers to pedestrian travel or safety. (Ord. 4922, February 23, 2010)
- 132.51.10 Complete Connections with Crosswalks All signalized intersections must have marked crosswalks. School crosswalks will be marked where crossing guards are provided. Subject to available funding, and where appropriate, marked crosswalks, along with safety enhancements (medians and curb extensions), shall be provided at unsignalized intersections and uncontrolled traffic locations in order to provide greater mobility in areas frequently traveled by persons with limited mobility. Marked crosswalks may also be installed at other high volume pedestrian locations without medians or curb extensions if a traffic study shows there would be a benefit to those pedestrians. (Ord. 4922, February 23, 2010)
- 132.51.15 Connecting Shared-Use Paths The City will continue to encourage the development of a connecting, shared-use path network, expanding facilities along parks and other rights-of-way. (Ord. 4922, February 23, 2010)

AMERICANS WITH DISABILITIES ACT COMPLIANCE

132.52.00 Compliance with ADA Standards – The City shall comply with the requirements set forth in the Americans with Disabilities Act regarding the location and design of sidewalks and pedestrian facilities within the City's right-of-way. (Ord. 4922, February 23, 2010)

SYSTEMS MAINTENANCE

132.53.00 Maintaining Quality of Facilities – The City will establish standards for the maintenance and safety of pedestrian facilities. These standards should include the removal of hazards and obstacles to pedestrian travel, as well as maintenance of benches and landscaping. (Ord. 4922, February 23, 2010)

PEDESTRIAN PROGRAMS

- 132.54.00 Promoting Walking for Health and Community Livability The City will encourage efforts that inform and promote the health, economic, and environmental benefits of walking for the individual and McMinnville community. Walking for travel and recreation should be encouraged to achieve a more healthful environment that reduces pollution and noise to foster a more livable community. (Ord. 4922, February 23, 2010)
- 132.55.00 Safe Routes to School The City shall work, where possible, with the McMinnville School District and neighborhood associations to maintain and improve its programs to evaluate the existing pedestrian access to local schools, estimate the current and potential use of walking as a travel mode, evaluate safety needs, and propose changes to increase the percentage of children and young adults safely using this mode. (Ord. 4922, February 23, 2010)

BICYCLE SYSTEM PLAN

- 132.56.00 Provide Bicycle Facilities on Arterials and some Collector Streets To the extent possible, arterial and some collector streets undergoing overlays or reconstruction will either be re-striped with bicycle lanes or sharrow (bicycle/auto shared-lane) routes as designated on the Bicycle System Plan Map. Every effort will be made to retrofit existing arterials and selective collectors with bicycle lanes, as designated on the Bicycle System Plan Map. (Ord. 4922, February 23, 2010)
- 132.56.05 Mitigation of On-street Parking Loss From Bicycle Projects New bicycle facilities require the removal of on-street parking spaces on existing streets, parking facilities should be provided that mitigate this loss, to the extent practicable. (Ord. 4922, February 23, 2010)
- 132.56.10 Eliminate Barriers to Bicycle Travel The City will actively pursue a comprehensive system of bicycle facilities through designing and constructing projects, as resources are available, and implementing standards and regulations designed to eliminate barriers to bicycle travel. As a result of this policy, new developments or major transportation projects will neither create new, nor maintain existing, barriers to bicycle travel. (Ord. 4922, February 23, 2010)
- 132.56.15 Bicycle Routes and Signage As resources are available, the City will periodically consult with local bicyclists to review existing and proposed bicycle lanes, and identify improvements needed to make these routes function better for bicyclists. These routes shall be identified by signage on the routes and shown on updates of the bicycle route map. (Ord. 4922, February 23, 2010)

- 132.56.20 Complete the Major Bicycle System A completed system of major bicycle facilities is one of the most important factors in encouraging bicycle travel. The City will work toward annually completing a minimum five percent addition to the bicycle system, as designated on the Bicycle System Plan Map, with priority given to projects that fill critical missing links in the bicycle system or address an identified safety hazard. (Ord. 4922, February 23, 2010)
- 132.56.25 Establish Minimum Standards for Bicycle Facility Maintenance The City shall develop minimum standards that will keep bicycle facilities clean of debris, properly striped, and clearly marked and signed. (Ord. 4922, February 23, 2010)
- 132.56.30 Zoning Ordinance Requirements for Bicycle Parking The McMinnville Zoning Ordinance (Section 17.60.140) contains bicycle parking supply requirements and standards that require new developments to provide a minimum amount of bicycle parking, based on the needs of the specific zone or land use type. (Ord. 4922, February 23, 2010)
- 132.56.35 Bicycle Parking at Transit Facilities The City will work with the Yamhill County Transit Authority (YCTA) to encourage the installation of public bicycle parking facilities at transit stations and other inter-modal facilities, and encourage the provision of bicycle racks on all public transit vehicles. (Ord. 4922, February 23, 2010)
- 132.56.40 Target and Eliminate Key Behaviors that Lead to Bicycle Accidents The City will encourage schools, safety organizations, and law enforcement agencies to provide information and instruction on bicycle safety issues that focus on the most important accident problems. (Ord. 4922, February 23, 2010)
- 132.56.45 Safe Routes to School The City will work with the McMinnville School District to: evaluate existing bicycle access to local schools and supporting infrastructure (bicycle racks, lockers, etc.); estimate the current and potential use of bicycling as a travel mode; evaluate safety needs; and propose changes to increase the percentage of children and young adults safely using this mode. (Ord. 4922, February 23, 2010)

TRANSIT SYSTEM PLAN

- 132.57.00 Transit-supportive Street System Design The City will include the consideration of transit operations in the design and operation of street infrastructure. (Ord. 4922, February 23, 2010)
- 132.57.05 Transit-supportive Urban Design Through its zoning and development regulations, the City will facilitate accessibility to transit services through transit-supportive streetscape, subdivision, and site design requirements that promote pedestrian connectivity, convenience, and safety. (Ord. 4922, February 23, 2010)

- 132.57.10 Transit Facilities The City will continue to work with YCTA to identify and help develop supportive capital facilities for utilization by transit services, including pedestrian and bicycle access to bus stop and bus shelter facilities where need is determined and right-of-way is available. (Ord. 4922, February 23, 2010)
- 132.57.15 Pedestrian Facilities The City will ensure that arterial and collector streets' sidewalk standards are able to accommodate transit amenities as necessary along arterial and collector street bus routes. The City will coordinate with YCTA on appropriate locations. . (Ord. 4922, February 23, 2010)
- 132.57.20 Intermodal Connectivity The City of McMinnville will encourage connectivity between different travel modes. Transit transfer facilities should be pedestrian and cyclist accessible. (Ord. 4922, February 23, 2010)

TRANSPORTATION DEMAND MANAGEMENT PLAN

- 132.58.00 The City should coordinate with Yamhill County to promote and support Transportation Demand Management investments that may include, but are not limited to, the following strategies:
 - 1. Ride-sharing coordination with regional partners;
 - 2. Parking management; and
 - 3. Transit-oriented and pedestrian-friendly design. (Ord. 4922, February 23, 2010)
- 132.58.05 The City should support Yamhill County, who provides assistance to employers in designing and implementing trip reduction plans at their work sites. Trip reduction plans will include strategies to encourage employees to use alternative transportation modes and discourage them from community in SOVs. Alternative work hours and tele-commuting will also be recommended as a way of reducing peak-hour congestion. (Ord. 4922, February 23, 2010)
- 132.58.10 The City should coordinate with YCTA to promote the use of transit and vanpools, in support of vehicle trip reduction strategies. (Ord. 4922, February 23, 2010)
- 132.58.15 The City of McMinnville should coordinate with and encourage YCTA to administer its county-wide TDM Program where it affects McMinnville. The Program may include, but is not limited to, the provisions of:
 - 1. Twenty-four hour rideshare matching hotline;

- 2. Carpool and vanpool match lists;
- Information and referrals to the public on McMinnville and intercity transit service, vanpools, bicycle routes, tele-commuting, park-andride lots, other ridesharing agencies, and transportation services for special needs;
- 4. Assistance in the formation of vanpools;
- 5. Public outreach;
- 6. School outreach;
- 7. Services to employees, including commuting surveys and individualized trip-reduction plans;
- 8. Coordination with other agencies and organizations with similar goals; and
- 9. Marketing of alternative transportation modes. (Ord. 4922, February 23, 2010)
- 132.58.20 Support YCTA in the application for adequate and consistent funding of the Regional TDM Program. The City of McMinnville should establish several strategies to reduce transportation demand, and thereby address the city's transportation congestion. The aim of transportation demand management (TDM) program is to reduce the number of vehicles on the area's roads, which reduces the demand on the existing transportation network. (Ord. 4922, February 23, 2010)

FREIGHT MOBILITY, AIR, RAIL AND PIPELINE PLANS

- 132.59.00 Truck routes Identify and designate truck routes that tie inter-modal facilities and industrial zones to the designated through routes. (Ord. 4922, February 23, 2010)
- 132.59.05 Airport Encourage safe aviation facilities that benefit local commerce. (Ord. 4922, February 23, 2010)
- 132.59.10 Airport area land use Do not permit land uses within airport noise corridors that are not noise compatible, and avoid the establishment of uses that are physical hazards to air traffic at the McMinnville Airport. (Ord. 4922, February 23, 2010)
- 132.59.15 Railroad Encourage railroad infrastructure to support current and future economic activities. (Ord. 4922, February 23, 2010)
- 132.59.20 Railroad crossings Encourage gate controls and sidewalk facilities at primary railroad crossings of streets. (Ord. 4922, February 23, 2010)

CAPITAL IMPROVEMENTS

- 132.60.00 Motor Vehicle Fuel Tax The City should continue to use a combination of Motor Vehicle Fuel Tax and Vehicle License Fee revenue to fund capital improvements to, and maintenance of, the transportation system. (Ord. 4922, February 23, 2010)
- 132.60.05 Systems Development Charge The City should continue to consider the impacts of future growth on the McMinnville transportation system and determine what level of development charges should be collected by the City to mitigate impacts placed on area-wide transportation facilities by expected future development. (Ord. 4922, February 23, 2010)
- 132.60.10 Development Exactions The City should require new developments to mitigate their impacts on the transportation system. (Ord. 4922, February 23, 2010)
- 132.60.15 Bicycle and Pedestrian System Funding The City should establish a new allocation and set aside 1.0% of its Motor Vehicles Fuel Tax funds for creation of on-street bicycle facilities and curb ramp replacements. (Ord. 4922, February 23, 2010)
- 132.60.20 Pursuing Federal and State Grants The City should continue to aggressively pursue Federal, State, and private grants to augment street and non-motorized capital improvements. (Ord. 4922, February 23, 2010)

PAVEMENT MANAGEMENT

- 132.61.00 Primary Maintenance Funding Sources Assuming no changes in State funding mechanisms, the primary funding sources for street system maintenance activities will be the City's allocation of the Motor Vehicle Fuel Tax. (Ord. 4922, February 23, 2010)
- 132.61.05 Seeking Additional Funding Sources for Maintenance The City should seek additional funding sources to meet the long term financial requirements of sustaining a perpetual life street operations and maintenance program, including the consideration of a street utility fee and utility franchise fee. (Ord. 4922, February 23, 2010)
- 132.61.10 Responsibilities for System Maintenance The City should continue to participate in cooperative agreements with the State for maintenance of traffic signal systems on City streets and State highways based on equitable determinations of responsibility and benefit. The City should continue to participate in cooperative agreements with the County for the maintenance of county roads within the city. (Ord. 4922, February 23, 2010)

- 132.61.15 Primary Funding Sources for Operations Assuming no changes in state funding mechanisms, transportation system operations activities will likely be funded primarily from the City's allocation of the Motor Vehicle Fuel Tax. Other funding sources should be pursued to augment the financial requirements of providing adequate future system operations. (Ord. 4922, February 23, 2010)
- 132.61.20 Pursuing Federal and State Grants The City should pursue federal and State grants to augment operations activities, especially in the planning and engineering functions. (Ord. 4922, February 23, 2010)

McMINNVILLE TSP IMPLEMENTATION

- 132.62.00 TSP as Legal Basis The City of McMinnville shall use the McMinnville TSP as the legal basis and policy foundation for actions by decisionmakers, advisory bodies, staff, and citizens in transportation issues. The goals, objectives, policies, implementation strategies, principles, maps, and recommended projects shall be considered in all decision-making processes that impact or are impacted by the transportation system. (Ord. 4922, February 23, 2010)
- 132.62.05 TSP Policies The City of McMinnville shall use the McMinnville TSP to:
 - 1. Describe the classification or function of all streets within the McMinnville planning area. Policies found in the Plan shall be used to develop connective local street circulation patterns.
 - 2. Require new development to provide adequate accessibility, as defined by the McMinnville Zoning Ordinance, for all travel modes within a development and in coordination with existing and other proposed development. Street design standards in the McMinnville Zoning Ordinance are to be used to secure adequate public street and sidewalk facilities.
 - 3. Identify measures and programs to be undertaken to enhance mobility for all travel modes.
 - 4. Form the basis from which identified projects are placed into the State Transportation Improvement Program (STIP).
 - 5. Establish funding and project construction priorities when preparing funding scenarios for measures. (Ord. 4922, February 23, 2010)
- 132.62.10 Capital Improvement Plan The City of McMinnville shall derive, in part, the projects in the Capital Improvement Plan (CIP) from the McMinnville TSP. Transportation projects contained in the CIP shall be consistent with the goals, policies, and needs identified in the Plan. (Ord. 4922, February 23, 2010)

- 132.62.15 State and Federal Funding The City of McMinnville shall include those projects and programs in the McMinnville TSP that are of regional or statewide significance (within the McMinnville urban area), or require the use of state or federal funding, in the Oregon Statewide Transportation Improvement Program (STIP). (Ord. 4922, February 23, 2010)
- 132.62.20 TSP Use in Review of Land Use Actions The City of McMinnville shall consider and apply the goals, policies, planning principles, recommended projects, implementation strategies, and maps contained in McMinnville TSP in the review of land use actions and development applications. (Ord. 4922, February 23, 2010)
- 132.62.25 TSP Update Every five years, or as may otherwise be warranted, the City of McMinnville shall conduct a reassessment of the planning assumptions, analysis methods, and findings and recommendations. The McMinnville TSP shall be updated, accordingly, based on the study reassessment. (Ord. 4922, February 23, 2010)

CHAPTER VII COMMUNITY FACILITIES AND SERVICES

GOAL VII 1: TO PROVIDE NECESSARY PUBLIC AND PRIVATE FACILITIES AND UTILITIES AT LEVELS COMMENSURATE WITH URBAN DEVELOPMENT, EXTENDED IN A PHASED MANNER, AND PLANNED AND PROVIDED IN ADVANCE OF OR CONCURRENT WITH DEVELOPMENT, IN ORDER TO PROMOTE THE ORDERLY CONVERSION OF URBANIZABLE AND FUTURE URBANIZABLE LANDS TO URBAN LANDS WITHIN THE McMINNVILLE URBAN GROWTH BOUNDARY.

PUBLIC ADMINISTRATIVE AND STORAGE FACILITIES

Policies:

- 133.00 The City of McMinnville shall encourage the consolidation of city, county, state, and federal administrative offices and other service facilities, where possible.
- 134.00 The City of McMinnville shall encourage city, county, state, and federal agencies to locate administrative offices in or near the downtown core of the City.
- 135.00 The City of McMinnville shall allow the placement of public storage and workshop facilities in areas where adverse impacts on surrounding lands are minimal or can be minimized by screening, landscaping, and/or other methods.

SANITARY SEWER SYSTEM

- 136.00 The City of McMinnville shall insure that urban developments are connected to the municipal sewage system pursuant to applicable city, state, and federal regulations.
- 137.00 The City of McMinnville shall undertake necessary long-range planning efforts for the sewage system to implement the McMinnville Comprehensive Plan.
- 138.00 The City of McMinnville shall develop, or require development of, sewer system facilities capable of servicing the maximum levels of development envisioned in the McMinnville Comprehensive Plan.
- 139.00 The City of McMinnville shall extend or allow extension of sanitary sewage collection lines within the framework outlined below:

- 1. Sufficient municipal treatment plant capacities exist to handle maximum flows of effluents.
- 2. Sufficient trunk and main line capacities remain to serve undeveloped land within the projected service areas of those lines.
- 3. Public water service is extended or planned for extension to service the area at the proposed development densities by such time that sanitary sewer services are to be utilized.
- 4. Extensions will implement applicable goals and policies of the comprehensive plan.
- 140.00 The City of McMinnville shall continue to limit sewer service extensions to the areas within the urban growth boundary, except where service is granted to comply with state or federal laws. Areas outside the city limits, but within the urban growth boundary, shall be granted sewer service hook-ups only under policies adopted by the City.
- 141.00 The City of McMinnville shall continue to separate storm and sanitary sewers where they are connected to reduce the inflow of storm sewer waters to the sewage treatment plant. Ongoing maintenance and improvements of the existing system shall also be undertaken to reduce infiltration of rain water into the system.

Proposals:

- 21.00 The City of McMinnville should develop a priority list of sewer system extensions and improvements that covers several years. Such a list, which would be nonbinding, would be a guideline for City expenditures for public sewer projects over a designated time period. The list would be useful in determining the appropriateness of annexation requests and other land use proposals. Priorities could be amended as circumstances change and allowances could be made for projects in which developers would pay for a substantial portion of the costs.
- 22.00 The City of McMinnville should establish a schedule of sewage treatment plant additions which are tied to the projected population in the McMinnville Comprehensive Plan. This schedule should include methods for financing needed additions, and could be implemented as required.
- 22.50 The City of McMinnville should evaluate whether or not to update its sanitary sewer master plan every five years, and following any major UGB amendment. (Ord. 5098, December 8, 2020)

STORM DRAINAGE

Policies:

- 142.00 The City of McMinnville shall insure that adequate storm water drainage is provided in urban developments through review and approval of storm drainage systems, and through requirements for connection to the municipal storm drainage system, or to natural drainage ways, where required.
- 143.00 The City of McMinnville shall encourage the retention of natural drainage ways for storm water drainage.

WATER SYSTEM

- 144.00 The City of McMinnville, through McMinnville Water and Light, shall provide water services for development at urban densities within the McMinnville Urban Growth Boundary.
- 145.00 The City of McMinnville, recognizing McMinnville Water and Light as the agency responsible for water system services, shall extend water services within the framework outlined below:
 - 1. Facilities are placed in locations and in such a manner as to insure compatibility with surrounding land uses.
 - 2. Extensions promote the development patterns and phasing envisioned in the McMinnville Comprehensive Plan.
 - 3. For urban level developments within McMinnville, sanitary sewers are extended or planned for extension at the proposed development densities by such time as the water services are to be utilized.
 - 4. Applicable policies for extending water services, as developed by the City Water and Light Commission, are adhered to.
- 146.00 The City of McMinnville shall continue to support the long-range planning efforts of McMinnville Water and Light to provide water system facilities and services commensurate with the projected population in the Comprehensive Plan.
- 147.00 The City of McMinnville shall continue to support coordination between city departments, other public and private agencies and utilities, and McMinnville Water and Light to insure the coordinated provision of utilities to developing areas. The City shall also continue to coordinate with McMinnville Water and Light in making land use decisions.

- 148.00 The City of McMinnville shall encourage McMinnville Water and Light to continue management practices in the municipal watershed which insure highest quality water.
- 149.00 The City of McMinnville shall carefully consider the environmental impact of the location and design of water system facilities to minimize adverse effects on residential, farm, and natural areas.
- 150.00 The City of McMinnville and McMinnville Water and Light shall cooperate with Yamhill County, the Bureau of Land Management, and private parties owning or regulating lands around the municipal water supply impoundments to restrict land uses around these sites to those which would be compatible with and protect water quality and quantity.

Proposals:

- 23.00 The City of McMinnville should require certain water system facilities such as reservoirs to be compatible with surrounding uses either through landscaping or other screening.
- 24.00 The City of McMinnville should encourage McMinnville Water and Light to evaluate whether or not to update its water master plan every five years, and following any major UGB amendment. The City shall supply McMinnville Water and Light consultants with necessary information to facilitate coordination of water system and land use plans. (Ord. 5098, December 8, 2020)
- 25.00 The City of McMinnville should support McMinnville Water and Light in its effort to develop an additional water supply impoundment in the Walker Creek drainage area to meet the needs of the projected population in the Comprehensive Plan.

WATER AND SEWER--LAND DEVELOPMENT CRITERIA

- 151.00 The City of McMinnville shall evaluate major land use decisions, including but not limited to urban growth boundary, comprehensive plan amendment, zone changes, and subdivisions using the criteria outlined below:
 - 1. Sufficient municipal water system supply, storage and distribution facilities, as determined by McMinnville Water and Light, are available or can be made available, to fulfill peak demands and insure fire flow requirements and to meet emergency situation needs.
 - 2. Sufficient municipal sewage system facilities, as determined by the City Public Works Department, are available, or can be made available, to collect, treat, and dispose of maximum flows of effluents.

- 3. Sufficient water and sewer system personnel and resources, as determined by McMinnville Water and Light and the City, respectively, are available, or can be made available, for the maintenance and operation of the water and sewer systems.
- 4. Federal, state, and local water and waste water quality standards can be adhered to.
- 5. Applicable policies of McMinnville Water and Light and the City relating to water and sewer systems, respectively, are adhered to.

POLICE AND FIRE PROTECTION

Policies:

- 152.00 The City of McMinnville shall encourage the provision of adequate police and fire facilities and personnel to meet the needs of the community as it expands.
- 153.00 The City of McMinnville shall continue coordination between the planning and fire departments in evaluating major land use decisions.
- 154.00 The City of McMinnville shall encourage the McMinnville Fire Department to develop plans for new facilities based on the development patterns projected in the Comprehensive Plan.
- 155.00 The ability of existing police and fire facilities and services to meet the needs of new service areas and populations shall be a criterion used in evaluating annexations, subdivision proposals, and other major land use decisions.

SOLID WASTE

GOAL VII 2: TO PROVIDE FOR THE ORDERLY AND EFFICIENT MANAGEMENT OF SOLID WASTE IN AN ENVIRONMENTALLY ACCEPTABLE AND ECONOMICALLY FEASIBLE MANNER.

Policies:

- 156.00 The City of McMinnville shall support regional efforts to develop innovative and economical alternatives for regional solid waste management.
- 157.00 The City of McMinnville shall support local solid waste management and recycling efforts.
- 158.00 The City of McMinnville shall encourage cooperation and coordination between local profit and nonprofit recycling groups and between local and regional solid waste management groups and agencies.

Proposals:

- 26.00 The City of McMinnville should examine methods available to the City to encourage recycling, including collection fee incentives and franchise modifications.
- 27.00 The City of McMinnville should establish a recycling program for city offices, similar to the program in county offices, to set an example for the public.

PARKS AND RECREATION

GOAL VII 3: TO PROVIDE PARKS AND RECREATION FACILITIES, OPEN SPACES, AND SCENIC AREAS FOR THE USE AND ENJOYMENT OF ALL CITIZENS OF THE COMMUNITY.

- 159.00 The City of McMinnville's Parks, Recreation, and Open Space Master Plan shall serve to identify future needs of the community, available resources, funding alternatives, and priority projects. (Ord. 4796, October 14, 2003)
- 160.00 The City of McMinnville shall encourage the improvement of existing parks and recreation facilities as a priority consideration.
- 161.00 The City of McMinnville shall encourage cooperation between public and private recreation agencies and groups to provide a full complement of recreational and leisure time activities, to share existing facilities, and to discourage duplication of expenditures and programs.
- 162.00 The City of McMinnville and School District 40 shall endeavor to jointly cooperate in the acquisition, development, and maintenance of combined park and school sites wherever desired, feasible, and mutually agreeable to both parties.
- 163.00 The City of McMinnville shall continue to require land, or money in lieu of land, from new residential developments for the acquisition and/or development of parklands, natural areas, and open spaces.
- 163.05 The City of McMinnville shall locate future community and neighborhood parks above the boundary of the 100-year floodplain. Linear parks, greenways, open space, trails, and special use parks are appropriate recreational uses of floodplain land to connect community and other park types to each other, to neighborhoods, and services, provided that the design and location of such uses can occur with minimum impacts on such environmentally sensitive lands. (Ord. 4840, January 11, 2006)
- 164.00 The City of McMinnville shall continue to acquire floodplain lands through the provisions of Chapter 17.53 (Land Division Standards) of the zoning ordinance and other available means, for future use as natural areas, open spaces, and/or parks.

- 165.00 The City of McMinnville shall acquire park sites in advance of needs; however, purchase of lands should be closely examined in the light of current costs of land, park maintenance, personnel services, and the existing parks development priorities.
- 166.00 The City of McMinnville shall recognize open space and natural areas, in addition to developed park sites, as necessary elements of the urban area.
- 167.00 The City of McMinnville shall encourage the retention of open space and scenic areas throughout the community, especially at the entrances to the City.
- 168.00 Distinctive natural features and areas shall be retained, wherever possible, in future urban developments.
- 169.00 Drainage ways in the City shall be preserved, where possible, for natural areas and open spaces and to provide natural storm run-offs.
- 170.00 The City of McMinnville shall require the provision of lands for parks from all subdivisions on Three Mile Lane, except when an existing park is available and reachable by safe and convenient pedestrian access. Where no land is dedicated, money in lieu of land shall be required.
- 170.05 For purposes of projecting future park and open space needs, the standards as contained in the adopted McMinnville Parks, Recreation, and Open Space Master Plan shall be used. (Ord. 4796, October 14, 2003)
- 170.06 The City shall encourage the siting of parks and public spaces in or adjacent to neighborhood activity centers. (Ord. 5098, December 8, 2020)

Proposals:

- 28.00 The City of McMinnville should evaluate whether or not to update its parks master plan every five years, and following any major UGB amendment. (Ord. 5098, December 8, 2020; Ord. 4796, October 14, 2003)
- 29.00 The City of McMinnville should continue to monitor the location and size of lands acquired through the parkland (subdivision) ordinance. Methods of developing and maintaining the smaller parks in a manner less expensive to the City should be encouraged and explored.
- 30.00 Deleted as per Ord. 4796, October 14, 2003.

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GOAL VIII 1: TO PROVIDE ADEQUATE ENERGY SUPPLIES, AND THE SYSTEMS NECESSARY TO DISTRIBUTE THAT ENERGY, TO SERVICE THE COMMUNITY AS IT EXPANDS.

ENERGY SUPPLY DISTRIBUTION

- 171.00 The City of McMinnville shall continue to examine land use decisions in the light of present and projected supplies of electrical, fossil fuel, and other sources of energy.
- 172.00 The City of McMinnville, through McMinnville Water and Light, shall recognize the potential for development of local energy sources to serve the local area and shall cooperate, where feasible, with energy developers.
- 173.00 The City of McMinnville shall coordinate with McMinnville Water and Light and the various private suppliers of energy in this area in making future land use decisions.
- 174.00 The City of McMinnville shall continue to support the long-range planning efforts of McMinnville Water and Light to supply the electrical energy needs of the community.
- 175.00 The City of McMinnville, recognizing McMinnville Water and Light, Northwest Natural Gas, and other private suppliers as the agencies or groups responsible for energy distribution, encourages the extension of energy distribution services within the framework outlined below:
 - 1. Sufficient supplies of energy as determined by McMinnville Water and Light, Northwest Natural Gas, and other groups are available to meet the demands of existing residential, commercial, and industrial consumers.
 - 2. Facilities are planned in such a manner as to insure compatibility with surrounding land uses.
- 176.00 The City of McMinnville shall carefully consider the environmental impacts of the location and design of energy system facilities to minimize or eliminate adverse effects on residential, farm, and natural areas.
- 177.00 The City of McMinnville shall coordinate with natural gas utilities for the extension of transmission lines and the supplying of this energy resource.

Proposals:

- 31.00 The City of McMinnville should require energy system facility sites to be compatible in appearance with surrounding land uses either through landscaping or other screening methods.
- 32.00 The City of McMinnville should zone, or otherwise regulate, land uses around future energy system-related sites to insure compatibility with the site.
- 33.00 The City of McMinnville should encourage updating of the existing electrical energy distribution system plan and electrical resource supply and demand forecasts, where needed, by the Water and Light Department. The City will supply McMinnville Water and Light consultants with necessary information to facilitate coordination of energy and land use plans.
- 34.00 Proposed extensions of energy system facilities should be coordinated with the extension of other facilities (sewer and water, telephone lines, storm drainage, etc.) where necessary to insure provision of full urban services to developable areas within the urban growth boundary.
- 35.00 Construction of facilities that could have an adverse effect on natural areas, farmlands, and residential areas should be altered in such a manner as to minimize or eliminate these impacts.

ENERGY CONSERVATION

GOAL VIII 2: TO CONSERVE ALL FORMS OF ENERGY THROUGH UTILIZATION OF LAND USE PLANNING TOOLS.

- 178.00 The City of McMinnville shall encourage a compact urban development pattern to provide for conservation of all forms of energy.
- 179.00 The City of McMinnville shall amend pertinent ordinances to allow for design techniques which increase the efficient utilization of land and energy. Areas to examine shall include, but not be limited to:
 - 1. The zoning ordinance requirements, including density, lot areas, and setbacks to increase utilizable space in lots, while maintaining health and safety standards.
 - 2. The geographic placement of various uses (commercial, industrial, residential) on the Comprehensive Plan Map to encourage energy-efficient locations.
 - 3. The zoning ordinance and planned development provisions to allow for cluster developments, individually owned, common-wall dwellings, and other design techniques that increase utilizable space and offer energy savings.

- 4. The subdivision and zoning ordinances to encourage energy-efficient design such as proper landscaping for solar heating and cooling, solar orientation of dwellings and other site design considerations.
- 5. The building codes to encourage energy-efficient residential, commercial, and industrial building design and construction techniques.
- 180.00 The City of McMinnville shall encourage weatherization of existing structures to increase energy efficiency.
- 180.50 The City of McMinnville supports local sustainability and endorses the utilization of proven and innovative energy efficient design and construction technologies to reduce building heat-gain, lower energy consumption, and lessen pollutant output. (Ord. 4903, December 9, 2008)

Proposals:

- 36.00 For industries seeking to locate in McMinnville, the City should examine the ratio of jobs to energy demand as an important consideration and encourage industries that are labor intensive and/or energy efficient rather than energy intensive.
- 37.00 The City of McMinnville should encourage the development of community gardens on vacant city lands and within multi-family housing developments as an energy saving device.
- 38.00 The City of McMinnville should consider adopting weatherization standards to be enacted prior to the resale of commercial and residential structures.
- 39.00 The City of McMinnville, through McMinnville Water and Light, should provide financial assistance for educational efforts in energy conservation and energy use awareness.

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- GOAL IX 1: TO PROVIDE ADEQUATE LANDS TO SERVICE THE NEEDS OF THE PROJECTED POPULATION TO THE YEAR 2023, AND TO ENSURE THE CONVERSION OF THESE LANDS IN AN ORDERLY, TIMELY MANNER TO URBAN USES.
- GOAL IX 2: TO ESTABLISH A LAND USE PLANNING FRAMEWORK FOR APPLICATION OF THE GOALS, POLICIES, AND PROPOSALS OF THE McMINNVILLE COMPREHENSIVE PLAN

URBAN GROWTH BOUNDARY

- 181.00 The City of McMinnville shall establish an urban growth boundary to separate rural lands from urbanizable and urban lands. Lands within the boundary shall be deemed necessary for urban development within the planning period, except those designated as reserve areas.
- 181.10 When evaluating areas for future urbanization, the City shall consider the "7 Guiding Principles for Future Land Use" contained in the MGMUP:
 - 1. Principle 1: Land Use Law. Comply with state planning requirements
 - 2. **Principle 2: Historical Development Patterns.** Respect existing land use and development patterns and build from them.
 - 3. **Principle 3: Hazards and Natural Resources.** Avoid development in areas of known hazards or natural resources
 - 4. **Principle 4: Cost of Urban Services.** Consider the availability and cost of providing urban services to new development.
 - 5. **Principle 5: Density.** Adopt policies that allow the market to increase densities, and push it to do so in some instances.
 - 6. **Principle 6: Traditional Development.** Consistent with principles 4 and 5, allow and encourage development that meets the principles of "smart growth."
 - 7. **Principle 7: UGB Expansions.** Contain urban expansion within natural and physical boundaries, to the extent possible. (Ord 5098, December 8, 2020)
- 181.20 When evaluating areas for future urbanization, the City shall consider the suitability and potential of the area to achieve the Great Neighborhood

Principles provided in Chapter IX of the Comprehensive Plan. Exceptions to certain principles may be considered for continuation of areas that are already predominantly planned for single-use commercial or industrial districts where mixed use is not anticipated. (Ord 5098, December 8, 2020)

- 181.30 When considering adequacy of lands for urbanization, the City shall consider the feasibility of the location and service extensions needed to meet identified needs during the planning horizon and considering and comparing adequacy of areas to meet identified needs relative to other areas. (Ord 5098, December 8, 2020)
- 181.40 The City shall consider both the short-term and long-term development capacity of an area when evaluating expansion of the UGB, especially when service provision requires significant extension of off-site improvements, to ensure the investment and cost of services is commensurate with the amount of new development to be served. The City shall generally avoid areas that require significant and costly off-site service extensions if an area is not large enough to achieve economies of scale investment over time in order to justify the off-site extensions and improvements. Such costs shall be borne by those who benefit from the improvements and service extensions. (Ord 5098, December 8, 2020)
- 181.50 The City shall generally avoid service extensions to developed areas predominantly served with private community water systems and wastewater systems which are not constructed to City standards, unless the primary cost is borne by the property to be served to connect the existing development to municipal services constructed to municipal standards. (Ord 5098, December 8, 2020)
- 181.60 The City shall consider the opportunities for transportation connectivity within an area, and opportunities for connectivity between an area and other urban and urbanizable lands. Urban transportation connectivity is intended to provide a well-connected street grid system and provide safe and comfortable facilities for all modes, including walking, bicycling, and transit. Areas evaluated for urbanization should have multiple direct transportation connections within the UGB, without requiring principal access across rural lands where the Oregon Transportation Planning Rule would preclude urban transportation facilities on or across those lands. (Ord 5098, December 8, 2020)
- 181.70 Where there is significant potential for harm to people and property due to hazards, the City should apply precautionary principles in evaluating whether land should remain outside the UGB, or whether there are sufficient opportunities to enable inclusion of land in the UGB subject to mitigation measures accompanying the increased intensity of population and development that would occur as the result of urbanization.. (Ord 5098, December 8, 2020)

- 182.00 Amendments to the Urban Growth Boundary may be considered periodically. The City of McMinnville and Yamhill County shall consider amendments to the boundary based on the following criteria and other State requirements:
 - 1. Demonstrated need to accommodate long-range urban population growth requirements consistent with LCDC goals.
 - 2. Need for housing, employment opportunities, and livability.
 - 3. Orderly and economic provision for public facilities and services.
 - 4. Maximum efficiency of land uses within and on the fringe of the existing urban area.
 - 5. The long term environmental, energy, economic, and social consequences of the locality, the region, and the state as the result of allowing urbanization and not preserving and maintaining the land for agricultural or forest uses, whichever is applicable.
 - 6. Retention of agricultural land as defined, with Class I being the highest priority for retention and Class IV the lowest priority.
 - 7. Compatibility of the proposed urban uses with other adjacent uses.
 - 8. Deleted as per Ord. 4796, October 14, 2003.
- 182.50 **Coordinated Master Planning and Plan Updates.** The City should initiate updates of its functional planning documents within 5 years of a major UGB update to address consistency with the new UGB, and work with service providers to conduct updates to their planning documents as needed. This includes:

City:

- Parks and Recreation Master Plan
- Water Reclamation Facilities Plan
- Storm Drainage Master Plan
- Transportation System Plan
- Airport Layout Plan
- Goal 5 Resources Plan
- Goal 7 Hazards Plan

Service Providers:

- McMinnville Water and Light: Water Distribution System Master Plan
- Yamhill County Transit: Transit System Master Plan. (Ord. 5098, December 8, 2020)

GENERAL DEVELOPMENT PATTERN

Policies:

- 183.00 The City of McMinnville, with the cooperation of Yamhill County, shall establish three categories of lands within the Urban Growth Boundary. Future urbanizable lands are those lands outside the city limits, but inside the Urban Growth Boundary. These lands shall be retained in agricultural resource zones until converted to urbanizable lands by annexation to the City of McMinnville. Urbanizable lands are those lands within the city limits which are not yet developed at urban densities. Conversion of these lands to the urban classification shall involve fulfillment of the goals and policies of this plan, provision of urban services, and application of appropriate implementation ordinances and measures. Urban lands are those lands within the city limits developed at urban densities.
- 184.00 The City of McMinnville shall establish a Comprehensive Plan Map designating allowed land uses within the McMinnville Urban Growth Boundary. Land uses allowed under the specific designations shall be set in Volume I of the McMinnville Comprehensive Plan, Chapter IX.
- 184.50 The City shall establish the following Comprehensive Plan Map Designations, which will relate to the zoning map, as follows. The zoning map classifications are identified in the zoning ordinance."

Residential – This designation covers all the zoning designations from R-1 through R-5, and any additional zones that may be created for residential uses.

Commercial – This designation covers all the commercial zoning designations, from C-1 to C-3, including the Office Residential zone, and any future zoning categories created for commercial use.

Industrial – This designation covers all the industrial zones, from M-L to M-2, and any future industrial designations.

Flood Plain – This designation corresponds to the flood plain zoning classifications.

Mixed Use Urban – The Mixed Use Urban designation is applied to lands which are planned for a mix of uses. The Mixed Use Urban designation allows for a mix of uses, and therefore a mix of zones including all residential zones (R-1 through R-5) and smaller scale commercial zones (O-R and C-1) that are compatible with residential uses. The Mixed Use Urban designation may include additional zones that may be created for mixed uses.

Urban Holding – This designation shall apply to areas added to the UGB which are planned for a mix of uses, and which are yet to be master planned through the City's established UGB expansion area planning process (Framework Plan, Area Planning, and Master Planning). Lands assigned the

Urban Holding designation shall retain their rural County zoning in the interim, until such time as they have been master planned, annexed, and rezoned to urban zones consistent with an approved Area Plan or Master Plan. The Urban Holding designation allows for a mix of uses, and therefore a mix of zones, including all residential zones (R-1 through R-5) and smaller scale commercial zones (O-R and C-1) that are compatible with residential uses, as well as the park (PK) and public facility zones. (Ord. 5098, December 8, 2020)

LAND USE DEVELOPMENT TOOLS

- 185.00 The City of McMinnville and Yamhill County shall adopt an Urban Growth Boundary management agreement establishing (1) the rights and responsibilities of each jurisdiction for management of lands outside the city limits but inside the Urban Growth Boundary, (2) procedures for processing different land use requests on lands within the Urban Growth Boundary, but outside the city limits, and (3) policies that shall be applied to the development of lands within the Urban Growth Boundary, but outside the city limits.
- 186.00 The City of McMinnville shall place planned development overlays on areas of special significance identified in Volume I of the McMinnville Comprehensive Plan. Those overlays shall set forth the specific conditions for development of the affected properties. Areas of significance identified in the plan shall include but not be limited to:
 - 1. Three Mile Lane (north and south).
 - 2. Deleted as per Ord. 4796, October 14, 2003.
 - 3. Barber property.
 - 4. West Hills area.
 - 5. Commercial areas at the northern and southern entrances to the city.
 - 6. New industrial areas, such as Riverside North, certain existing industrial areas. (Ord. 5098, December 8, 2020)
- 187.00 The City of McMinnville shall adopt additional implementation ordinances and measures to carry out the goals and policies of the McMinnville Comprehensive Plan. These shall include, but not be limited to, the Zoning Ordinance and Map, Annexation Ordinance, and Mobile Home Development Ordinance.

GREAT NEIGHBORHOOD PRINCIPLES

Policies:

187.10 The City of McMinnville shall establish Great Neighborhood Principles to guide the land use patterns, design, and development of the places that McMinnville

citizens live, work, and play. The Great Neighborhood Principles will ensure that all developed places include characteristics and elements that create a livable, egalitarian, healthy, social, inclusive, safe, and vibrant neighborhood with enduring value, whether that place is a completely new development or a redevelopment or infill project within an existing built area.

- 187.20 The Great Neighborhood Principles shall encompass a wide range of characteristics and elements, but those characteristics and elements will not function independently. The Great Neighborhood Principles shall be applied together as an integrated and assembled approach to neighborhood design and development to create a livable, egalitarian, healthy, social, inclusive, safe, and vibrant neighborhood, and to create a neighborhood that supports today's technology and infrastructure, and can accommodate future technology and infrastructure.
- 187.30 The Great Neighborhood Principles shall be applied in all areas of the city to ensure equitable access to a livable, egalitarian, healthy, social, inclusive, safe, and vibrant neighborhood for all McMinnville citizens.
- 187.40 The Great Neighborhood Principles shall guide long range planning efforts including, but not limited to, master plans, small area plans, and annexation requests. The Great Neighborhood Principles shall also guide applicable current land use and development applications.
- 187.50 The McMinnville Great Neighborhood Principles are provided below. Each Great Neighborhood Principle is identified by number below (numbers 1 13), and is followed by more specific direction on how to achieve each individual principle.
 - 1. Natural Feature Preservation. Great Neighborhoods are sensitive to the natural conditions and features of the land.
 - a. Neighborhoods shall be designed to preserve significant natural features including, but not limited to, watercourses, sensitive lands, steep slopes, wetlands, wooded areas, and landmark trees.
 - 2. Scenic Views. Great Neighborhoods preserve scenic views in areas that everyone can access.
 - a. Public and private open spaces and streets shall be located and oriented to capture and preserve scenic views, including, but not limited to, views of significant natural features, landscapes, vistas, skylines, and other important features.
 - 3. Parks and Open Spaces. Great Neighborhoods have open and recreational spaces to walk, play, gather, and commune as a neighborhood.
 - a. Parks, trails, and open spaces shall be provided at a size and scale that is variable based on the size of the proposed development and the number of

dwelling units.

- b. Central parks and plazas shall be used to create public gathering spaces where appropriate.
- c. Neighborhood and community parks shall be developed in appropriate locations consistent with the policies in the Parks Master Plan.
- 4. Pedestrian Friendly. Great Neighborhoods are pedestrian friendly for people of all ages and abilities.
 - a. Neighborhoods shall include a pedestrian network that provides for a safe and enjoyable pedestrian experience, and that encourages walking for a variety of reasons including, but not limited to, health, transportation, recreation, and social interaction.
 - b. Pedestrian connections shall be provided to commercial areas, schools, community facilities, parks, trails, and open spaces, and shall also be provided between streets that are disconnected (such as cul-de-sacs or blocks with lengths greater than 400 feet).
- 5. Bike Friendly. Great Neighborhoods are bike friendly for people of all ages and abilities.
 - a. Neighborhoods shall include a bike network that provides for a safe and enjoyable biking experience, and that encourages an increased use of bikes by people of all abilities for a variety of reasons, including, but not limited to, health, transportation, and recreation.
 - b. Bike connections shall be provided to commercial areas, schools, community facilities, parks, trails, and open spaces.
- 6. Connected Streets. Great Neighborhoods have interconnected streets that provide safe travel route options, increased connectivity between places and destinations, and easy pedestrian and bike use.
 - a. Streets shall be designed to function and connect with the surrounding built environment and the existing and future street network, and shall incorporate human scale elements including, but not limited to, Complete Streets features as defined in the Comprehensive Plan, grid street networks, neighborhood traffic management techniques, traffic calming, and safety enhancements.
 - b. Streets shall be designed to encourage more bicycle, pedestrian and transit mobility with a goal of less reliance on vehicular mobility.

- 7. Accessibility. Great Neighborhoods are designed to be accessible and allow for ease of use for people of all ages and abilities.
 - a. To the best extent possible all features within a neighborhood shall be designed to be accessible and feature elements and principles of Universal Design.
 - b. Design practices should strive for best practices and not minimum practices.
- 8. Human Scale Design. Great Neighborhoods have buildings and spaces that are designed to be comfortable at a human scale and that foster human interaction within the built environment.
 - a. The size, form, and proportionality of development is designed to function and be balanced with the existing built environment.
 - b. Buildings include design elements that promote inclusion and interaction with the right-of-way and public spaces, including, but not limited to, building orientation towards the street or a public space and placement of vehicleoriented uses in less prominent locations.
 - c. Public spaces include design elements that promote comfortability and ease of use at a human scale, including, but not limited to, street trees, landscaping, lighted public areas, and principles of Crime Prevention through Environmental Design (CPTED).
- 9. Mix of Activities. Great Neighborhoods provide easy and convenient access to many of the destinations, activities, and local services that residents use on a daily basis.
 - a. Neighborhood destinations including, but not limited to, neighborhoodserving commercial uses, schools, parks, and other community services, shall be provided in locations that are easily accessible to surrounding residential uses.
 - b. Neighborhood-serving commercial uses are integrated into the built environment at a scale that is appropriate with the surrounding area.
 - c. Neighborhoods are designed such that owning a vehicle can be optional.
- 10. Urban-Rural Interface. Great Neighborhoods complement adjacent rural areas and transition between urban and rural uses.
 - a. Buffers or transitions in the scale of uses, buildings, or lots shall be provided on urban lands adjacent to rural lands to ensure compatibility.
- 11. Housing for Diverse Incomes and Generations. Great Neighborhoods provide housing opportunities for people and families with a wide range of incomes, and

for people and families in all stages of life.

- a. A range of housing forms and types shall be provided and integrated into neighborhoods to provide for housing choice at different income levels and for different generations.
- 12. Housing Variety. Great Neighborhoods have a variety of building forms and architectural variety to avoid monoculture design.
 - a. Neighborhoods shall have several different housing types.
 - b. Similar housing types, when immediately adjacent to one another, shall provide variety in building form and design.
- 13. Unique and Integrated Design Elements. Great Neighborhoods have unique features, designs, and focal points to create neighborhood character and identity. Neighborhoods shall be encouraged to have:
 - a. Environmentally friendly construction techniques, green infrastructure systems, and energy efficiency incorporated into the built environment.
 - b. Opportunities for public art provided in private and public spaces.
 - c. Neighborhood elements and features including, but not limited to, signs, benches, park shelters, street lights, bike racks, banners, landscaping, paved surfaces, and fences, with a consistent and integrated design that are unique to and define the neighborhood. (Ord 5066 §2, April 9, 2019)

UGB EXPANSION AREA PLANNING PROCESS

- 187.60.00 At the time of any expansion of the McMinnville UGB, the City of McMinnville shall follow a planning process that will guide the development of the expanded UGB in a manner that is consistent with the land use development tools and urban design requirements of the McMinnville Comprehensive Plan and also provides for the development of the identified land use needs that require the expansion of the UGB. (Ord. 5098, December 8, 2020)
- 187.60.10 The City of McMinnville's overall planning process for UGB expansion areas shall include the completion and adoption of three successive levels of planning for lands within UGB expansion areas prior to their development. The three successive planning processes include the Framework Plan, the Area Plan, and the Master Plan. (Ord. 5098, December 8, 2020)

FRAMEWORK PLANS

- 187.70.00 At the time of the adoption of any UGB amendment that expands the UGB, the City of McMinnville shall include with the UGB amendment a Framework Plan for the UGB expansion areas. (Ord. 5098, December 8, 2020)
- 187.70.10 The Framework Plan shall identify a general urban land use concept for lands that are included in the UGB expansion areas. The Framework Plan will be conceptual in nature, but shall serve as an advisory plan that informs and provides guidance for more detailed Area Planning and Master Planning that will be required for lands that are annexed into the City. (Ord. 5098, December 8, 2020)
- 187.70.20 Lands that are included in UGB expansion areas shall be assigned the Urban Holding (UH) Comprehensive Plan Map Designation. Exceptions to the assignment of the Urban Holding designation may be made for lands that are included in the UGB based on their suitability to provide a specific identified land need, such as Commercial or Industrial, or reflect a hazard or protected area, such as the Floodplain (FP) designation. Lands designated as UH on the Comprehensive Plan Map shall retain their existing rural County zoning. (Ord. 5098, December 8, 2020)
- 187.70.30 Lands designated as Urban Holding (UH) on the Comprehensive Plan Map shall not be rezoned to urban zoning districts other than the Urban Holding zone or developed with urban uses until further Area Planning and Master Planning processes are completed and adopted. Parcels smaller than 10 acres are exempt from the Master Planning process but will be required to show compliance with the Area Plan. This shall not preclude any applicable provisions of state law which may specify when a City is required to allow for a dwelling on an existing lot of record. (Ord. 5098, December 8, 2020)

AREA PLANNING

- 187.80.00 The City of McMinnville shall initiate an Area Planning process for UGB expansion areas that are designated on the Comprehensive Plan Map as Urban Holding (UH). The City of McMinnville shall prioritize which UGB expansion areas to complete Area Planning for based on the size of the area, the need for coordination of the development of public infrastructure and services, and the expected timeframe of development or redevelopment. (Ord. 5098, December 8, 2020)
- 187.80.10 Area Plans shall more specifically identify land uses, their locations, and their relationship to public facilities, natural resources, and existing urban uses. The land uses identified in an Area Plan must be consistent with the Framework Plan and the identified land use needs for the UGB expansion area. (Ord. 5098, December 8, 2020)

- 187.80.20 Area Plans shall be adopted by the City Council as guiding land use documents. The adoption of the Area Plan is not a land use decision, and does not result in any changes to Comprehensive Plan designations or zoning districts. (Ord. 5098, December 8, 2020)
- 187.80.30 The City of McMinnville shall establish a process for property owners to initiate the Area Planning process, if the City has not yet initiated or completed an Area Plan for land designated on the Comprehensive Plan Map as Urban Holding (UH) in a UGB expansion area. (Ord. 5098, December 8, 2020)

MASTER PLANNING

- 187.90.00 Prior to annexation of all lands greater than 10 acres in size, property owners shall submit a Master Plan to be reviewed by the City Council and acknowledged in an Annexation Agreement. (Ord. 5098, December 8, 2020)
- 187.90.10 Master Plans shall be consistent with the land uses identified in the adopted Area Plan that is applicable to the land in question. (Ord. 5098, December 8, 2020)
- 187.90.20 Master Plans shall identify current Comprehensive Plan designations and future urban zoning districts per the policies of the McMinnville Comprehensive Plan and the McMinnville Municipal Code. Uses identified in the Master Plan shall be consistent with the urban Comprehensive Plan designations and zones. (Ord. 5098, December 8, 2020)
- 187.90.30 Lands less than 10 acres in size may be annexed without the completion of the Master Planning process. Development of these lands shall be consistent with the land uses identified in the adopted Area Plan that is applicable to the land in question. Development of these lands shall be consistent with the land use development tools and requirements of the McMinnville Comprehensive Plan and the McMinnville Zoning Ordinance. (Ord. 5098, December 8, 2020)
- 187.90.40 Master Plans will be required as a land-use decision to rezone property from a rural zone to an urban zone. (Ord. 5098, December 8, 2020)

NEIGHBORHOOD ACTIVITY CENTERS

GOAL: NEIGHBORHOOD ACTIVITY CENTERS PROVIDE SHOPPING, SERVICES, RECREATION, HIGH-DENSITY HOUSING, OFFICE AND INSTITUTIONAL FACILITIES NEEDED TO SUPPORT A SURROUNDING NEIGHBORHOOD OR URBAN AREA. Policies:

- 187.95.00 Neighborhood activity centers shall include the following types and mix of land uses:
 - 1. Activity center focus areas should include a mix of land uses: commercial, office, institutional, mixed-use residential, and high-density residential. The presence of a single usage type in an entire focus area (e.g., commercial), does not meet the criteria for an activity center.
 - 2. Each activity center should incorporate some amount of formal outdoor space for public use, such as a formal park or plaza, as focal points for public interaction.
 - 3. Different land uses or activities may be placed adjacent to one another, or on different floors of the same building. Such mixing of land uses encourages a compact and pedestrian-oriented center.
 - 4. An activity center has a support area consisting of medium and higher density housing.
 - 5. The activity center's physical layout should include a location for a future transit stop. (Ord. 5098, December 8, 2020)
- 187.95.01 The focus area should include a mix of commercial, office, institutional, and high density residential uses. The commercial and institutional uses support the common day-to-day demands of the surrounding neighborhood for goods, services, and facilities. A neighborhood grocery store is an essential element of the focus area, and if possible should generally be the principal establishment. The activity center may also supply professional office space for neighborhood businesses. Some high-density residential uses may also be present in the focus area, as well as mixed-use residential uses, such as upper story residential over commercial businesses. Examples of focus area land uses include:

Commercial:

- Neighborhood Grocery store
- Pharmacy or drug store
- Bakery or coffee shop
- Neighborhood restaurant or pub
- Neighborhood services or retail

Professional Office Space:

Residential:

• High-density housing

• Upper story housing (over commercial business)

Public/Institutional:

- Church
- Post office
- Neighborhood park or plaza
- Public Market. (Ord. 5098, December 8, 2020)

187.95.02 The following uses should be avoided in a neighborhood activity center:

- Uses considered noxious when located next to a residential neighborhood
- Large retailers, discount stores
- Auto-oriented businesses
- Warehousing, storage, heavy manufacturing. (Ord. 5098, December 8, 2020)

Neighborhood Activity Center Locational Criteria Policies:

187.95.03 Neighborhood activity centers should be located and arranged according to the following guidelines:

Minimum Separation from other Neighborhood Activity Centers:	0.50 to 1 miles
Minimum Separation from Downtown McMinnville:	1 - 1.5 miles
Maximum distance that nonresidential uses may radiate	800-1000 ft.
outwards from the center of the activity center (along streets):	(about 1/4 mi.)
Maximum distance away from edge of Focus Area that high- density housing (a part of the Support Area) should be located:	1/8 mi.
Maximum distance away from edge of Focus Area that medium-density housing (a part of the Support Area) should be located:	1/4 mi.

187.95.04 Neighborhood Activity Centers require locations that are not heavily parcelized, or characterized by numerous individual ownerships. Locations that consist primarily of large vacant parcels will maximize the ability to realize such mixed-use development in a cost effective, comprehensively planned manner. (Ord. 5098, December 8, 2020)

Neighborhood Activity Center Site Area and Development Size and Intensity Policies:

187.95.05 The size of a Neighborhood Activity Center, and the allocation of land area and building space between different uses in the activity center, should fall around these ranges. This table should be used for guidance but variances from the size ranges in the table should be allowed if the variance achieves the objectives of the Neighborhood Activity Center. (Ord. 5098, December 8, 2020)

	Average Area
Combined focus and support areas	40 to 80 acres
Support Area	30 to 50 acres
Focus Area, Acreage	
focus area total acreage	8 to 30 acres
focus area, commercial portion	2.5 to 10 acres
focus area, office portion	2.5 to 10 acres
focus area, institutional portion	1 to 10 acres
focus area, public space (park, plaza)	0.25 to 2.5 acre
Focus Area, Floor Space	
total retail floor space, acceptable range	50,000 to 100,000 sq. ft.
total office floor space, acceptable range	25,000 to 100,000 sq. ft.
total institutional floor space, acceptable range	2,500 to 25,000 sq. ft.
max. size of largest non-grocery retailer	10,000 to 30,000 sq. ft.
max. size of grocery/supermarket	20,000 to 40,000 sq. ft.

- 187.95.06 Residential densities in the focus area or portions of the support area adjacent to it should be between 8 to 20 dwelling units per net acre. These density ranges are generally appropriate for attached single-family housing or apartments. (Ord. 5098, December 8, 2020)
- 187.95.07 Densities in the support area should transition to between 4 10 dwelling units per net acre at the outer edge of the support area -- appropriate for commonwall homes, duplexes, and small lot single-family detached homes. (Ord. 5098, December 8, 2020)

Proposals:

- 40.00 The City shall complete an inventory of the applicable natural resources listed in Goal 5 of the Oregon Statewide Planning Goals and Guidelines. The resources to be included in the inventory include, but are not limited to, riparian corridors, wetlands, wildlife habitat, open space, and scenic views. The City shall coordinate with the Department of Land Conservation and Development to determine which Goal 5 resources to include in the inventory.
- 41.00 The City shall complete an inventory of landmark trees that are of significance or value to the City's environment or history.
- 42.00 The City shall develop specific park and open space requirements for different types of neighborhoods and developments, such as multiple family residential uses or single family residential subdivisions. The park and open space requirements for individual developments shall be based on the size or scale of

the proposed development and on the number of dwelling units within the proposed development and shall incorporate both active and passive parks, open spaces, and opportunities to connect with nature.

- 43.00 The City shall complete a Bicycle Plan to guide the planning, implementation, and growth of a city-wide bicycle network throughout McMinnville. The Bicycle Plan may be adopted as an appendix to the Transportation System Plan and may identify projects that can be implemented or planned to create a city-wide bicycle network.
- 44.00 The City shall complete a Pedestrian Plan to guide the planning, implementation, and growth of a city-wide pedestrian network throughout McMinnville. The Pedestrian Plan may be adopted as an appendix to the Transportation System Plan and may identify projects that can be implemented or planned to create a city-wide pedestrian network.
- 45.00 The City shall develop site and design requirements for commercial and industrial uses.
- 46.00 The City shall develop development codes that allow for a variety of housing types and forms, and shall develop site and design requirements for those housing types and form.
- 47.00 The City shall evaluate the impact of future technology on neighborhood design and develop development codes that support today's technology and infrastructure but can accommodate future technology and infrastructure as well, including but not limited to data infrastructure, artificial intelligence, ride-share, and autonomous vehicles.
- 48.00 The City shall develop design and development standards and processes that allow for the discreet and coordinated incorporation of existing and future infrastructure into neighborhoods. (Ord 5066 §2, April 9, 2019)
- 48.10 The City shall complete and adopt Area Plans for the following areas as described in the McMinnville Growth Management and Urbanization Plan:
 - 1. Southwest Area Potentially with subareas:
 - a. West Hills South, Southwest 2, and West of Old Sheridan Road (potentially also including Redmond Hill Road)
 - b. Southwest 06 and Old Sheridan Road
 - 2. Fox Ridge Road, NW-EX1b-R1, and High School Site
 - 3. Riverside South
 - 4. Redmond Hill Road (potentially include with the Southwest Area Plan)
 - 5. Booth Bend Road
 - 6. Riverside North (Ord. 5098, December 8, 2020)
- 48.15 The City of McMinnville should develop an Area Plan for the Three Mile Lane area that supports and enhances the district's economic vitality and marketability, provides opportunities for a complementary mix of land uses,

consistent with the vision of a diverse and vibrant district, enhances multi-modal connections throughout the district, and creates an aesthetically pleasing gateway to the City of McMinnville. (Ord. 5098, December 8, 2020)

- 48.20 The City shall evaluate and potentially update the Office-Residential (O-R) and Neighborhood Business (C-1) zones to ensure that the uses and development permitted in those zones is consistent with the Neighborhood Activity Center (NAC) principles and Great Neighborhood Principle #9 (Mix of Activities. Great Neighborhoods provide easy and convenient access to many of the destinations, activities, and local services that residents use on a daily basis.) (Ord. 5098, December 8, 2020)
- 48.30 **"Urban Holding" (UH) Zoning Map Designation.** The City shall establish an "Urban Holding" (UH) zone, which may be applied to lands within the UH Comprehensive Plan Map designation. Lands within the UH Comprehensive Plan map designation may be annexed and rezoned to UH as an interim designation before urban zoning is applied, subject to completion of the master planning process consistent with an approved annexation agreement. (Ord. 5098, December 8, 2020)
- 48.40 **"Park" (PK) Zone Map Designation.** The City shall develop a Park Zone which will be applied to all public parks and facilities within the city limits. (Ord. 5098, December 8, 2020)
- 48.50 **"Public Facility" (PF) Zone Map Designation.** The City shall develop a Public Facility Zone which will be applied to public facilities within the city limits. (Ord. 5098, December 8, 2020)
- 48.60 **"Open Space and Natural Resources" (OSR) Comprehensive Plan/Zone Map Designation.** The City will establish an Open Space and Recreation Comprehensive Plan and Zoning map designations to be applied to protected open space and natural resources lands. (Ord. 5098, December 8, 2020)
- 48.65 **Redesignation to OSR.** As part of the Goal 5 planning work, the City shall evaluate redesignating the property which is subject to open space conservation through the Chegwyn Farms Conservation Easement (Instrument # 20090315) from the "R" Residential designation to the "OSR" Open Space Reserve designation. (Ord. 5098, December 8, 2020)
- 48.70 **Redesignation to Commercial.** As an identified efficiency measure necessary to reduce the needed size of the "Phase 2" UGB amendment to meet additional Commercial land needs, the City shall initiate a change to the Comprehensive Plan and Zone Map to redesignate and rezone 40 acres of property along the south side of the Highway 18 frontage from commercial to industrial, leaving the rear portions in an Industrial designation. This recognizes that the City will retain an Industrial surplus as a result of adding the Riverside North area to the UGB as part of the "Phase 2" UGB amendment. (Ord. 5098, December 8, 2020)

- 48.80 **"Airport Facilities" (AZ) Comprehensive Plan/Zone Map Designation.** The City will establish an Airport Facilities Comprehensive Plan and Zoning map designation to be applied to all land associated with the successful operation and vitality of the airport. (Ord. 5098, December 8, 2020)
- 48.90 **Annexation Process.** The City shall update its annexation ordinance (Ordinance No. 4357) to reflect new statutory requirements and a process consisting of an annexation agreement with the City Council that includes a conceptual master plan but is not a land-use process. (Ord. 5098, December 8, 2020)
- 48.95 *McMinnville Yamhill County Urban Growth Boundary Management Agreement.* The City shall update its urban growth boundary management agreement (Ordinance No. 4146) with Yamhill County. (Ord. 5098, December 8, 2020)

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CHAPTER X CITIZEN INVOLVEMENT AND PLAN AMENDMENT

- GOAL X 1: TO PROVIDE OPPORTUNITIES FOR CITIZEN INVOLVEMENT IN THE LAND USE DECISION MAKING PROCESS ESTABLISHED BY THE CITY OF McMINNVILLE.
- GOAL X 2: TO MAKE EVERY EFFORT TO ENGAGE AND INCLUDE A BROAD CROSS SECTION OF THE COMMUNITY BY MAINTAINING AN ACTIVE AND OPEN CITIZEN INVOLVEMENT PROGRAM THAT IS ACCESSIBLE TO ALL MEMBERS OF THE COMMUNITY AND ENGAGES THE COMMUNITY DURING DEVELOPMENT AND IMPLEMENTATION OF LAND USE POLICIES AND CODES.
- GOAL X 3 TO PERIODICALLY REVIEW AND AMEND THE McMINNVILLE COMPREHENSIVE PLAN TO REFLECT CHANGES IN COMMUNITY CIRCUMSTANCES, IN CITIZEN DESIRES, AND IN THE STATEWIDE GOALS.

Policies:

- 188.00 The City of McMinnville shall continue to provide opportunities for citizen involvement in all phases of the planning process. The opportunities will allow for review and comment by community residents and will be supplemented by the availability of information on planning requests and the provision of feedback mechanisms to evaluate decisions and keep citizens informed.
- 189.00 The City of McMinnville shall establish procedures for amending the Comprehensive Plan, Volumes I and II, and the implementation ordinances and measures in Volume III, which allow for citizen review and comment.
- 190.00 The City of McMinnville shall appoint a representative Planning Commission that will serve as the officially recognized Committee for Citizen Involvement (CCI) for the City of McMinnville. This Commission will be made up of representatives of all geographical areas of the City, and shall hold public forums and public hearings on major comprehensive plan text amendments, comprehensive plan and zoning map amendments, zoning ordinance text amendments and changes in the urban growth boundary and/or urban growth management agreements.
- 191.00 The Committee for Citizen Involvement shall, in addition to reviewing the aforementioned proposals, undertake a major review of the City's comprehensive plan, as required by the LCDC, to insure compliance with the statewide goals, to insure the proper functioning of the plan and all implementation measures, and to incorporate into the plan changes in citizenry views or community circumstances which are deemed necessary and proper.

- 192.00 The Committee for Citizen Involvement shall have the power to initiate requests for amendments to the comprehensive plan text, maps, or implementation ordinances through appropriate procedures and channels.
- 193.00 The City of McMinnville shall continue to engage citizens in community advisory positions for input on the major elements of the comprehensive plan by creating special citizen advisory bodies and ad-hoc committees comprised of volunteers representing a broad cross-section of the community to provide input on every major comprehensive planning effort and other related land use planning matters.
- 194.00 The City of McMinnville shall strive to include youth members on City committees involved in land use planning, and work with the McMinnville School District, local private schools and service groups to encourage youth involvement in land use planning activities.
- 195.00 The City of McMinnville shall assure that technical information is available to citizens in an understandable form and when needed provide translations of information to non-English speaking members of the community,
- 196.00 The City of McMinnville shall allocate adequate human, financial and informational resources for the citizen involvement program. (Ord 5037 §2, September 12, 2017; Ord. 4536, April 27, 1993)

Proposals:

- 49.00 Periodically evaluate the City's Citizen Involvement Program and make adjustments as needed to improve its effectiveness.
- 50.00 Have the Committee for Citizen Involvement report at least annually to the City Council to evaluate the effectiveness of the City's citizen involvement efforts. (Ord 5066 §2, April 9, 2019, Ord 5037 §2, September 12, 2017)

MCMINNVILLE DEVELOPMENT CODE REFERENCES TO TRANSIT

Chapter 17.21

R-4 MULTIPLE-FAMILY RESIDENTIAL ZONE

<u>17.21.010</u> Permitted uses. In an R-4 zone, the following uses and their accessory uses are permitted:

- A. Single-family dwelling;
- B. Two-family dwelling;
- C. Multiple-family dwelling subject to the following:
 - 1. The property on which the use will be located has direct access from a major collector or minor arterial street, or a local collector street within 600' of a collector or arterial street; or
 - 2. The property is located within one-half mile of a planned or existing transit route; or
 - 3. The property is within one-quarter mile from a planned or existing neighborhood or commercial shopping area.

Chapter 17.50

NEIGHBORHOOD ACTIVITY CENTER OVERLAY DISTRICT

<u>17.50.040</u> Policies and Procedures. The following policies and procedures shall apply to lands within designated Neighborhood Activity Centers:

- A. The Neighborhood Activity Center (NAC) is intended to facilitate the development of an activity center at the neighborhood scale. Neighborhoods are contiguous areas, generally containing approximately 600 to 1500 dwellings, or approximately 1500 to 3500 people. The NAC should contain facilities vital to the day-to-day activity of a neighborhood (e.g., neighborhood grocery store, drug store, church, coffee shop) located in close proximity to residential uses. The NAC should contain the neighborhood's highest-density housing and link pedestrian, bike, and transit networks from adjacent residential areas to the NAC.
- B. Approval of a Neighborhood Activity Center Concept Plan that addresses the NAC planning requirements is required in locations that are not covered by an approved Area Plan or Master Plan. Approval of an NAC Concept Plan shall follow the approval steps for an Area Plan and Master Plan set forth in Comprehensive Plan Policy 187.80 and 187.90.
- C. An approved Neighborhood Activity Center Concept Plan and/or development plan is required prior to any development or redevelopment within these overlay areas. At a minimum, a concept plan shall encompass the entire land area within a designated activity center overlay_that is proposed for development. The specific boundaries of the activity center shall be reviewed with City staff to determine an appropriate boundary.