City of Stayton

TRANSPORTATION SYSTEM PLAN

Volume I: Transportation System Plan

KITTELSON & ASSOCIATES

Adopted June 2019

CITY OF STAYTON TRANSPORTATION SYSTEM PLAN

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- Councilor Christopher Molin
- Councilor Jordan Ohrt
- Councilor David Patty
- Councilor Brian Quigley

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INTRODUCTION

INTRODUCTION

The City of Stayton transportation system plan (TSP) is a long-range plan that sets the vision for the city's transportation system, facilities, and services to meet state, regional, and local needs for the next 20 years. The TSP was developed through community and stakeholder input and is based on the system's existing and projected future needs and anticipated available funding. The plan also serves as the Transportation Element of the City of Stayton Comprehensive Plan. The purpose of the 2019 TSP update is to address growth in Stayton as well as address regulatory changes that have occurred since adoption of the City's previous TSP.

THE CITY OF STAYTON TSP

The City of Stayton TSP is a long-range plan that sets the vision for the city's transportation system, facilities, and services to meet state, regional, and local needs for the next 20 years.

The TSP fulfills the Transportation Planning Rule (TPR) requirements for comprehensive transportation planning in Oregon cities and presents the investments and priorities for the Pedestrian, Bicycle, Transit, Motor Vehicle, and other transportation systems.

Stayton is a city in Marion County, Oregon, located 12 miles southeast of Salem. It has a population of approximately 8,000 people. It is served by Highway 22, an east-west state highway that runs north of Stayton and provides access to Salem. The city's main commercial district is concentrated around N First Avenue and its downtown lies in the southeast part of town.

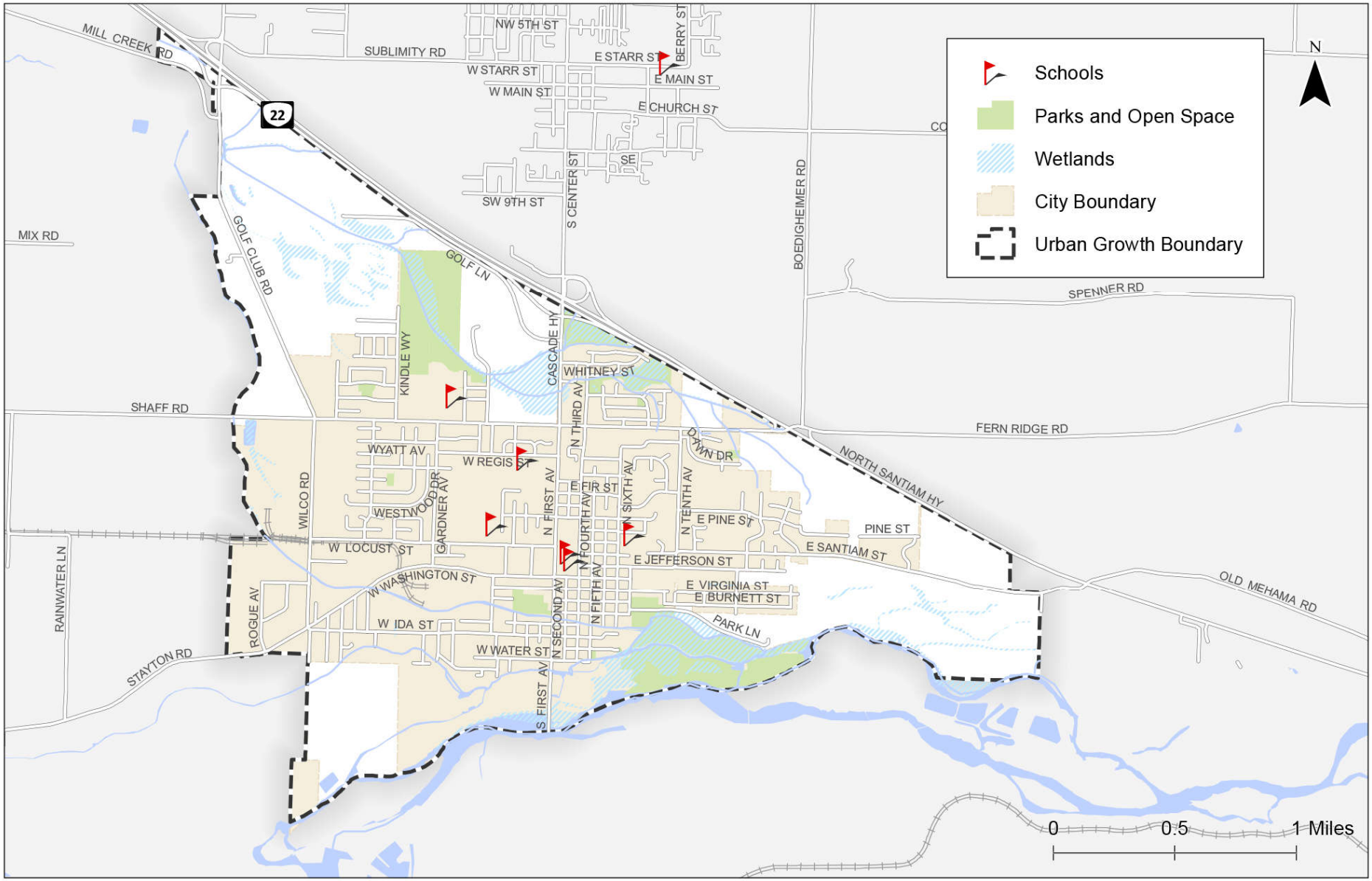
Major east-west roadways within Stayton include Shaff Road SE/Fern Ridge Road SE and Washington Street/E Jefferson Street/E Santiam Street. Major north-south roadways within Stayton include Golf Club Road/Wilco Road and Cascade Highway SE/First Avenue. Key destinations within Stayton include the Stayton Community Center, Public Library, and Memorial Pool, Stayton elementary school, middle school, and high school, Safeway, and NORPAC (a food manufacturer). The City of Stayton study area is shown in Figure 1.

TSP UPDATE PROCESS

The TSP update process began with a review of local, regional, and statewide plans and policies that guide land use and transportation planning in the City. Goals, objectives, and evaluation criteria were then developed to guide the evaluation of existing and project future transportation system conditions as well as the development of planned improvements. An inventory of the multimodal transportation system was then conducted to serve as the basis for the existing and future conditions analyses. The existing and future conditions analyses focused on identifying gaps and deficiencies in the multimodal transportation system based on current and forecast future performance. For each gap and deficiency, solutions were evaluated to address the system needs.

This process led to the development of plans, programs, and projects. These were then prioritized using the project evaluation

Figure 1. Study Area



criteria and organized by priority. This document is the culmination of the TSP update process. It presents the plans, programs, and projects identified to address the existing and future gaps and deficiencies in the City's transportation system.

COMMITTEES

The project team developed the TSP update in close coordination with city staff along with key stakeholders and representatives from the community. Two formal committees participated in the TSP update: a Technical Advisory Committee (TAC) and a Public Advisory Committee (PAC).

The TAC consisted of representatives from Stayton, Marion County, Oregon Department of Transportation (ODOT), and the Department of Land Conservation and Development (DLCD). The TAC provided technical guidance and coordination throughout the project. TAC members reviewed and commented on technical memoranda and participated in committee meetings, open houses, and workshops.

The PAC consisted of residents and property owners with an interest in transportation. It served as the voice of the community and the caretakers of the goals and objectives of the TSP update. Much like the TAC, PAC members reviewed and commented on technical memoranda and participated in committee meetings, open houses, and City Council/Planning Commission sessions.

PUBLIC INVOLVEMENT

The project team made opportunities for public involvement available throughout the TSP update process. The opportunities consisted of continuous web-based communications about upcoming committee meetings, open houses, and workshops via the project website (http://sites.kittelson.com/StaytonTSP). The project team met with the project advisory committees three times each throughout the TSP update process.

The project team also hosted two open houses at the Stayton Public Library. Both open houses were accompanied by an online open house that offered participants the same opportunities to provide input on project materials and share their concerns related to the transportation system. Additionally, the project team also met with the Planning Commission and City Council twice throughout the planning process.

The goal of the public involvement process was to develop a TSP update that addressed the gaps and deficiencies in the transportation system while meeting the needs of the community.

TSP ORGANIZATION

The Stayton TSP is composed of a main document (Volume I) and a volume of supporting technical appendices and other supporting documentation (Volume II).

Volume I is organized into chapters that address each individual mode of transportation available and its network in the overall Stayton transportation system. Chapter 2 presents the goals and objectives along with the criteria used to evaluate and prioritize projects and programs. Chapters 3 through 7 present the transportation system improvement projects identified by the project team to address needs and deficiencies in the City's transportation system. Chapter 8 presents the funding, implementation, and

monitoring plan for the TSP update, including existing and potential future funding sources to finance the identified transportation system improvements.

Volume II (under separate cover) contains the Technical Memoranda completed throughout the TSP update process, which showcase the inventory, analysis, and project list identification efforts. It also includes other technical appendices. The technical appendices are numbered as follows:

- Technical Memorandum 1: Plans and Policies (Appendix A)
- Technical Memorandum 2: Goals, Objectives, & Evaluation Criteria (Appendix B)
- Technical Memorandum 3: Existing and Future Conditions (Appendix C)
- Technical Memorandum 4: System Alternatives (Appendix D)
- 2015 Final Design Standards Proposed Changes (Appendix E)

Preliminary cost estimates for the list of TSP programs and projects exceed what the City can fund with existing or forecasted revenue. Therefore, the TSP includes a "fiscally constrained" plan, which identifies the top priority projects that can be completed within the 21-year planning horizon based on the projected available funding. These projects address existing and projected deficiencies in the transportation system per local, regional, and state standards and targets.

- Goals and Objectives
- Project Selection and Prioritization

SECTION 2
GOALS, OBJECTIVES, AND EVALUATION CRITERIA

GOALS, OBJECTIVES, AND EVALUATION CRITERIA

The project team developed goals, objectives, and evaluation criteria for the TSP update to help guide the review and documentation of existing and future transportation system needs, the development and evaluation of potential solutions to address these needs, and the selection and prioritization of preferred solutions for inclusion in the TSP update. They also inform recommendations for policy language that will serve as guidance for future land use decision making. The goals, objectives, and evaluation criteria will enable the City to plan for, and consistently work towards, achieving the vision of a connected community.

A VISION OF A CONNECTED COMMUNITY

The goals, objectives, and evaluation criteria will enable the City of plan for, and consistently work towards, achieving the vision of a connected community.

GOALS AND OBJECTIVES

The goals and objectives for the Stayton TSP update are based on an evaluation of the existing goals and policies in the current Stayton TSP and Comprehensive Plan. The goals provide direction for where the City would like to go, while the objectives provide a more detailed breakdown of the goals with specific outcomes the City desires to achieve. To ensure compliance with the Transportation Planning Rule (TPR) and other state, regional, and local planning requirements, the goals and objectives presented below tend to favor improvements in active transportation facilities and services over capital improvements.

GOAL 1 – MOBILITY AND EFFICIENCY: OPTIMIZE THE PERFORMANCE OF THE TRANSPORTATION SYSTEM FOR THE EFFICIENT MOVEMENT OF PEOPLE AND GOODS.

Objective A. Establish a transportation system that can accommodate a wide variety of travel modes and minimizes the reliance on any one single mode of travel.

Objective B. Develop and maintain street functional classifications, along with operational guidance and cross-sectional and right-of-way standards, to ensure streets are able to serve their intended purpose.

Objective C. Review and determine needed standards for mobility to help maintain a minimum level of motor vehicle travel efficiency. State and county mobility standards will be supported on facilities under the respective jurisdiction.

Objective D. Develop an integrated transportation system that includes additional local, collector and arterial roads that improves connectivity across multiple modes, preserves future rights-of-way, and maintains Stayton's existing street grid system.

Objective E. Provide a network of arterials, collectors and local streets that are interconnected, appropriately spaced, and reasonably direct in accordance with city, County and state design standards in order to reduce reliance on any one corridor.

Objective F. Review and update, where necessary, adopted access management standards.

GOAL 2 – SAFETY: PROVIDE A TRANSPORTATION SYSTEM THAT ENHANCES THE SAFETY AND SECURITY OF ALL TRANSPORTATION MODES.

Objecive A. Assess options to reduce traffic volumes and speeds near schools consistent with the Safe Routes to School Plan. Work with the school district and educational institutions to identify and implement circulation and access patterns to and around schools that are safe for pedestrians and bicyclists, as well as people in cars and arriving by bus.

Objecive B. Improve safety and operational components of existing transportation facilities not meeting City of Stayton or ODOT standards or industry best practices.

Objecive C. Address existing safety issues at high collision locations and locations with a history of severe vehicle, bicycle- and/or pedestrian-related crashes.

Objecive D. Ensure adequate access for emergency services vehicles throughout the city's transportation system.

Objecive E. Manage access to transportation facilities consistent with their applicable classification to reduce and separate conflicts and provide reasonable access to land uses.

Objecive F. Identify and improve safe crossings for vehicles, bicycles and pedestrians across arterial and collector streets.

GOAL 3 – EQUITY: PROVIDE AN EQUITABLE, BALANCED AND CONNECTED MULTI-MODAL TRANSPORTATION SYSTEM.

Objective A. Ensure that the transportation system provides equitable access to underserved and vulnerable populations.

Objective B. Provide connections for all modes that meet applicable city and Americans with Disabilities Act (ADA) standards.

Objective C. Provide for multi-modal circulation internally on site and externally to adjacent land use and existing and planned multi-modal facilities.

GOAL 4 – ENVIRONMENTAL: LIMIT AND MITIGATE ADVERSE ENVIRONMENTAL IMPACTS ASSOCIATED WITH TRAFFIC AND TRANSPORTATION SYSTEM DEVELOPMENT.

Objective A. Identify environmental impacts related to transportation projects at the earliest opportunity to ensure compliance with all federal and state environmental standards.

Objective B. Avoid or minimize impacts to natural resources, which may include alternative transportation facility designs in constrained areas.

Objective C. Reduce the number of vehicle-miles traveled.

Objective D. Enhance opportunities to increase the number of walking, bicycling, and transit trips in the city.

Objective E. Support alternative vehicle types by identifying potential electric vehicle plug-in stations and developing implementing code provisions.

Objective F. Evaluate and implement, where cost-effective, environmentally friendly materials and design approaches (reducing required pavement width, water reduction and infiltration methods to protect waterways, solar infrastructure, impervious materials).

Objective G. Support technology applications that improve travel mobility and safety with less financial and environmental impact than traditional infrastructure projects.

Objective H. Roadways within Stayton shall be multi-modal or "complete streets," with each street servicing the needs of the various modes of travel.

GOAL 5 – MULTI-JURISDICTION COORDINATION: DEVELOP AND MAINTAIN A TRANSPORTATION SYSTEM PLAN THAT IS CONSISTENT WITH THE GOALS AND OBJECTIVES OF THE CITY, MARION COUNTY, AND THE STATE.

Objective A. Coordinate with regional transit service efforts and seek improvements to public transit services to the City of Stayton.

Objective B. Ensure consistency with state, regional and local planning rules, regulations, and standards.

Objective C. Coordinate land use, financial, and environmental planning to prioritize strategic transportation investments.

GOAL 6 – STRATEGIC TRANSPORTATION FINANCING: SEEK FUNDING FOR AND INVEST IN FINANCIALLY FEASIBLE INFRASTRUCTURE PROJECTS THAT WILL SERVE THE CITY FOR YEARS TO COME.

Objective A. Preserve and protect the function of locally and regionally significant transportation corridors.

Objective B. Develop and support reasonable alternative mobility targets for motor vehicles that align with economic and physical limitations on state highways and city streets where necessary.

Objective C. Preserve and maintain the existing transportation system assets to extend their useful life.

Objective D. Improve travel reliability and efficiency of existing major travel routes in the city before adding capacity.

Objective E. Pursue grants and collaboration with other agencies to efficiently fund transportation improvements and supporting programs.

Objective F. Identify and maintain stable and diverse revenue sources to meet the need for transportation investments in the city.

Objective G. Identify new and creative funding sources to leverage high priority transportation projects.

Objective H. Review existing development requirements related to traffic impact study submittal requirements and criteria to ensure that future developments will be responsible for mitigating their direct traffic impacts

Objective I. Upon TSP adoption, update the current transportation system development charge methodology and update the current list of SDC-eligible projects.

GOAL 7 – HEALTH: PROVIDE A TRANSPORTATION SYSTEM THAT ENHANCES THE HEALTH OF RESIDENTS AND USERS.

Objective A. Identify and seek funding for programs that encourage walking and bicycling and rideshare/carpool through community awareness and education.

Objective B. Identify and seek funding for programs that provide education regarding good traffic behavior and consideration for all users.

Objective C. Provide convenient and direct pedestrian and bicycle facilities and routes to promote health and the physical and social well-being of Stayton residents, to reduce vehicular traffic congestion, to provide community and recreational alternatives, and to support economic development.

Objective D. Plan for a multi-modal system that limits users' exposure to pollution and that enhances air quality.

GOAL 8 – LAND USE AND TRANSPORTATION INTEGRATION: CREATE A BALANCED BUILT ENVIRONMENT WHERE DESIRED EXISTING AND PLANNED LAND USES ARE SUPPORTED BY AN EFFICIENT MULTI-MODAL TRANSPORTATION SYSTEM.

Objective A. Identify areas where encouraging more compact, walkable, mixed use, and/or transit-oriented development could significantly shorten trip lengths or reduce the need for motor vehicle travel within the city.

Objective B. Identify the 20-year roadway system needs to accommodate developing or undeveloped areas; ensure adequate capacity for future travel demand and minimize travel times.

Objective C. Review and revise where necessary local land use and development requirements to ensure that future land use decisions are consistent with the planned transportation system.

Objective D. Review and incorporate appropriate access management and land use measures consistent with the recommendations of the Sublimity Interchange Area Management Plan (IAMP).

GOAL 9 – COMMUNITY AND ECONOMIC VITALITY: PROVIDE A TRANSPORTATION SYSTEM THAT SUPPORTS EXISTING INDUSTRY AND ENCOURAGES ECONOMIC DEVELOPMENT IN THE CITY.

Objective A. Develop a plan for designated truck routes through the City that prioritize efficient freight movement and minimize truck traffic on other city roadways.

Objective B. Improve the movement of goods and delivery of services throughout the city while balancing the needs of all users with a variety of travel modes and preserving livability in residential areas and established neighborhoods.

Objective C. Identify lower cost options or provide funding mechanisms for transportation improvements necessary for development to occur.

Objective D. Program transportation improvements to facilitate the development of desired land uses and activities.

Objective E. Encourage recreational tourism by developing connections to and between recreational locations and destinations and key services in the city.

Objective F. Encourage tourism by promoting and upgrading bicycle and pedestrian recreational routes and services through the city.

PROJECT SELECTION AND PRIORITIZATION

The selection and prioritization of the projects included in the TSP update was determined based on the project evaluation criteria, which reflect the goals and objectives described above. A qualitative process using the project evaluation criteria was used to evaluate solutions and prioritize projects developed through the TSP update. The rating method used to evaluate solutions is described below.

- Most Desirable: The concept addresses the criterion and/or makes substantial improvements in the criteria category. (+1)
- No Effect: The criterion does not apply to the concept or the concept has no influence on the criteria. (0)
- Least Desirable: The concept does not support the intent of and/or negatively impacts the criteria category. (-1)

Table 1 presents the project evaluation criteria that were used to qualitatively evaluate the solutions developed through the TSP update. The initial screening ratings presented in Appendix D in Volume II were used to inform discussions about the benefits and

tradeoffs of each solution, while the final alternatives in this TSP reflect input from the project management team, advisory committees, and the public.

Table 1. Evaluation Criteria

Objective	Evaluation Criteria	Evaluation Score
Goal 1: Mobility and Efficiency		
Objective A	Could reduce reliance on any one single travel mode	+1
	Would not reduce reliance on any one single travel mode	0
	Could increase reliance on any one single travel mode	-1
Objective D	Will improve connectivity across travel modes	+1
	Will not improve connectivity across travel modes	0
	Will reduce connectivity across travel modes	-1
Objective E	Could reduce reliance on any one corridor	+1
	Would not impact reliance on any one corridor	0
	Could increase reliance on any one corridor	-1
Goal 2: Safety		
Objective C	Will address a known safety issue	+1
	Will not address a known safety issue	0
	Could worsen a known safety issue	-1
Objective D	Will improve access for emergency services vehicles	+1
	Will not improve access for emergency service vehicles	0
	Will reduce or limit access for emergency service vehicle	-1
Objective E	Will reduce potential for future conflicts	+1
	Will have no impact on the potential for future conflicts	0
	Will increase the potential for future conflicts	-1
Goal 3: Equity		
Objective A	Will improve access for underserved and vulnerable populations	+1
	Will not improve access for underserved and vulnerable populations	0
	Will reduce or limit access for underserved and vulnerable populations	-1
Goal 4: Multi-Jurisdiction Coordination		
Objective B	Will not impact natural resources	+1
	Will have a minimal impact to natural resources	0

Objective	Evaluation Criteria	Evaluation Score
	Will have a significant impact to natural resources	-1
Objective C	Could reduce the number of vehicle miles traveled	+1
	Would not change the number of vehicle miles traveled	0
	Could increase the number of vehicle miles traveled	-1
Objective E	Will support alternative vehicle types	+1
	Will not support alternative vehicle types	0
	Will reduce or limit opportunities for alternative vehicle types	-1
Goal 5: Strategic Investment		
Objective B	Is consistent with state, regional, and local planning	+1
	Is not impacted by or reflected in state, regional, and/or local planning	0
	Is inconsistent with state, regional, and/or local planning	-1
Goal 6: Strategic Transportation Financing		
Objective A	Will preserve and protect the function of locally and/or regionally significant corridors	+1
	Will not impact locally and/or regionally significant corridors	0
	Will degrade the function of locally and/or regionally significant corridors	-1
Objective D	Will improve travel reliability and efficiency of major travel routes	+1
	Will not impact travel reliability and efficiency of major travel routes	0
	Will degrade travel reliability and efficiency of major travel routes	-1
Goal 7: Health		
Objectives A, B, and C	Could encourage the use of active modes of transportation	+1
	Would not encourage the use of active modes of transportation	0
	Could discourage the use of active modes of transportation	-1
Objective D	Will contribute to the development of a multi-modal system	+1
	Will not contribute to the development of a multi-modal system	0
	Will impede development of a multi-modal transportation system	-1
Goal 8: Land Use and Transportation Integration		
Objective A	Will encourage more compact, walkable, mixed-use and/or transit-oriented development	+1
	Will not encourage more compact, walkable, mixed-use and/or transit-oriented development	0
	Will discourage more compact, walkable, mixed-use and/or transit-oriented development	-1
Goal 9: Community and Economic Vitality		
Objective B	Could improve the movement of goods and delivery of services	+1
	Would not improve the movement of goods and delivery of services	0

Objective	Evaluation Criteria	Evaluation Score
	Could impede the movement of goods and delivery of services	-1
Objective E and F	Could encourage tourism and/or recreational tourism	+1
	Would not encourage tourism and/or recreational tourism	0
	Could discourage tourism and/or recreational tourism	-1

- Pedestrian Facilities
- Pedestrian Plan

SECTION 3
PEDESTRIAN PLAN

PEDESTRIAN PLAN

Stayton's pedestrian system consists of sidewalks, enhanced sidewalks, off-street trails, and pedestrian crossings, which are both marked and unmarked; signalized and unsignalized. These facilities provide residents with the ability to access local retail/commercial centers, recreational areas, schools, and other land uses by foot. A safe, convenient, and continuous network of pedestrian facilities is essential to establishing a vibrant and healthy community while supporting the local economy within Stayton.

A VIBRANT AND HEALTHY COMMUNITY

A safe, convenient, and continuous network of pedestrian facilities is essential to establishing a vibrant and healthy community while supporting the local economy within Stayton.

Most city streets have sidewalks on both sides of the roadway and enhanced crossings at key intersections and mid-block locations; however, there are several streets with gaps in the sidewalks and locations where crossings could be implemented or improved. Therefore, the pedestrian plan includes many projects to fill in the gaps in the sidewalks along the city's arterial and collector streets along with enhanced pedestrian crossings.

PEDESTRIAN FACILITIES

The existing pedestrian facilities are shown in Figure 2.

Sidewalks

Sidewalks are provided along at least one side of most of the roadways categorized as collector or higher within the city of Stayton. However, there a few segments along roadways where there is no sidewalk. These sidewalk gaps are also shown in Figure 2. Notable sidewalk gaps occur on segments of W Washington Street, Shaff Road, N Third Avenue, N Tenth Avenue, Kindle Way, and Locust Street.

Enhanced Sidewalks

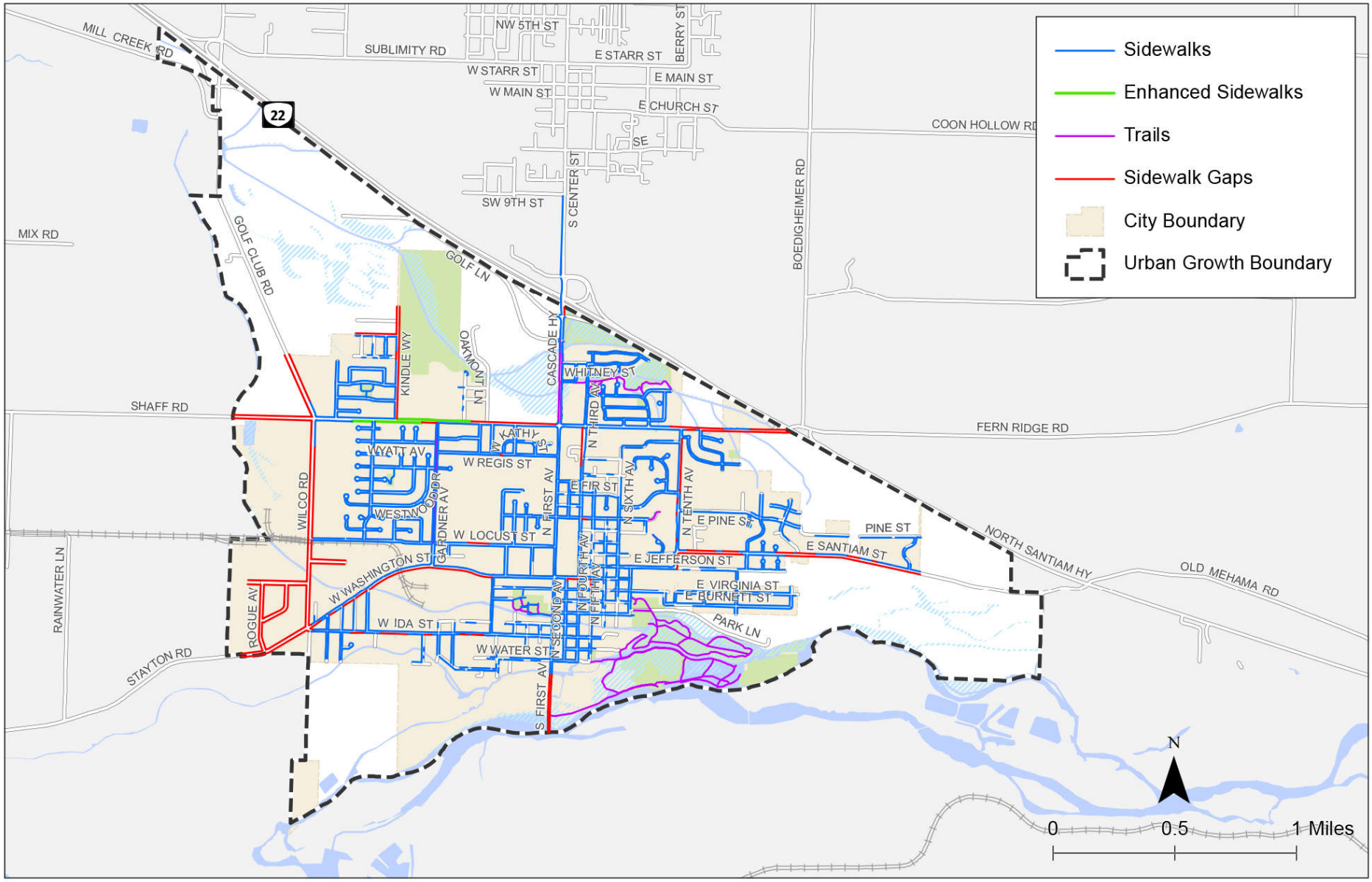
Enhanced sidewalks are wide, separated facilities that can be used for walking or bicycling. Enhanced sidewalks are present along both sides of Shaff Road intermittently between Wilco Road and Oakmont Lane.

Trails

Off-street trails are also present in Stayton. These trails range from multi-use paved paths to gravel trails. The following off-street trails exist within Stayton:

- The trails throughout Wilderness Park, which are a mix between paved and gravel.
- The trails on the Stayton Middle School Campus, which are mostly gravel.
- The path in and around Santiam Park, which is paved.
- The paths within Community Center Park, which are paved.
- The path near the Santiam Hospital, which is paved.

Figure 2. Existing Pedestrian Facilities



Crosswalks

Pedestrian crosswalks notify drivers that they must stop for pedestrians in the roadway. Most crosswalks in Stayton feature white roadway striping and signage and/or flashing amber lights. Curb ramps meeting the specifications outlined in the Americans with Disabilities Act (ADA) are an important feature of crosswalks.

PEDESTRIAN PLAN

Table 2 identifies the pedestrian plan projects for the Stayton TSP. As shown, the projects are separated into sidewalk and crosswalk projects. The projects and priorities shown were determined using the City of Stayton Public Works Design Standards (Design Standards), the project evaluation criteria, and input from the project team and the public. Projects are prioritized in tiers from Tier I (most critical) to Tier IV (least critical). The cost estimates are based on average unit costs for sidewalk improvements. Figure 3 illustrates the locations of the pedestrian plan projects.

Safety

Pedestrian improvement projects are included in the ODOT All Roads Transportation Safety (ARTS) approved countermeasures list.[1] The installation of crosswalk markings, rectangular rapid flashing beacons (RRFBs), pedestrian hybrid beacons, and pedestrian signals have all been shown to improve pedestrian safety conditions. While sidewalk installation is not shown on the approved countermeasure list, sidewalk projects make walking more comfortable and provide separation between the flow of vehicle traffic and pedestrians. Projects on the approved ARTS countermeasures list could be eligible for ARTS funding. Appendix C in Volume II contains additional information on pedestrian safety.

Table 2. Pedestrian Plan Improvement Projects

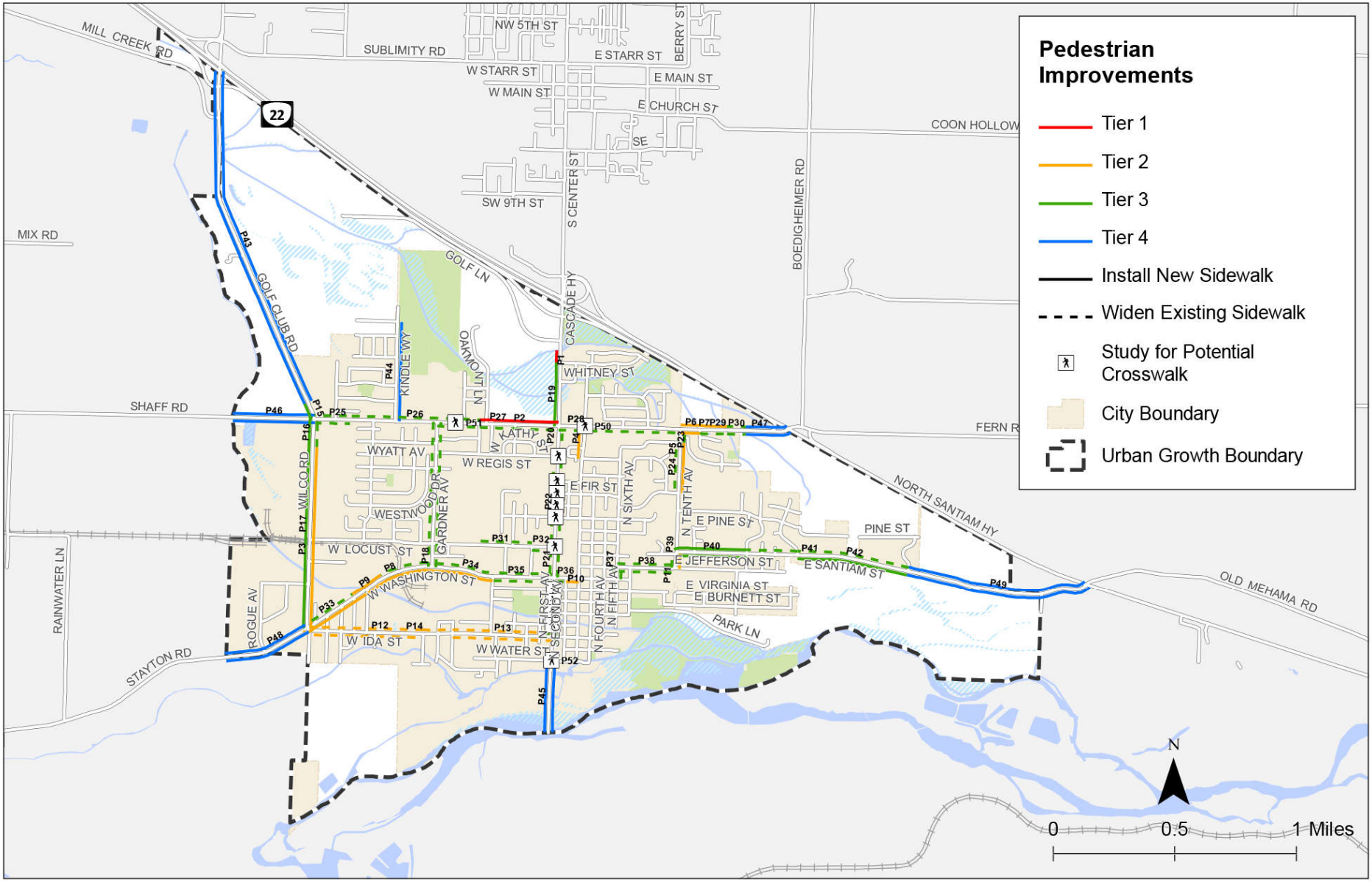
Project Number	Roadway	Segment/Cross-Street	Project	Priority	Cost Estimate
Sidewalk Projects					
P1	Cascade Highway	Mill Creek Bridge to Whitney Street (SB)	Install 6-foot sidewalk on property line	Tier I	$40K
P2	Shaff Road	Fern Avenue to First Avenue (WB)	Install 8-foot sidewalk on property line	Tier I	$335K
P3	Wilco Road	600 feet south of Shaff Road to Washington Street (NB)	Install 6-foot sidewalk on property line	Tier II	$585K
P4	Third Avenue	Fern Ridge Road to Regis Street (SB)	Install 5-foot sidewalk on property line	Tier II	$85K
P5	Tenth Avenue	Fir Street to Kathy Street (NB)	Install 6-foot sidewalk on property line	Tier II	$160K
P6	Fern Ridge Road	Tenth Avenue to Kent Avenue (EB)	Install 6-foot sidewalk on property line	Tier II	$65K

[1] https://www.oregon.gov/ODOT/Engineering/Pages/ARTS.aspx

Project Number	Roadway	Segment/Cross-Street	Project	Priority	Cost Estimate
P7	Fern Ridge Road	Tenth Avenue to United Methodist Church (WB)	Install 6-foot sidewalk on property line	Tier II	$150K
P8	Washington Street	Wilco Road to Evergreen Avenue (EB)	Install 6- to 8-foot sidewalk on property line	Tier II	$760K
P9	Washington Street	Myrtle Avenue to Miller Drive (WB)	Install 6- to 8-foot sidewalk on property line	Tier II	$130K
P10	Washington Street	Second Avenue to Third Avenue (EB)	Install 8-foot sidewalk on curb line	Tier II	$55K
P11	Tenth Avenue	Jefferson Street to Santiam Street (NB)	Install 6-foot wide sidewalk on property line	Tier II	$50K
P12	W Ida Street	Wilco Road to Holly Avenue (EB)	Install 6-foot sidewalk on property line	Tier II	$375K
P13	W Ida Street	Fern Avenue to First Avenue (EB)	Install 6-foot sidewalk on property line	Tier II	$315K
P14	W Ida Street	Wilco Road to First Avenue (WB)	Install 6-foot sidewalk on property line	Tier II	$785K
P15	Golf Club Road	Shaff Road to 400 feet north (SB)	Install 6-foot sidewalk on property line	Tier III	$55K
P16	Wilco Road	Shaff Road to 600 feet south (NB)	Install 6-foot sidewalk on property line	Tier III	$90K
P17	Wilco Road	Shaff Road to Washington Street (SB)	Install 6-foot sidewalk on property line	Tier III	$675K
P18	Gardner Avenue	Shaff Road to Washington Street (both sides)	Install 6-foot sidewalk on property line	Tier III	$920K
P19	Cascade Highway	Whitney Street to Shaff Road (SB)	Install 6-foot sidewalk on property line	Tier III	$205K
P20	Cascade Highway	Shaff Road to Regis Street (NB)	Install 6-foot sidewalk on property line	Tier III	$95K
P21	First Avenue	Regis Street to Water Street (NB)	Install 8-foot sidewalk on curb line	Tier III	$870K
P22	First Avenue	Regis Street to Ida Street (SB)	Install 8-foot sidewalk on curb line	Tier III	$770K
P23	Tenth Avenue	Fern Ridge Road to Kathy Street (NB)	Install 6-foot sidewalk on property line	Tier III	$45K
P24	Tenth Avenue	Fir Street to Kathy Street (SB)	Install 6-foot sidewalk on property line	Tier III	$160K
P25	Shaff Road	Wilco Road to Bi-Mart East Driveway (EB)	Install 8 foot sidewalk on property line	Tier III	$150K
P26	Shaff Road	Wilco Road to Fern Avenue (WB)	Install 8-foot sidewalk on property line	Tier III	$700K
P27	Shaff Road	Gardner Avenue to First Avenue (EB)	Install 8-foot sidewalk on property line	Tier III	$515K
P28	Fern Ridge Road	First Avenue to Tenth Avenue (EB)	Install 6-foot sidewalk on property line	Tier III	$390K
P29	Fern Ridge Road	Kent Avenue to Boulders Mobile Home Park (EB)	Install 6-foot sidewalk on property line	Tier III	$145K
P30	Fern Ridge Road	United Methodist Church to Boulders Mobile Home Park (WB)	Install 6-foot sidewalk on property line	Tier III	$60K
P31	Locust Street	Stayton High School to Birch Avenue (WB)	Install 6-foot sidewalk on property line	Tier III	$180K
P32	Locust Street	Birch Avenue to First Avenue (EB)	Install 6-foot sidewalk on property line	Tier III	$75K

Project Number	Roadway	Segment/Cross-Street	Project	Priority	Cost Estimate
P33	Washington Street	Wilco Road to Myrtle Avenue (WB)	Install 6- to 8-foot sidewalk on property line	Tier III	$210K
P34	Washington Street	Miller Drive to First Avenue (WB)	Install 6- to 8-foot sidewalk on property line	Tier III	$650K
P35	Washington Street	Evergreen Avenue to First Avenue (EB)	Install 6- to 8- foot sidewalk on property line	Tier III	$225K
P36	Washington Street	First Avenue to Second Avenue (EB)	Install 8-foot sidewalk on curb line	Tier III	$55K
P37	Sixth Avenue	Washington Street to Jefferson Street (both sides)	Install 6-foot sidewalk on curb line	Tier III	$80K
P38	Jefferson Street	Sixth Avenue to Tenth Avenue (both sides)	Install 6-foot sidewalks on property line	Tier III	$370K
P39	Tenth Avenue	Jefferson Street to Santiam Street (SB)	Install 6-foot wide sidewalk on property line	Tier III	$50K
P40	E Santiam Street	Tenth Avenue to Highland Drive (EB)	Install 6-foot sidewalk on property line	Tier III	$225K
P41	E Santiam Street	Tenth Avenue to 28th Avenue (WB)	Install 6-foot sidewalk on property line	Tier III	$745K
P42	E Santiam Street	Scenic View Drive to 28th Avenue (EB)	Install 6-foot sidewalk on property line	Tier III	$355K
P43	Golf Club Road	Highway 22 to 400 feet north of Shaff Road (both sides)	Install 6-foot sidewalk on property line	Tier IV	$2.2M
P44	Kindle Way	Goshen Avenue to Shaff Road (NB)	Install 6-foot sidewalk on property line	Tier IV	$315K
P45	First Avenue	Water Street to City Limits (both sides)	Install 8-foot sidewalk on property line	Tier IV	$610K
P46	Shaff Road	City Limit to Wilco Road (both sides)	Install 6-foot sidewalk on property line	Tier IV	$520K
P47	Fern Ridge Road	Boulders Mobile Home Park to Highway 22 (both sides)	Install 6-foot sidewalk on property line	Tier IV	$280K
P48	Stayton Road	City Limits to Wilco Road (both sides)	Install 6-foot sidewalk on property line	Tier IV	$560K
P49	E Santiam Street	28th Avenue to Highway 22 (both sides)	Install 6-foot sidewalk on property line	Tier IV	$1.2M
Crosswalk Projects					
P50	Fern Ridge Road	N Third Avenue	Study and implement crosswalk enhancements	Tier I	$100K
P51	Shaff Road	Stayton Middle School East Entrance	Study and implement crosswalk enhancements	Tier I	$100K
P52	First Avenue	Shaff Road to Water Street	Study and implement crosswalk enhancements	Tier I	$500K

Figure 3. Pedestrian Plan Projects



- Bicycle Facilities
- Bicycle Plan

SECTION 4
BICYCLE PLAN

BICYCLE PLAN

Stayton's bicycle system consists of on-street bike lanes, enhanced sidewalks, shoulder bikeways, local streets, and trails. A connected network of bicycle facilities improves the health and well-being of Stayton's community while improving access for non-car-owning households and reducing total vehicle miles traveled.

A few major roadways within the city have on-street bike lanes or other bicycle facilities, but many do not have dedicated bicycle infrastructure. Therefore, the bicycle plan includes many projects to fill in the gaps in the bicycle network along the city's arterial and collector streets.

BICYCLE FACILITIES

The existing bicycle facilities are shown in Figure 4.

Bicycle Lanes

On-street bike lanes are provided along five roadway segments in Stayton. Bike lanes are present along Gardner Avenue from Shaff Road to W Darby Street, Cascade Highway from OR 22 to Shaff Road, N Tenth Avenue from Fern Ridge Road to E Santiam Street, Shaff Road from Golf Club Road to Kindle Way, and Fern Ridge Road from Cascade Highway to the eastern city limits.

Shoulder Bikeways

Some of the roadways within Stayton have shoulders, which, when wide enough, can act as a bicycle lane. The shoulders allow bicyclists to ride in a lane separated from traffic, which allows motor vehicles to pass safely. Shoulder bikeways aren't always available for cyclists, however, as there are sometimes motor vehicles parked in the shoulder and there is oftentimes debris along the shoulder.

Enhanced Sidewalks

Enhanced sidewalks are wide, separated facilities that can be used for walking or bicycling. Enhanced sidewalks are present along both sides of Shaff Road intermittently between Wilco Road and Oakmont Lane.

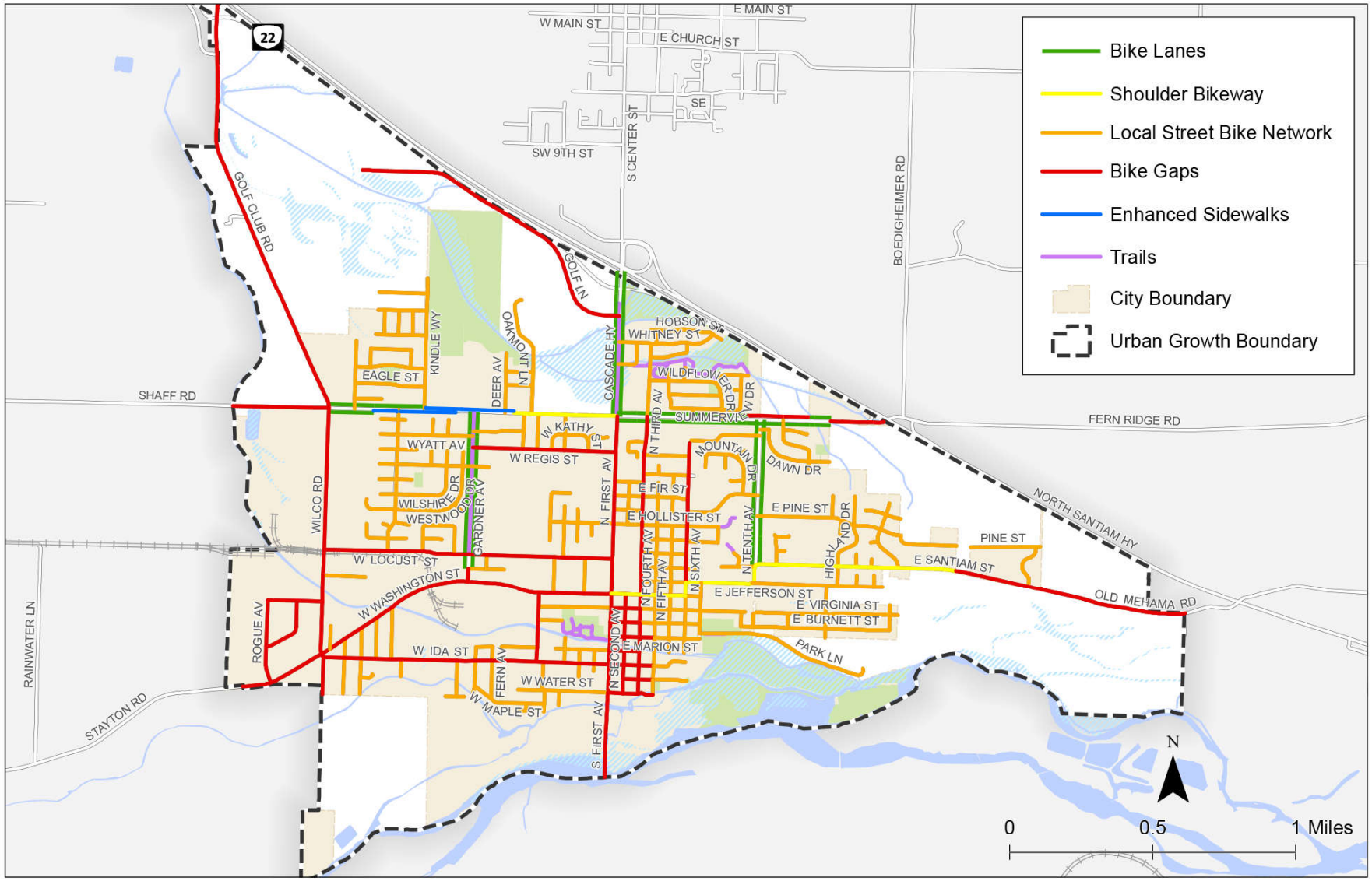
Local Street Bike Network

Local streets with low vehicle speeds and volumes may be suitable for bicyclists without the implementation of bicycle infrastructure. On these streets, bicyclists typically ride with traffic.

Shared Roadways

Some local streets are proposed to be signed with "sharrows" – stencils showing that bicyclists should be expected to be on the roadway. This is especially useful for bicycle routes that run parallel to more vehicle-friendly route.

Figure 4. Existing Bicycle Facilities



Trails

Many of the trails available for pedestrians are also available to cyclists. Exceptions include Pioneer Park, Wilderness Park, and Riverfront Park. Trails available to cyclists are typically multi-use paved paths.

BICYCLE PLAN

Table 3 identifies the bicycle plan projects for the Stayton TSP. The projects and priorities shown were determined using the Design Standards, the project evaluation criteria, and input from the project team and the public. Projects are prioritized in tiers from Tier I (most critical) to Tier IV (least critical). The cost estimates are based on average unit costs for roadway improvements. Figure 5 illustrates the locations of the bicycle plan projects.

Safety

Bicycle improvement projects are included in the ODOT All Roads Transportation Safety (ARTS) approved countermeasures list.[2] The installation of bike lanes and buffered bike lanes have been shown to improve bicycle safety conditions. Projects on the approved ARTS countermeasures list could be eligible for ARTS funding. Appendix C in Volume II contains additional information on bicyclist safety.

BICYCLE LANES TO IMPROVE SAFETY

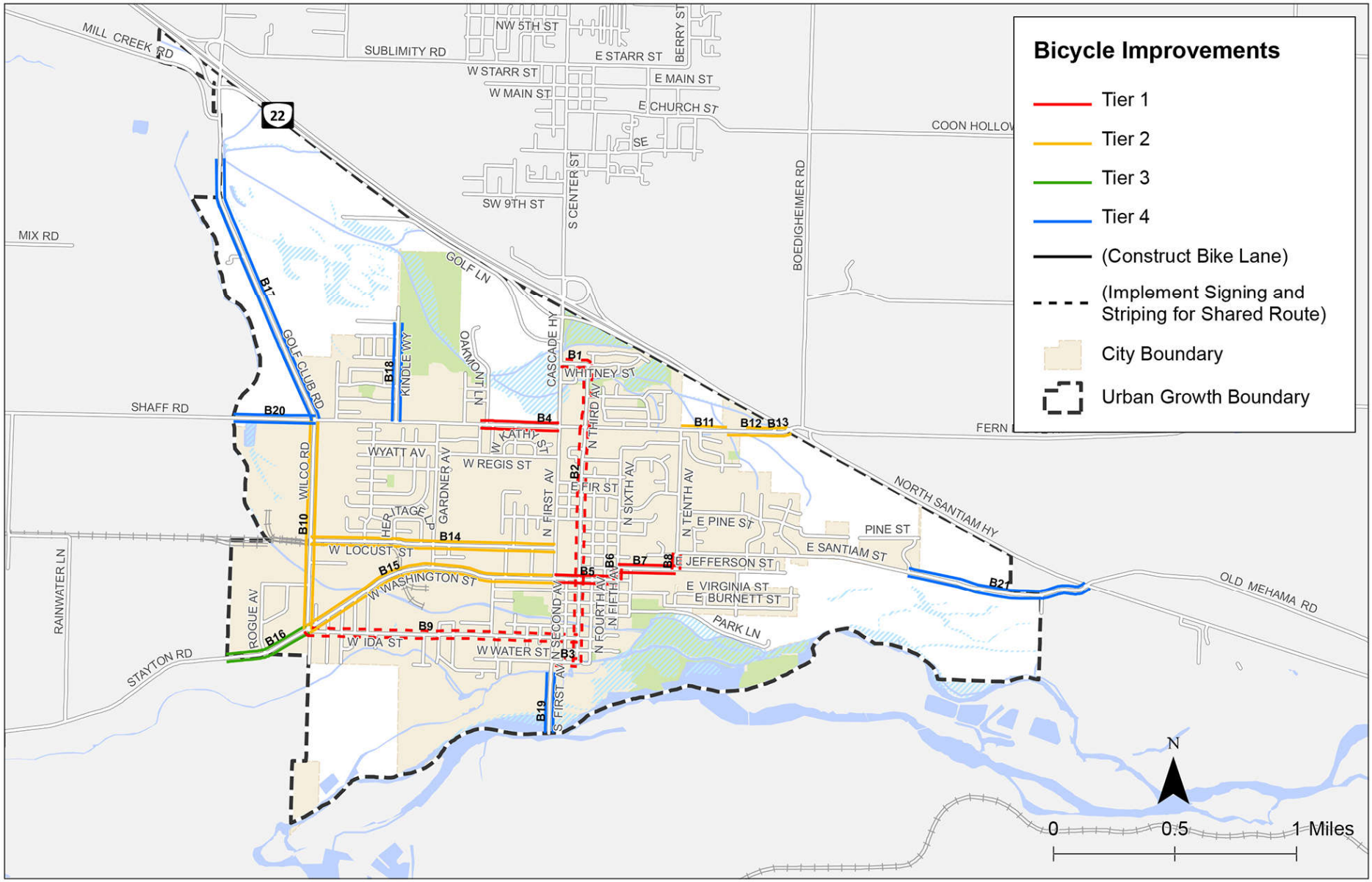
The installation of bike lanes and buffered bike lanes have been shown to improve bicycle safety conditions.

[2] https://www.oregon.gov/ODOT/Engineering/Pages/ARTS.aspx

Table 3. Bicycle Plan Improvement Projects

Project Number	Roadway	Segment	Project	Priority	Cost Estimate
B1	Whitney Street	Cascade Highway to Third Avenue (both sides)	Add signing and striping to denote bicycle route	Tier 1	$90K
B2	Third Avenue	Whitney Street to E Water Street (both sides)	Add signing and striping to denote bicycle route	Tier I	$1.1M
B3	Water Street	First Avenue to Third Avenue (both sides)	Add signing and striping to denote bicycle route	Tier 1	$80K
B4	Shaff Road	Fern Avenue to First Avenue (both sides)	Install 6-foot bike lanes	Tier I	$1.1M
B5	Washington Street	First Avenue to Sixth Avenue (both sides)	Restripe to 6-foot bike lane	Tier I	$210K
B6	Sixth Avenue	Washington Street to Jefferson Street (both sides)	Restripe to 6-foot bike lane	Tier I	$40K
B7	Jefferson Street	Sixth Avenue to Tenth Avenue (both sides)	Restripe to 6-foot bike lane	Tier I	$190K
B8	Tenth Avenue	Jefferson to Santiam Street (both sides)	Restripe to 6-foot bike lane	Tier I	$50K
B9	Ida Street	Wilco Road to Third Avenue (both sides)	Add signing and striping to denote bicycle route	Tier I	$810K
B10	Wilco Road	Shaff Road to Washington Street (both sides)	Install 6-foot bike lanes	Tier II	$2.9M
B11	Fern Ridge Road	Tenth Avenue to United Methodist Church (WB)	Install 6-foot bike lane	Tier II	$315K
B12	Fern Ridge Road	United Methodist Church to Highway 22 (EB)	Install 6-foot bike lane	Tier II	$435K
B13	Fern Ridge Road	Boulders Mobile Home Park to Highway 22 (WB)	Install 6-foot bike lane	Tier II	$300K
B14	Locust Street	Wilco Road to First Avenue (both sides)	Install 6-foot bike lane	Tier II	$3.6M
B15	Washington Street	Wilco Road to First Avenue (both sides)	Install 6-foot bike lane	Tier II	$870K
B16	Stayton Road	City Limit to Wilco Road (both sides)	Install 6-foot bike lane	Tier III	$1.2M
B17	Golf Club Road	Mill Creek Bridge to Shaff Road (both sides)	Install 6-foot bike lanes	Tier IV	$3.9M
B18	Kindle Way	Goshen Avenue to Shaff Road (both sides)	Install 6-foot bike lanes	Tier IV	$1.3M
B19	First Avenue	Santiam River Bridge to City Limits (both sides)	Install 6-foot bike lane	Tier IV	$840K
B20	Shaff Road	City Limit to Wilco Road (both sides)	Install 6-foot bike lanes	Tier IV	$1.1M
B21	Santiam Street	28th Avenue to Highway 22 (both sides)	Install 6-foot bike lane	Tier IV	$2.5M

Figure 5. Bicycle Plan Projects



- Transit Services
- Transit Infrastructure
- Transit Ridership
- Transit Plan

SECTION 5
TRANSIT PLAN

TRANSIT PLAN

Transit can provide important connections to destinations for people that do not drive or bike and can provide an additional option for all transportation system users. In Stayton, transit provides residents limited access to Sublimity, Salem, and other surrounding towns. It also provides schoolchildren access to school. Transit also complements walking, bicycling, or driving trips: users can walk to and from transit stops and their homes, shopping, or work places; people can drive to park-and-ride locations to access a bus; and people can bring their bikes on transit vehicles and bicycle from a transit stop to their destination.

TRANSIT TO PROVIDE ACCESS

In Stayton, transit provides residents limited access to Sublimity, Salem, and other surrounding towns.

Transit service in Stayton is provided by Cherriots and the North Santiam School District. Cherriots views its fixed-route service to Stayton as a human services resource, not a commuter route. As such, Cherriots does not plan to improve service to Stayton in the near-term.

TRANSIT SERVICES

Transit services within Stayton consist of fixed-route and school bus services.

Fixed Route Service

Cherriots Route 30X is a fixed route bus service that runs from Salem to Gates. The bus makes three stops in Stayton and two stops in Sublimity. Cherriots Route 30X services each of these bus stops four times per day in both directions. The bus does not operate on weekends or holidays. Cherriots does not offer any special services, such as deviated route or dial-a-ride services for seniors or people with disabilities in the Stayton area. The bus route and stop locations are shown in Figure 6.

School Bus Services

The North Santiam School District 29J, which includes Stayton Elementary, Middle, and High Schools, is serviced by the Mid-Columbia Bus Company (MIDCO). MIDCO has an office within Stayton and offers 19 different bus routes for the school district.

TRANSIT INFRASTRUCTURE

Park-and-Ride

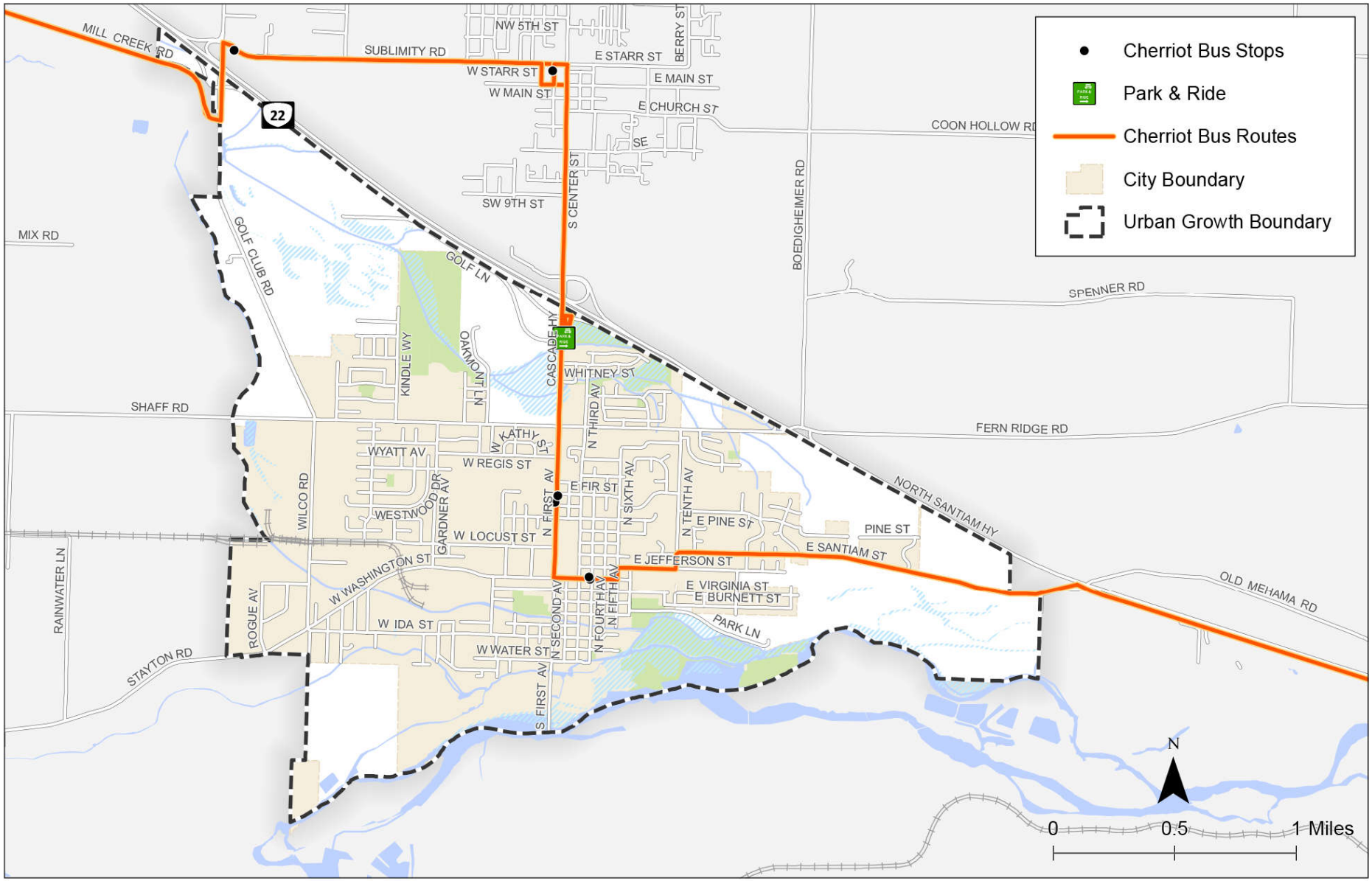
There is one park-and-ride location within Stayton, located on Cascade Highway at the intersection of Golf Lane, as shown in Figure 6. This park-and-ride is serviced by Cherriots Route 30X and has vehicle parking capacity for 94 vehicles and covered bicycle parking capacity for 5 bicycles.

Transit Stops

There are three transit stops in Stayton and two in Sublimity. Stop locations are:

- E Washington Street/N Fourth Avenue in downtown Stayton
- Stayton Safeway near the intersection of N First Avenue/E Fir Street

Figure 6. Existing Transit Facilities



- Stayton park-and-ride near the intersection of Cascade Highway SE/Golf Lane
- NW Starr Street/NW Johnson Street in Sublimity
- Stayton DMV near the intersection of Sublimity Road SE/Golf Club Road SE

Each of these transit stops are serviced by Cherriots Route 30X and are shown in Figure 6.

TRANSIT RIDERSHIP

Daily average ridership for Cherriots Route 30X for April and the first three weeks of May of 2018 is shown in Table 4. This data shows bidirectional boardings and alightings and was collected by Cherriots transit drivers.

Table 4. Cherriots Route 30X Average Daily Ridership

Transit Stop	Boardings	Alightings	Total
Washington Street and Fourth Avenue	6	11	17
Stayton Safeway	25	26	51
Stayton Park-and-Ride	2	4	6
Johnson Street and Starr Road	1	2	3
Stayton DMV	0	0	0

TRANSIT PLAN

Cherriots does not plan to improve service to Stayton in the near-term; however, the City of Stayton desires more frequent service on Cherriots Route 30X to support commute trips to Salem. Additionally, the City would be supportive of a community-based organization providing transit for senior and low-income residents or the general population such as dial-a-ride, local circulator, or senior shopper shuttle options.

- Functional Classification Plan
- Future Street Network Map
- Motor Vehicle Facilities and Plan
- Project Descriptions

SECTION 6
MOTOR VEHICLE PLAN

MOTOR VEHICLE PLAN

Stayton's motor vehicle system includes private streets, city streets, county roads, and a state highway. These facilities provide residents with the ability to access retail, commercial, recreational, and other land uses within Stayton and neighboring cities by vehicle. Stayton's roadway jurisdictions are shown in Figure 7.

This system is largely built-out and there are few opportunities to construct new roadways except in the city's undeveloped growth areas. There are no capacity failures under existing or projected future traffic conditions. Therefore, the Motor Vehicle Plan includes projects to increase the efficiency of the transportation system through improvements to street system connectivity, improvements to key intersections, and access management.

FUNCTIONAL CLASSIFICATION PLAN

A street's functional classification defines its role in the transportation system and reflects desired operational and design characteristics such as right-of-way requirements, pavement widths, pedestrian and bicycle features, and driveway (access) spacing standards. The roadway functional classification map is shown in Figure 8. The functional classification plan includes the following designations:

Arterials

Arterials are roadways that are designed to facilitate traffic entering and leaving the urban area. The main function of arterials is to efficiently move traffic, although they may provide access to adjacent land uses. Arterials typically focus on longer distance trips than other roadways, with the goal of moving high volumes of traffic through as efficiently as possible. Principal Arterials typically have limited access and higher traffic speeds than other facilities except when traveling through a downtown area. Principal Arterials are usually served by other arterials.

Collectors

Collector roadways facilitate the movement of city traffic within the urban area. Collectors provide some degree of access to adjacent properties, while maintaining circulation and mobility for all users. Collectors can be two or three-lane facilities and are used to connect the various roadways of an urban area, although they are designed to carry lower traffic volumes at lower speeds than arterials.

Neighborhood Collectors

Neighborhood Collectors connect neighborhoods with collectors and arterials, facilitate the movement of local traffic and provide access to abutting land uses. Speed on these facilities should remain low to ensure community livability and safety for pedestrians and bicyclists of all ages. On-street parking is more prevalent and pedestrian amenities are typically provided on these roadways. Striped bike lanes are unnecessary for most neighborhood collectors because the traffic volumes and speeds should allow cyclists to share the road with the motorists.

Local Streets

The goal of Local Streets is to provide access to adjacent land uses. These streets offer the lowest level of mobility and consequently tend to be short, low-speed facilities. The local streets within Stayton can be split into three categories: Industrial, Commercial, and Residential Local roadways, with all three categories providing access to their respective land uses.

Figure 7. Roadway Jurisdiction Map

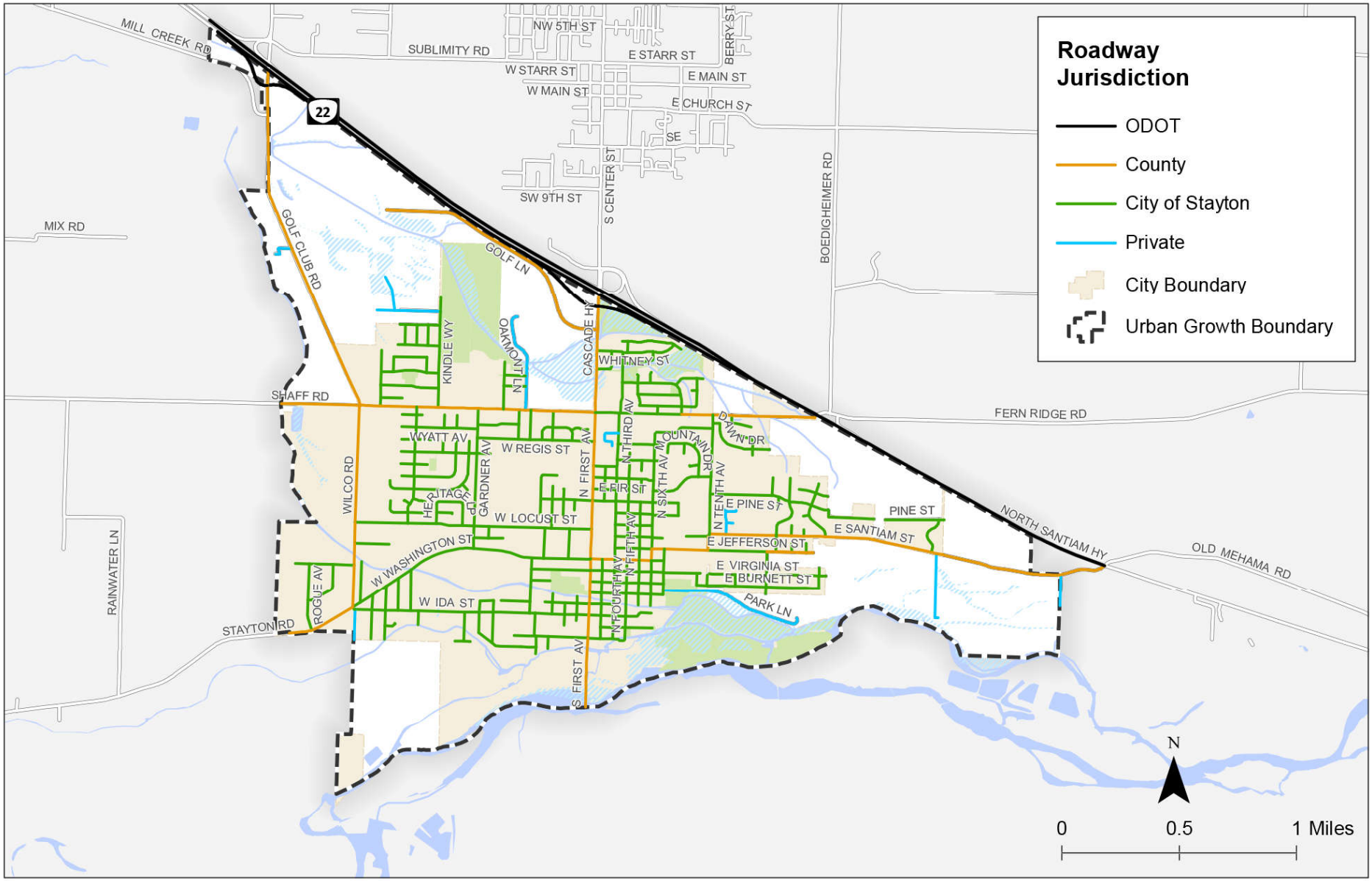
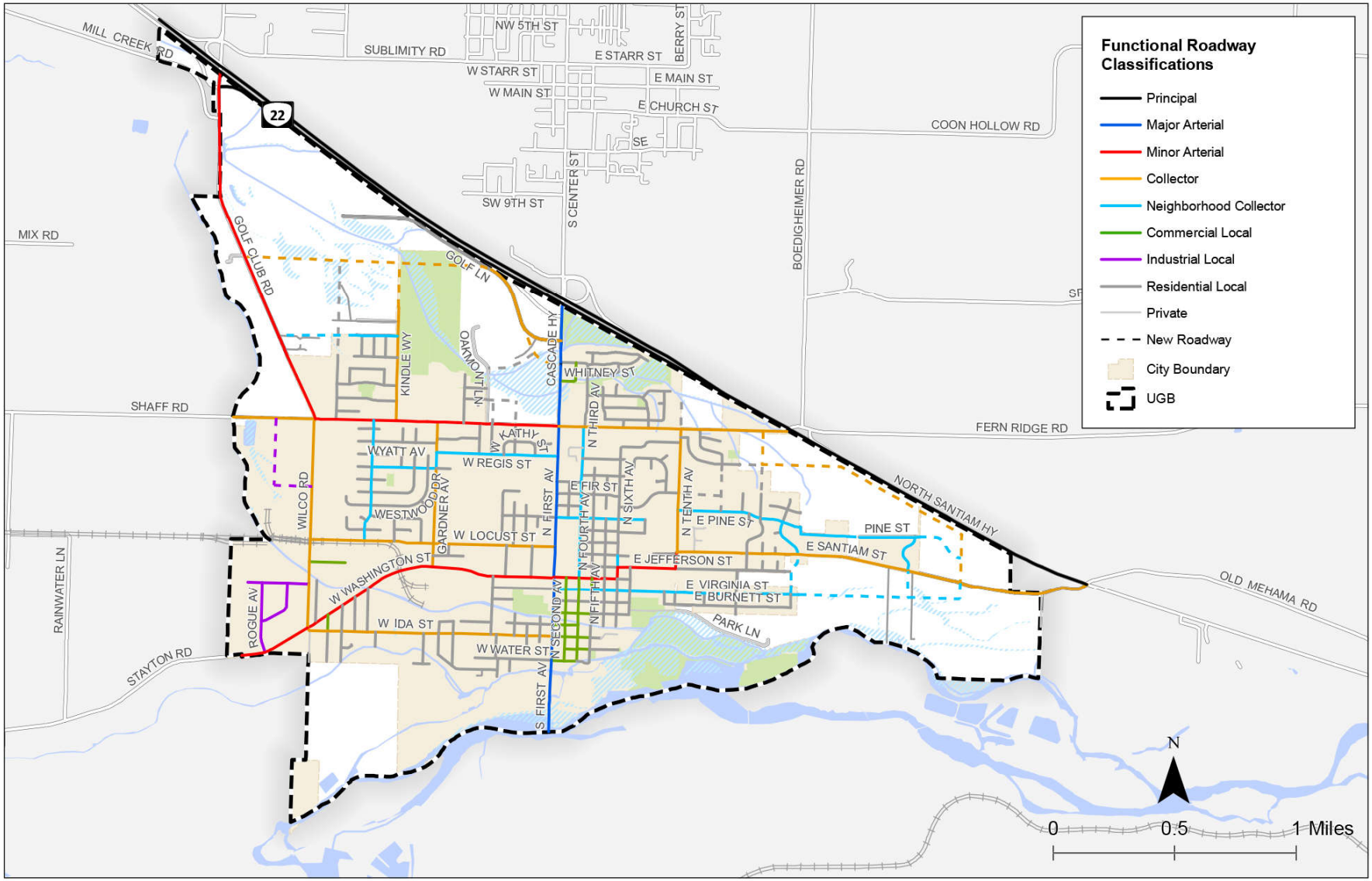


Figure 8. Roadway Functional Classification Map



ROADWAY CROSS-SECTION STANDARDS

The City of Stayton has street design standards that vary based on the roadway's designated functional classification. The City has cross-section requirements specific to each collector and arterial based on a variety of existing conditions and constraints. These cross-section requirements identify the number of travel lanes and specify the widths of each cross-sectional element; however, the basic elements of each facility type are shown in Exhibits 1 through 6.

These street standards are enumerated in the City of Stayton Public Works Design Standards (Design Standards). Growth projections have changed since the 2004 TSP, eliminating the need for several previously planned roadway widenings to five-lane facilities. Lane width standards have also evolved, with many jurisdictions implementing 10' and 11' through lanes on all types of street classifications (11' minimum recommended on transit and freight routes) to reduce impervious surfaces and to create additional space for bicycle lanes or buffered bicycle lanes. Appendix E in Volume II shows these proposed updates to the City of Stayton's Design Standards, including:

- reduction from 5-lanes to 3-lanes on Cascade Highway, Golf Club Road, Shaff Road, Wilco Road, and Fern Ridge Road, and Golf Club Lane,
- reductions of the standard lane widths on most Minor Arterials and Collectors from 12' to 11' and on Neighborhood Collectors from 11' to 10', and
- reductions of most of the standard center left-turn lane widths from 14' to 12'.

Collectors and arterials should have bike lanes, except for First Avenue, due to right-of-way constraints, and Ida Street, which needs on-street parking. Local streets and neighborhood collectors do not require bike lanes.

On-street parking is included in the typical standard on neighborhood collectors and local streets.

Areas with on-street parking present the opportunity to install stormwater treatment facilities to treat runoff, to reduce impervious surface, reduce crossing distance for pedestrians, and help identify crosswalks.

All street classifications require a landscape strip between the curb and the sidewalk (with the exception of local streets in the downtown). This provides a better experience (lower traffic stress) for pedestrians and provides space for potential stormwater management. One potential stormwater management method is the implementation of "green street" treatments (specially designed vegetated planters between the roadway and sidewalk that can detain and treat stormwater runoff).

Table 5 shows the typical rights-of-way associated with each functional classification, as shown in the Design Standards.

Table 5. Typical Rights-of-Way

Functional Classification	Right of Way (Feet)
Principal Arterial	Variable
Major Arterial	100
Minor Arterial	60 to 100
Collector	60 or 80
Neighborhood Collector	60
Residential Local	45 to 60
Commercial Local	60
Industrial Local	80

Exhibit 1. Arterial Cross-Section With Center Turn-Lane

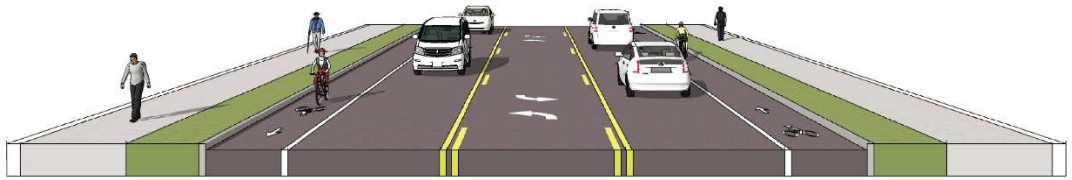


Exhibit 2. Arterial Cross-Section Without Center Turn-Lane

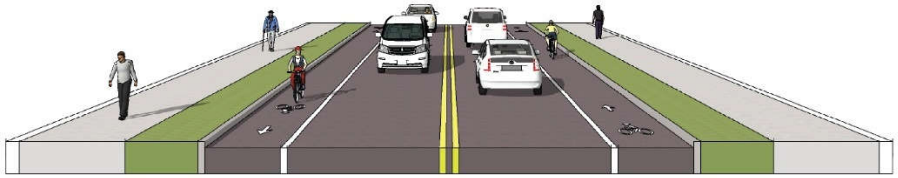


Exhibit 3. Collector Cross-Section With Center Turn-Lane

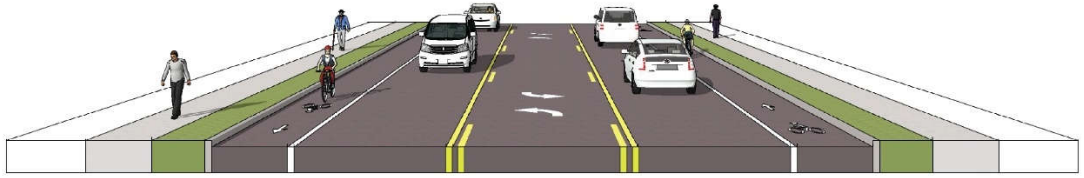


Exhibit 4. Collector

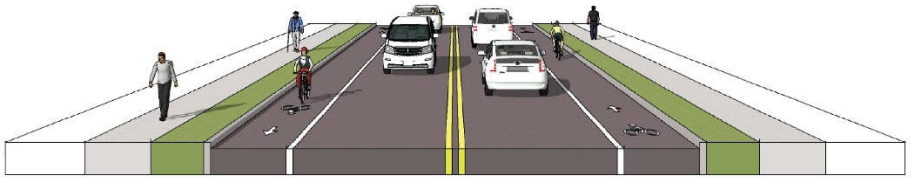


Exhibit 5. Neighborhood Collector

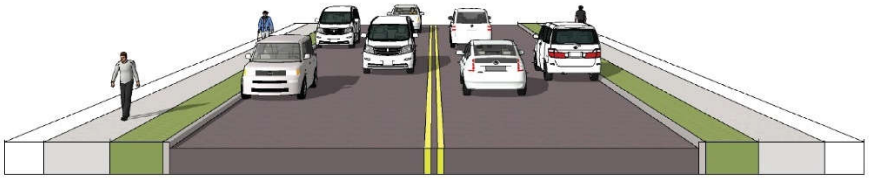
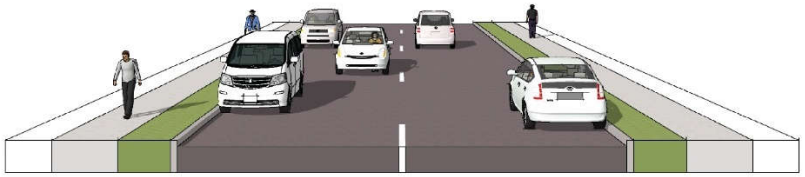


Exhibit 6. Local Street



ACCESS MANAGEMENT STANDARDS

Access management refers to a set of measures regulating access to streets, roads, and highways, from public roads and private driveways. Access management is a policy tool that seeks to balance the need to provide safe, efficient, and timely travel with the need to allow access to individual properties. Proper implementation of access management techniques should guarantee reduced congestion, reduced crash rates, less need for roadway widening, conservation of energy, and reduced air pollution. Measures may include but are not limited to restrictions on the type and amount of access to roadways, and use of physical controls, such as signals and channelization including raised medians, to reduce impacts of approach road traffic on the main facility.

ODOT STANDARDS

Oregon Administrative Rule 734, Division 51 establishes procedures, standards, and approval criteria used by ODOT to govern highway approach permitting and access management consistent with Oregon Revised Statutes (ORS), Oregon Administrative Rules (OAR), statewide planning goals, acknowledged comprehensive plans, and the Oregon Highway Plan (OHP). The OHP serves as the policy basis for implementing Division 51 and guides the administration of access management rules, including mitigation and public investment, when required, to ensure highway safety and operations pursuant to this division.

Access spacing standards for approaches to state highways are based on the highway classification, highway designation, area type, and posted speed. Within Stayton, the OHP classifies OR 22 as a Statewide Highway. Future developments along OR 22 (new development, redevelopment, zone changes, and/or comprehensive plan amendments) are required to meet the OAR 734 Division 51 access management policies and standards. Table 6 summarizes ODOT's access management standards for OR 22.

Table 6. OR 22 ODOT Access Management Standards

Intersection Type	Context[1]	Spacing Standards (Miles)[2, 3]
At-Grade	**Rural**	1
Interchange	**Rural**	3

[1] Roadways within the Stayton urban growth boundary are considered urban and roadways outside this boundary are considered rural. All ODOT facilities are outside this boundary.
[2] These access spacing standards do not apply to approaches in existence prior to April 1, 2000 except as provided in OAR 734-051-5120(9).
[3] Intersection distances measured from approach road spacing for at-grade intersections and crossroad to crossroad spacing for interchanges.

CITY STANDARDS

The City's access spacing standards are intended to maintain and enhance the integrity (capacity, safety, and level of service) of city streets. Numerous driveways or street intersections increase the number of conflict points and potential for collisions and decrease mobility and traffic flow. Table 7 summarizes the City's access spacing standards for City streets and driveways as shown in the Design Standards Section 303.07.D and 303.11.D. These standards help to preserve transportation system investments and guard against deteriorations in safety and increased congestion.

In addition to these standards, the Sublimity Interchange Area Management Plan (IAMP) states that development on the west side of Cascade Highway north of OR 22 requiring a zone change will not have direct access to Cascade Highway.

Table 7. City Access Spacing Standards

Street Classification	Minimum Public Intersection Centerline Spacing (Feet)	Minimum Spacing between Driveways and/or Streets (Feet)
Major Arterial (Limited Access Facility)[1]	750	375
Major Arterial	260	260
Minor Arterial	600	300
Collector	260	150
Neighborhood Collector	260	50
Residential Local	260	50[2]
Commercial Local	260	50
Industrial Local	260	50

[1] This standard applies on Cascade Highway north of Shaff Road and on S First Avenue south of Water Street.
[2] This standard only applies to a corner residential lot driveway spacing from the adjacent street and may be modified per SMC 17.26.020.3.a.

ACCESS SPACING VARIANCES

Access spacing variances may be provided to parcels whose highway/street frontage, topography, or location would otherwise preclude issuance of a conforming permit and would either have no reasonable access or cannot obtain reasonable alternate access to the public road system. In such a situation, a conditional access permit may be issued by the City for a connection to a property that cannot be accessed in a manner that is consistent with the spacing standards. The permit can carry a condition that the access may be closed at such time that reasonable access becomes available to a local public street. The approval condition might also require a given land owner to work in cooperation with adjacent land owners to provide either joint access points, front and rear cross-over easements, or a rear access upon future redevelopment.

For streets under the City's jurisdiction, the City may reduce the access spacing standards on a case-by-case basis when findings presented to the City Engineer indicate that the spacing change is necessary and as determined appropriate by the City Engineer.

ACCESS CONSOLIDATION THROUGH MANAGEMENT

From an operational perspective, access management measures limit the number of redundant access points along roadways. This enhances roadway capacity, improves safety, and benefits circulation. Enforcement of the access spacing standards should be complemented with provision of alternative access points. Under state law, each parcel must have access to public right-of-way, but such access may be via an easement on adjoining property. Parcels are not entitled to "direct" access to the public right-of-way.

As part of every land use action, the City should evaluate the potential need for conditioning a given development proposal with the following items, in order to maintain and/or improve traffic operations and safety along the arterial and collector roadways.

- Provide access to the lower classification roadway when multiple roadways abut the property.
- Provide crossover easements on all compatible parcels (considering topography, access, and land use) to facilitate future access between adjoining parcels.
- Issue conditional access permits to developments that have access points that do not meet the designated access spacing policy and/or have the ability to align with opposing driveways.
- Right-of-way dedications to facilitate the future planned roadway system in the vicinity of proposed developments.

- Half-street improvements (sidewalks, curb and gutter, bike lanes/paths, and/or travel lanes) along site frontages that do not have full build-out improvements in place at the time of development.

FUTURE STREET NETWORK MAP

The City's 2004 TSP included a future network plan to assure that the future street network within the Stayton planning area would develop as a grid system. The grid system assures that access, mobility, and circulation will be achieved at a high level throughout the city.

STREET GRID SYSTEM

The grid system assures that access, mobility, and circulation will be achieved at a high level throughout the city.

Figure 9 shows the updated future street network map that identifies future collectors and neighborhood collectors necessary to support future growth areas. Several future local streets are also shown to indicate the future location of intersections or desired connections in infill development areas; however, this figure does not include all future local streets. Future subdivisions and land development applications will be required to dedicate right-of-way and/or construct additional future local streets consistent with the City's connectivity and block length standards and to provide adequate access to their development.

MOTOR VEHICLE FACILITIES

Streets serve a majority of all trips within Stayton across all travel modes. In addition to motorists, pedestrians, bicyclists, and public transit riders use streets to access areas locally and regionally. This section summarizes the types of improvements included in the Motor Vehicle Plan for the TSP update.

Traffic Signals

Traffic signals allow opposing streams of traffic to proceed in an alternating pattern. National and state guidance indicates when it is appropriate to install traffic signals at intersections. When used, traffic signals can effectively manage high traffic volumes and provide dedicated times in which pedestrians and cyclists can cross roadways. Because they continuously draw from a power source and must be periodically re-timed, signals typically have higher maintenance costs than other types of intersection control. Signals can improve safety at intersections where signal warrants are met, however, they may result in an increase in rear-end crashes compared to other solutions. Signals have a significant range in costs depending on the number of approaches, how many through and turn lanes each approach has, and, if it is located in an urban or rural area. The cost of a new traffic signal ranges from approximately $250,000 to $750,000 depending upon urban or rural context and the functional classification of the roadways forming the intersection.

Roundabouts

Roundabouts are circular intersections where entering vehicles yield to vehicles already in the circle. They are designed to slow vehicle speeds to 20 to 30 mph or less before they enter the intersection, which promotes a more comfortable environment for pedestrians,

bicyclists, and other non-motorized users. Roundabouts have fewer conflict points and have been shown to reduce the severity of crashes, as compared to signalized intersections. Roundabouts can be costlier to design and install than other intersection control types, but they have a lower operating and maintenance cost than traffic signals. Topography must be carefully evaluated in considering a roundabout, given that slope characteristics at an intersection may render a roundabout infeasible. The cost of a new roundabouts ranges from approximately $1 million to $3 million depending upon the number of lanes and the slope conditions.

MOTOR VEHICLE PLAN

Table 8 and Table 9 identify the motor vehicle plan projects for the Stayton TSP. These projects are intended to address existing and projected future transportation system needs for motor vehicles as well as all other modes of transportation that depend on the roadway system for travel, such as pedestrians, bicyclists, transit users, and freight.

Projects within the Stayton urban growth boundary are shown in Table 8. Projects along OR 22, outside the Stayton urban growth boundary, are shown in Table 9. It is not anticipated that the City of Stayton would fund these projects. Figure 10 illustrates the locations of the motor vehicle plan projects.

Safety

Projects that improve safety outcomes and are listed in the ODOT ARTS countermeasure list[3] are shown with their related crash modification factor (CMF). These projects may be eligible for ARTS funding.

Appendix C in Volume II contains additional information on motor vehicle safety and identifies four high-crash intersections:

- Golf Club Road SE/OR 22 WB Off-Ramp
- Cascade Highway SE/OR 22 WB Ramps
- Cascade Highway SE/OR 22 EB Ramps
- OR 22/Fern Ridge Road SE

Each of these intersections is outside of Stayton urban growth boundary and on ODOT facilities. It is not be anticipated that the City of Stayton would fund proposed improvements at these locations but they will support safety improvements at these locations.

[3] https://www.oregon.gov/ODOT/Engineering/Pages/ARTS.aspx

Figure 9. Future Street Plan

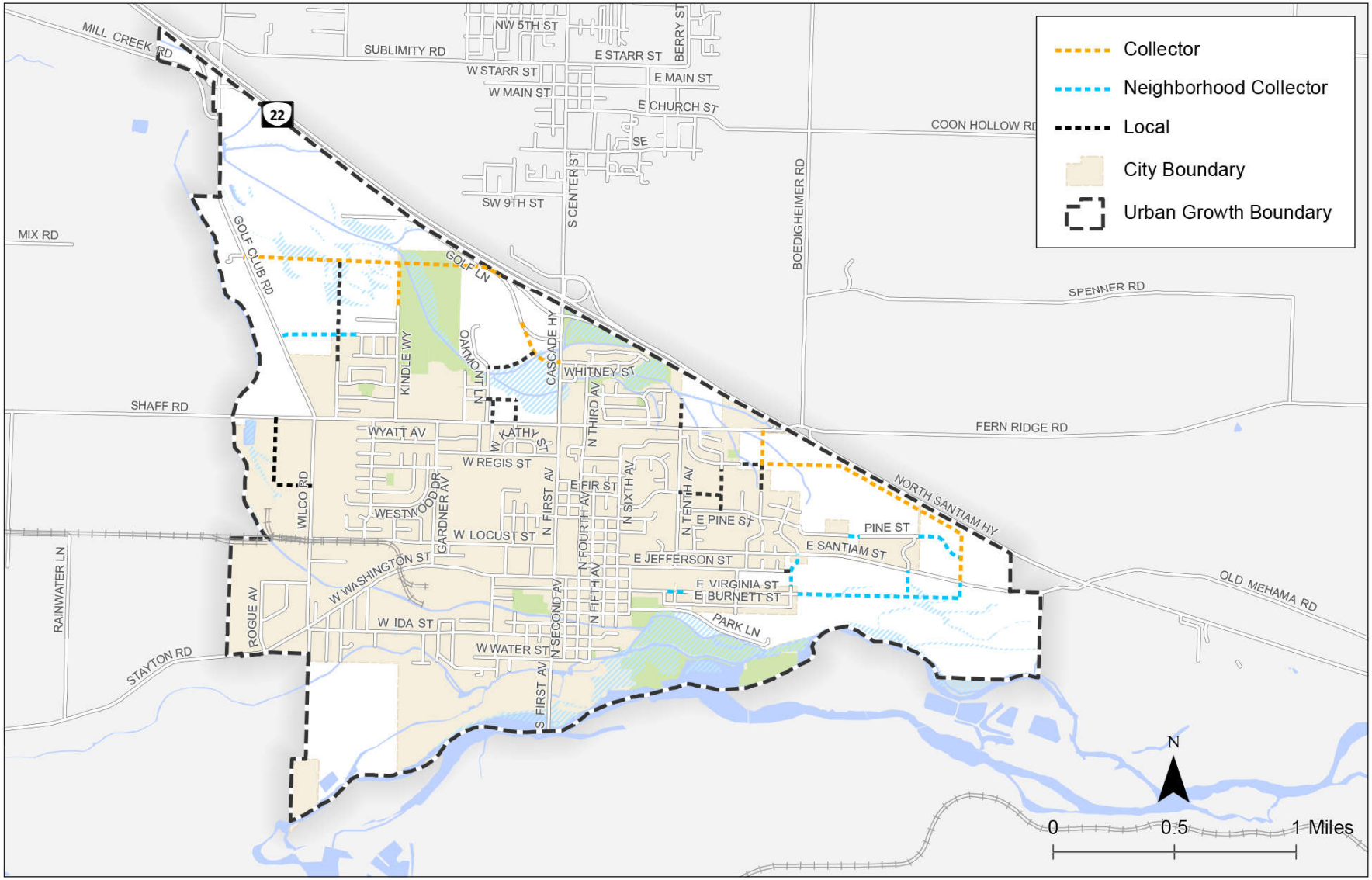


Table 8. Motor Vehicle Plan Projects

Project Number	Roadway/Intersection	Project	Cost Estimate	CMF	Priority
M1	Golf Club Road/Shaff Road	Roundabout	$2.6M	-	High
M2	Stayton Road/Wilco Road	Roundabout	$1.6M	-	High
M3	Golf Lane	Realign to Whitney Street as Cascade Highway	$3.3M	-	High
M4	Sixth Avenue S-Curves	All-Way Stop control at E Jefferson Street	$630K	75%[1]	High
M5	Tenth Avenue S-Curves	Mini-Roundabout at E Santiam Street	$1.5M	-	High
M6	First Avenue/Washington Street	Permissive/protected left turns	$20K	16%[2]	High
M7	Golf Lane Extension	Extend Golf Lane from existing roadway to Golf Club Road	$8.2M	-	Low
M8	Kindle Way Extension	Extend Kindle Way from existing roadway to Golf Lane Extension	$1.4M	-	Low
M9	Dawn Drive Extension	Extend Dawn Drive from local roadway extension to E Santiam Street	$8.4M	-	Low
M10	Highland Drive Extension	Extend Highland Drive from local roadway extension to Fern Ridge Road	$1.1M	-	Low

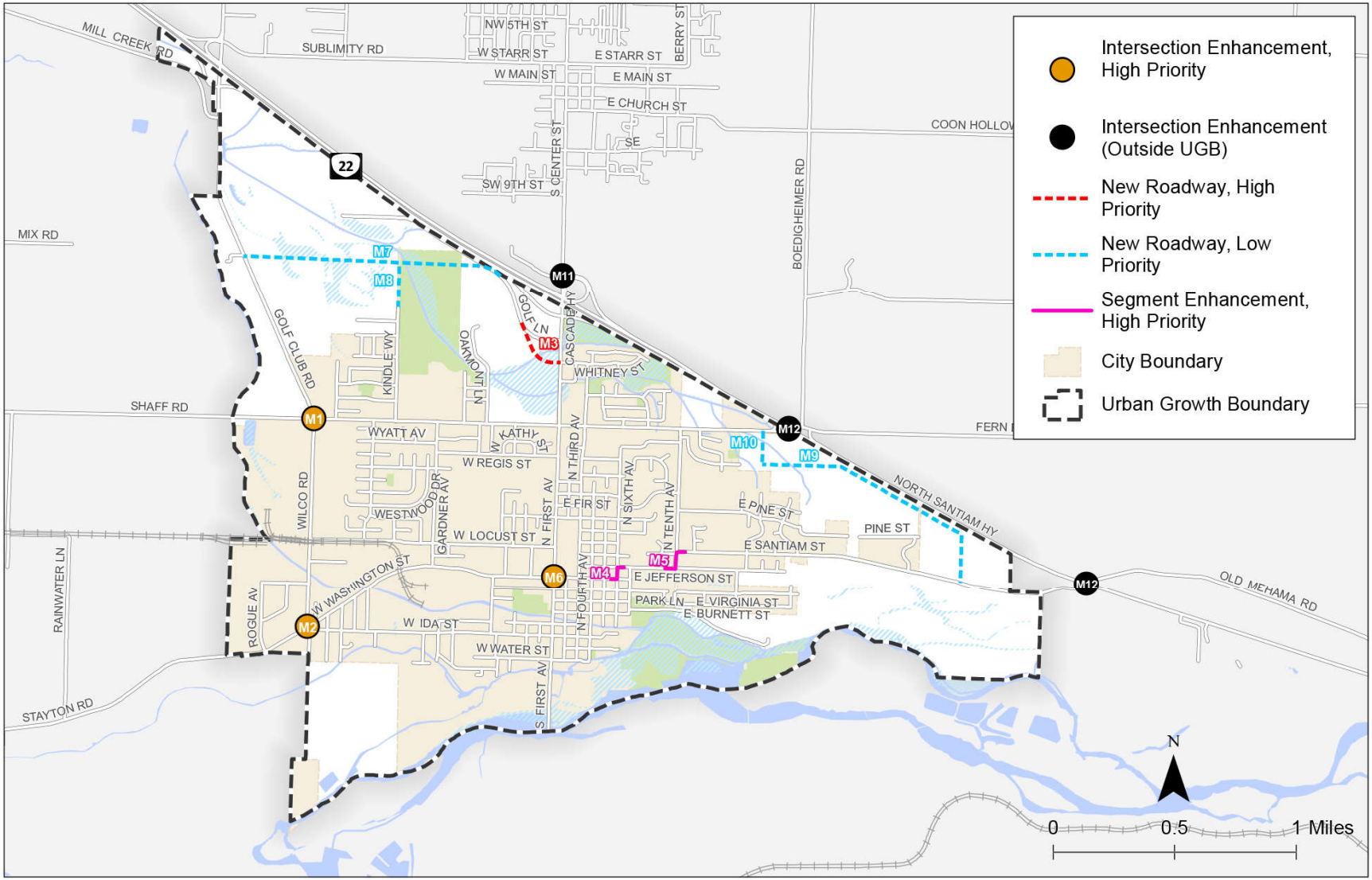
[1] Applies to angle crashes
[2] Applies to left turning injury crashes
CMF = Crash Modification Factor

Table 9. Motor Vehicle Plan Projects (Outside Stayton City Limits)

Project Number	Roadway/Intersection	Project	CMF	Priority
M11	Cascade Highway / OR 22 WB Ramps	Traffic signal	67%[1]	N/A
M12	OR 22/Fern Ridge Road and OR 22/Old Mehama Road	Restrict access for EBL and WBL movements	-	N/A

[1] Applies to angle crashes; rear end crashes have an associated CRF of -143%
CMF = Crash Modification Factor

Figure 10. Motor Vehicle Plan Projects



PROJECT DESCRIPTIONS

The following section describes the intersection and safety projects listed in the motor vehicle plan in Table 8 and Table 9.

PROJECT M1: GOLF CLUB ROAD SE/SHAFF ROAD SE ROUNDABOUT

The intersection of Golf Club Road SE and Shaff Road is currently all-way stop controlled. As shown in Table 10, it currently operates at an acceptable level of service. However, based on existing vehicular volumes, this intersection meets signal warrants as prescribed in the Manual for Uniform Traffic Control Devices. Additionally, during the public engagement process, this intersection was noted to need intersection control upgrade to improve traffic flow.

Projected operations in the existing and future scenario for the no-build and roundabout alternative and cost estimates are shown in Table 10. A sketch of the roundabout alternative is shown in Figure 11.

Table 10. Weekday PM Peak Hour Operations and Evaluation (Golf Club Road/Shaff Road)

Alternative	Scenario	Delay	Level of Service	Cost Estimate
No-build	Existing	20.9	D	$0
	2040	25.3	D	
Roundabout	Existing	8.9	A	$2,590,000
	2040	9.9	A	

PROJECT M2: STAYTON ROAD SE / WILCO ROAD ROUNDABOUT

The Stayton Road SE/Wilco Road intersection is a five-leg intersection on the southwest edge of Stayton. It consists of two intersections in close proximity: an all-way stop- controlled intersection and a second, smaller, minor-approach stop control intersection 70 feet southeast of the first. As shown in Table 11, it currently operates at an acceptable level of service. However, during the public engagement process, this intersection was noted as congested and in need of a traffic control upgrade. Additionally, because this intersection serves as an entrance to the city from the southwest, a more aesthetically-pleasing intersection could enhance perception of the city.

Projected operations in the existing and future scenario for the no-build and roundabout alternatives and cost estimates are shown in Table 11. A sketch of the roundabout alternative is shown in Figure 12.

Table 11. Weekday PM Peak Hour Operations and Evaluation (Stayton Road/Wilco Road)

Alternative	Scenario	Delay	Level of Service	Cost Estimate
No-build	Existing	12.0	B	$0
	2040	13.6	B	
Roundabout	Existing	5.8	A	$1,640,000
	2040	6.1	A	

PROJECT M3: GOLF LANE SE REALIGNMENT

Golf Lane SE should be realigned to intersect Cascade Highway directly opposite Whitney Street when traffic volumes on Golf Lane at Cascade Highway warrant a signal for safety or capacity. This is not anticipated based on the projected growth on Golf Lane which does not assume expansion of the city limits. Annexation and urban development along Golf Lane would add trips to the Cascade Highway SE/Golf Lane SE intersection and could trigger the need for the Golf Lane realignment.

The wetlands surrounding Mill Creek pose significant environmental constraints to the realignment of Golf Lane SE. Advanced engineering may be necessary to avoid or mitigate adverse wetland

Figure 11. Golf Club Road SE / Shaff Road SE Roundabout

Figure 12. Stayton Road SE / Wilco Road Roundabout

impacts. Table 12 shows the cost estimate for the Golf Lane realignment.

Appendix C in Volume II discusses two fatal crashes that occurred at this intersection in the last 5 years. A pedestrian was struck and killed by a southbound passenger vehicle south of the Golf Lane SE intersection in 2014. Additionally, a westbound left-turning vehicle and northbound through-moving vehicle collided, resulting in a fatality and an incapacitating injury, in 2017. The proposed realignment alternative is not intended to be a direct safety enhancement at this location. Extending the sidewalk on the west side of Cascade Highway from the ramp terminal to the signal at Whitney would help pedestrians to cross at the signal. Project P2 in the pedestrian plan addresses this need.

Table 12. Evaluation (Golf Lane Realignment)

Alternative	Cost Estimate
No-build	$0
Realign Golf Lane to Whitney Signal	$3,320,000

PROJECT M4: N SIXTH AVENUE ALL-WAY STOP CONTROL

The predominant vehicular travel route between Cascade Highway and OR 22 to the east features three roads (E Washington Street, E Jefferson Street, and Stayton Road SE) with two S-curves between them, on Sixth Avenue and Tenth Avenue. The Sixth Avenue S-curve currently features stop-control for minor approaches and free-flow for turning movements between E Jefferson Street and E Washington Street. During the public engagement process, citizens commented that the two intersections that make up this S-curve need pedestrian improvements, as they are currently difficult to navigate on foot. Additionally, sight distance for minor approach vehicles can be an issue at this location.

A sketch of the all-way stop control alternative is shown in Figure 13. Table 13 shows the cost estimate for this improvement.

Table 13. Evaluation (Sixth Avenue S-Curve)

Alternative	Cost Estimate
No-build	$0
All-Way Stop Control	$630,000

PROJECT M5: N TENTH AVENUE MINI-ROUNDABOUT

The Tenth Avenue S-curve currently features stop-control for minor approaches and free-flow for turning movements between E Washington Street and Stayton Road SE.

During the public engagement process, citizens commented that the two intersections that make up this S-curve need pedestrian improvements, as they are currently difficult to navigate on foot. Additionally, sight distance for minor approach vehicles and the southbound left-turn from N. Tenth Avenue to Washington Street can be an issue at this location. A sketch of the mini-roundabout is shown in Figure 14. Table 14 shows PM peak hour operations at the Tenth Avenue/Stayton Road SE intersection and the cost estimate for the mini-roundabout.

Table 14. Evaluation (Tenth Avenue S-Curve)

Alternative	Scenario	Delay	Level of Service	Cost Estimate
No-build	Existing	6.5	A	$0
	2040	8.9	A	
Mini-Roundabout	Existing	3.8	A	$1,460,000
	2040	5.3	A	

Figure 13. Sixth Avenue All-Way Stop Control

PROJECT M6: PROTECTED LEFT TURNS AT N FIRST AVENUE/WASHINGTON STREET

The intersection of N First Avenue and Washington Street currently features permissive left-turns on all approaches. This results in conflicts between left-turning vehicles and oncoming traffic. From 2011 to 2015, nine of the ten crashes occurring at this intersection involved angle or turning movements, and four of these crashes involved a left-turning vehicle colliding with an oncoming through movement vehicle.

Changing the left-turns at this intersection from permissive to protected eliminates conflicts between left-turning vehicles and oncoming through vehicles. As shown in Table 15, this change would increase delay at this intersection from level of service B to level of service D.

Table 15. Weekday PM Peak Hour Operations and Evaluation (First Avenue/Washington Street)

Alternative	Scenario	Delay	Level of Service	Cost Estimate
No-build	Existing	19.5	B	$0
	2040	20.1	C	
Protected Left-Turns	Existing	38.0	D	$20,000
	2040	40.8	D	

PROJECT M11: CASCADE HIGHWAY SE/OR 22 WB RAMPS SIGNALIZATION

The intersection of Cascade Highway and OR 22 WB is currently two-way stop controlled. This results in conflicts as minor approach vehicles must wait for gaps in major approach traffic to proceed. From 2011 to 2015, all nine crashes occurring at this intersection involved angle or turning movements between a minor approach and major approach vehicle.

Improving this intersection's control from stop-controlled to signalized would eliminate many of these conflict points. As shown in Table 16, it would also improve intersection operations. Based on existing vehicular volumes, this intersection meets signal warrants as prescribed in the Manual for Uniform Traffic Control Devices.

Table 16. Weekday PM Peak Hour Operations and Evaluation (Cascade Highway/OR 22 WB)

Alternative	Scenario	Delay	Level of Service
No-build	Existing	20.6	C
	2040	20.6	C
Signalized	Existing	5.6	A
	2040	5.6	A

PROJECT M12: RESTRICT LEFT-TURNS ONTO OR 22 AT FERN RIDGE ROAD & OLD MEHAMA ROAD

The intersections of Fern Ridge Road/OR 22 and Old Mehama Road/OR 22 are currently two-way stop controlled. When drivers approaching OR 22 from a minor approach make a left-turn or through movement, they must navigate conflicts from both major approaches, resulting in more conflict points and potential safety issues. At the intersection of Fern Ridge Road and OR 22, 11 of the 13 crashes occurring from 2011 to 2015 involved a minor approach left-turn or through movement and at the intersection of Old Mehama Road and OR 22, both crashes occurring from 2011 to 2015 involved a minor approach left-turn or through movement. Restricting these movements, and rerouting traffic through the Cascade Highway interchange, would eliminate conflict points that lead to these crashes.

Figure 14. N Tenth Avenue Roundabout

SECTION 7
OTHER TRAVEL MODES

OTHER TRAVEL MODES

This chapter summarizes the plans for other travel modes in Stayton such as rail, air, water, freight, and pipeline. This TSP does not identify projects for any of the travel modes described in this chapter.

FREIGHT TRANSPORTATION

OR 22 is designated as a statewide National Highway System freight route by the 1999 Oregon Highway Plan (OHP). Figure 15 shows Stayton's freight routes, which include the following roadways:

- Golf Club Road – Wilco Road between Washington Street and Highway 22
- First Avenue – Cascade Highway between Santiam River and Highway 22
- Washington Street – Sixth Avenue – Jefferson Street – Tenth Avenue – Santiam Street between City Limits and Highway 22
- Shaff Road – Fern Ridge Road between City Limits and Highway 22

RAIL TRANSPORTATION

An unused rail spur runs from the west side of the city along W Locust Street to the NORPAC facility. The last rail activity on this line was over five years ago, and NORPAC has not used the line in over twenty years. In 2018, Marion County conducted a feasibility analysis of reestablishing rail service and concluded that service was not feasible without either a subsidy to the operator or substantial additional demand.

AIR TRANSPORTATION

The City of Stayton does not have an airport. The nearest commercial airport is the Portland International Airport, located 75 miles north of Stayton. There are several other small airstrips within 20 miles of Stayton. One such location is the Salem Municipal Airport, which does not operate commercial flights. There is also a helistop located at Santiam Hospital.

WATER TRANSPORTATION

Although the City of Stayton is situated along the North Santiam River, the river has not been used as a method of transportation, mainly due to the shallowness of the river. There are several boat ramps along the river; however, these are mostly used for small watercraft. The river is mainly used for recreation but is also a source of drinking water.

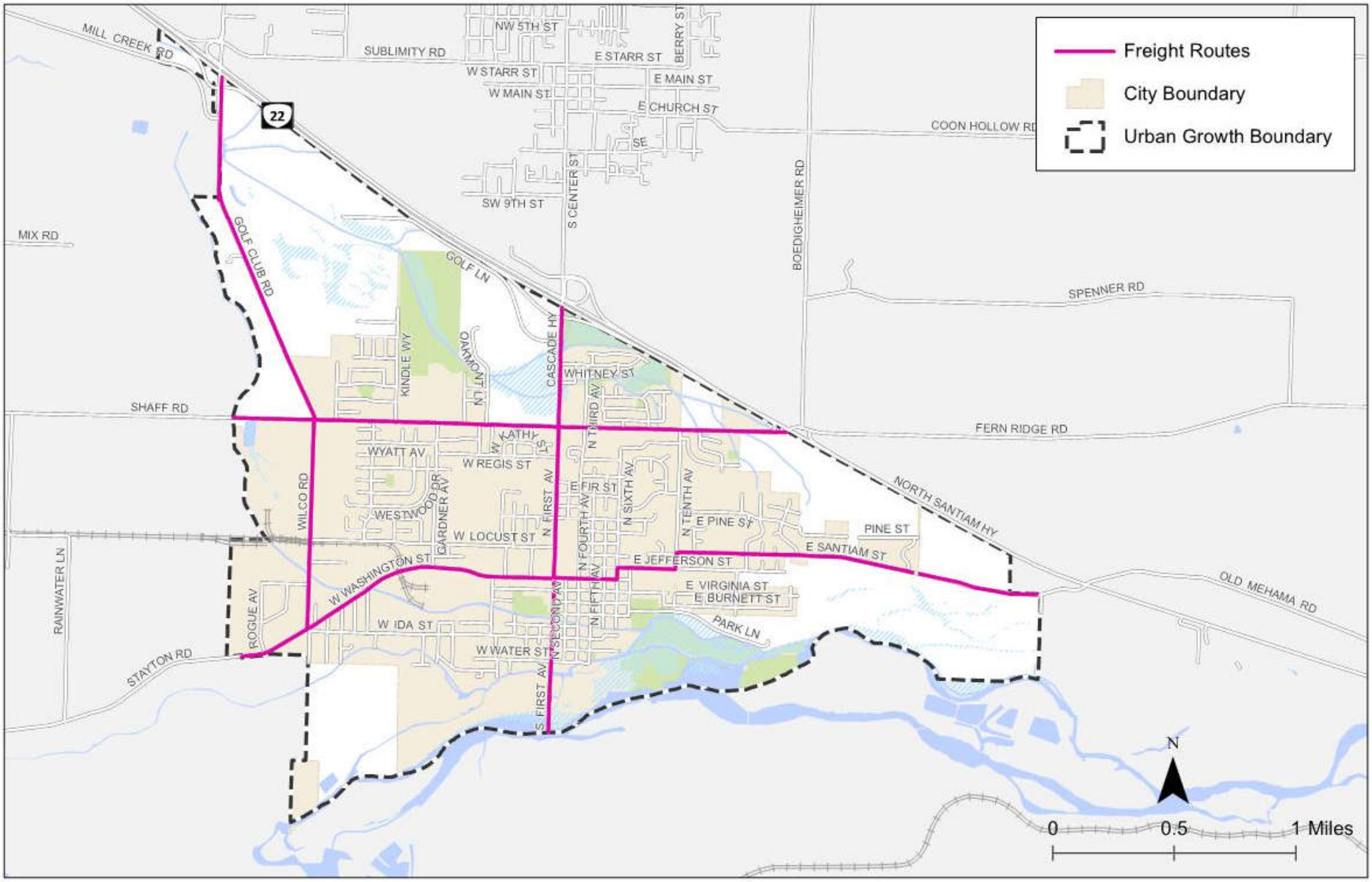
PIPELINE FACILITIES

The primary pipeline facilities in Stayton are associated with the city storm sewer, sanitary sewer, and water lines. Potable water is transported from the North Santiam River to Salem via two transmission mains that run through Stayton. There are no natural gas lines that are large enough to be classified as pipelines in the Stayton area.

PRIVATE TRANSPORTATION PROVIDERS

Uber and Lyft both operate in the City of Stayton. They provide on-demand taxi services through a mobile phone application.

Figure 15. Freight Routes



- Historical Revenue Sources
- Transportation Expenditures
- Projected Funding
- Planned System Costs
- Implementation

SECTION 8
FUNDING, IMPLEMENTATION, AND MONITORING

FUNDING, IMPLEMENTATION, AND MONITORING

This section documents the City's historical revenue sources and expenditures and identifies the projected transportation funding for implementation of the TSP.

HISTORICAL REVENUE SOURCES

Historical revenue sources that have contributed to transportation funding for Stayton include the state gas tax, ODOTs surface transportation program (STP), the City's street maintenance fee, System Development Charges (SDCs), and most recently, a local gas tax. Since the implementation of the local gas tax, total transportation revenue has risen. The FY 2019-2020 projected revenue from each source was projected out over the next 5-, 10-, and 21-year period to determine the total revenue that is estimated through 2040. Table 17 summarizes the potential cumulative funding for transportation through 2040.

Table 17. Cumulative Transportation Funding Projections

FY 19-20	5-Year	10-Year	2040
$ 1,153,362	$ 6,352,777	$ 12,966,902	$ 28,182,079

TRANSPORTATION EXPENDITURES

The City's transportation expenditures are summarized by five main categories including personnel services, materials and services, capital improvements, fund transfers, and contingencies. Transportation spending has increased steadily over the last five years with the exception of FY 2016-17. Table 19 shows the portions of the transportation expenditures that have been spent on street improvements and capital projects. Over time, these have averaged approximately 44% of the transportation budget over seven years including the projected FY 2018-19.

PROJECTED FUNDING

As described in Table 17, approximately $28 million dollars are anticipated to be available for transportation over the next 21 years. However, only a portion is assumed to be available for street improvements and capital projects (as opposed to street maintenance such as pavement preservation). STP Allocation, ODOT grants, and SDC funds are assumed to be used for street improvements and capital projects in the future along with a portion of state and local gas tax based on past transportation spending which averaged approximately 42% of gas taxes supporting street improvements (as opposed to street maintenance).

FUNDING AVAILABILITY

Depending upon street maintenance needs, between $6.7 and $14.3 million could be available for street improvements and capital projects over the next 21 years

Table 20 illustrates the projected revenues for street improvements and capital projects over FY 2019-2020 and the next 5-, 10-, and 21-year periods. Three scenarios are provided that vary in the assumed portion of gas taxes that could go towards these projects from the historical rate of 42%, 20% and 0%. As shown, depending upon street maintenance needs, between $6.7 and $14.3 million could be available for street improvements and capital projects over the next 21 years.

Table 18. City of Stayton Transportation Expenditures

	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
Personnel Service	$ 86,275	$ 84,096	$ 84,470	$ 85,460	$ 88,600	$ 95,600	$ 189,600
Materials and Services	$ 196,030	$ 262,030	$ 232,780	$ 232,780	$ 201,900	$ 206,300	$ 228,000
Street Improvements	$ 100,000	$ 180,000	$ 350,000	$ 425,000	$ 300,000	$ 399,000	$ 625,000
Transportation System Plan Update						$ 135,000	$ 100,000
Miscellaneous		$ 10,000	$ 10,000	$ 10,000			
Transfer to Capital Projects (Tenth Ave Fund)	$ 476,500						
Transfer to General Fund	$ 13,900	$ 14,180	$ 14,180	$ 14,605	$ 50,000	$ 53,500	$ 65,000
Transfer to PW Admin Fund	$ 65,000	$ 65,000	$ 65,000	$ 66,950	$ 76,400	$ 78,200	$ 80,000
Transfer to Facility Maintenance	$ 4,922	$ 4,922	$ 4,922	$ 4,922	$ 4,700	$ 2,500	$ 2,500
Transfer to Vehicle Replacement Fund	$ 34,835	$ 38,835	$ 38,835	$ 38,835			
Miscellaneous				$ 75,000			
Total Transportation Expenditures	$ 977,462	$ 659,063	$ 800,187	$ 878,552	$ 721,600	$ 970,100	$ 1,290,100
Total Spent on Street Improvements and Capital Projects	**$ 576,500**	**$ 180,000**	**$ 350,000**	**$ 425,000**	**$ 300,000**	**$ 399,000**	**$ 625,000**
% Spent on Street Improvements and Capital Projects	59%	27%	44%	48%	42%	41%	48%

Table 19. Potential Cumulative Funding for Street Improvements and Capital Projects

	FY 19-20	5-Year	10-Year	Through 2040
State Gas Tax	$ 562,368	$ 2,867,520	$ 5,904,307	$ 13,080,123
Local Gas Tax	$ 217,150	$ 1,107,250	$ 2,279,860	$ 5,050,694
STP Allocation/ ODOT Grants	$ 85,000	$ 925,000	$ 1,850,000	$ 3,785,000
Transfer In Street SDC Fund	$ 138,000	$ 690,000	$ 1,380,000	$ 2,898,000
Estimated Revenues for Street Improvements and Capital Projects (42% of gas tax)	**$ 550,398**	**$ 3,284,403**	**$ 6,667,350**	**$ 14,297,943**
Estimated Revenues for Street Improvements and Capital Projects (20% of gas tax)	**$ 378,904**	**$ 2,409,954**	**$ 4,866,833**	**$ 10,309,163**
Estimated Revenues for Street Improvements and Capital Projects (0% of gas tax)	**$ 223,000**	**$ 1,615,000**	**$ 3,230,000**	**$ 6,683,000**

PLANNED SYSTEM COSTS

Table 21 and Table 22 summarize the full cost of the planned transportation system. As shown, the full cost of the planned system is approximately $52M over the next 21-year period, including $16M high-priority projects, $21M medium-priority projects, and $15M low-priority projects. Based on the anticipated funds available for the capital improvement projects, **the financially-constrained plan includes all the high priority projects.** Assuming 42% of the gas tax is used for street improvements and capital projects, this leaves a deficit of approximately $27K in funding for the City to complete medium- and low-priority projects over the 21-year period, to contribute to projects on ODOT facilities, or to provide matching funds for grants.

Table 20. Planned Transportation System Cost Summary

Project Type	Project	Cost	Priority
Pedestrian	Tier I Projects	$1,075,000	High
	Tier II Projects	$3,515,000	Medium
	Tier III Projects	$9,065,000	Medium
	Tier IV Projects	$5,690,000	Low
Bicycle	Tier I Projects	$3,590,000	High
	Tier II Projects	$8,480,000	Medium
	Tier III Projects	$1,180,000	Medium
	Tier IV Projects	$9,590,000	Low
Motor Vehicle	Golf Club Road / Shaff Road Roundabout (M1)	$2,590,000	High
	Stayton Road / Wilco Road – Roundabout (M2)	$1,640,000	High
	Realign Golf Lane (M3)	$3,320,000	High
	Sixth Street S-Curves – All-Way Stop Control (M4)	$630,000	High
	Tenth Street S-Curves – Mini-Roundabout (M5)	$1,460,000	High
Safety Projects	First Avenue / Washington Street Protected Lefts (M6)	$20,000	High
	Cascade Highway SE / OR 22 EB Ramps Signalization (M11)	-	N/A
	OR 22 / Fern Ridge Road and Old Mehama Road Access Restrictions (M12)	-	N/A
New Roadway Projects	Golf Lane Extension (M7)	$8,245,000	Low
	Kindle Way Extension (M8)	$1,425,000	Low
	Dawn Drive Extension (M9)	$8,395,000	Low
	Highland Drive Extension (M10)	$1,090,000	Low

Table 21. Transportation Improvement Prioritization Summary

Mode	High Priority (Financially-Constrained Plan Projects)	Medium Priority	Low Priority	Total
Pedestrian	$1,075,000	$12,580,000	$5,690,000	$19,345,000
Bicycle	$3,590,000	$9,660,000	$9,590,000	$22,840,000
Motor Vehicle	$9,640,000	$0	$0	$9,640,000
Safety	$20,000	$0	$0	$20,000
New Roadways	$0	$0	$19,155,000	$19,155,000
Total	$14,325,000	$22,240,000	$34,435,000	$71,000,000

IMPLEMENTATION

The Transportation Planning Rule (TPR), as codified in Oregon Administrative Rules (OAR) 660-012-0045, requires that local jurisdictions identify and adopt land use regulations and code amendments needed to implement the TSP. The land use regulations and code amendments are provided under separate cover in the staff report.

SECTION 9
GLOSSARY OF TERMS

GLOSSARY OF TERMS

The following terms are applicable only to the Stayton Transportation System Plan and shall be construed as defined herein:

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

American Association of State Highway Transportation Officials (AASHTO): The American Association of State Highway and Transportation Officials (AASHTO) is a standards-setting body which publishes specifications, test protocols and guidelines which are used in highway design and construction throughout the United States.

Americans with Disabilities Act (ADA): A civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public.

Arterial (Street): A street designated in the functional class system as providing the highest amount of connectivity and mostly uninterrupted traffic flow through an urban area.

Average Annual Daily Traffic (AADT): A measure used primarily in transportation planning and traffic engineering that represents the total volume of vehicular traffic on a highway or roadway for a year divided by 365 days.

Average Daily Traffic (ADT): This is the measurement of the average number of vehicles passing a certain point each day on a highway, road or street.

Bicycle Facility: Any facility provided for the benefit of bicycle travel, including bikeways and parking facilities.

Bicycle Network: A system of connected bikeways that provide access to and from local and regional destinations.

Bicycle Boulevard: Lower-order, lower-volume streets with various treatments to promote safe and convenient bicycle travel. Usually accommodates bicyclists and motorists in the same travel lanes, often with no specific vehicle or bike lane delineation. Assigns higher priority to through bicyclists, with secondary priority assigned to motorists. Also includes treatments to slow vehicle traffic to enhance the bicycling environment.

Bike Lane: Area within street right-of-way designated specifically for bicycle use.

Capital Improvement Plan (CIP): A community planning and fiscal management tool used to coordinate the location, timing and financing of capital improvements over a multi-year period.

Capacity: The maximum number of vehicles or individuals that can traverse a given segment of a transportation facility with prevailing roadway and traffic conditions.

Central Business District (CBD): This is the traditional downtown area, and is usually characterized by slow traffic speeds, on-street parking and a compact grid system.

Citizen Advisory Committee (CAC): An advisory committee consisting of volunteer citizens from the community they represent.

Collector (Street): A street designated in the functional class system that provides connectivity between local and neighborhood streets with the arterial streets serving the urban area. Usually shorter in

distance than arterials, designed with lower traffic speeds and has more traffic control devices than the arterial classification.

Crosswalk: Portion of a roadway designated for pedestrian crossing and can be either marked or unmarked. Unmarked crosswalks are the national extension of the shoulder, curb line or sidewalk.

Department of Land Conservation and Development (DLCD): A public agency that helps communities and citizens plan for, protect and improve the built and natural systems that provide a high quality of life.

Driveway (DWY): A short road leading from a public road to a private business or residence.

Eastbound (EB): Leading or traveling toward the east.

Fiscal Year (FY): A year as reckoned for taxing or accounting purposes.

Geographic Information Systems (GIS): A system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data.

Grade: A measure of the steepness of a roadway, bikeway or walkway, usually expressed in a percentage form of the ratio between vertical rise to horizontal distance, (e.g. a 5% grade means that the facility rises 5 feet in height over 100 feet in length.)

Grade Separation: The vertical separation of conflicting travelways.

Green Street: A street designed to reduce or redirect stormwater runoff quantity and/or to improve stormwater runoff quality. Green street design generally involves using rain gardens, vegetated swales and/or pervious materials (porous pavement or permeable paving) as an alternative to conventional stormwater facilities.

Impervious Surfaces: Hard surfaces that do not allow water to soak into the ground, increasing the amount of stormwater running into the drainage system.

Intelligent Transportation Systems (ITS): the application of advanced technologies and proven management techniques to relieve congestion, enhance safety, provide services to travelers and assist transportation system operators in implementing suitable traffic management strategies.

Level of Service (LOS): A qualitative measure describing the perception of operation conditions within a traffic steam by motorists and or passengers. An LOS rating of "A" to "F" describes the traffic flow on streets and at intersections, ranging from LOS A, representing virtually free flow conditions and no impedance to LOS F representing forced flow conditions and congestion.

Local (Street): A street designated in the functional class system that's primary purpose is to provide access to land use as opposed to enhancing mobility. These streets typically have low volumes and are very short in relation to collectors and arterials.

Manual on Uniform Traffic Control Devices (MUTCD): A document issued by the Federal Highway Administration (FHWA) of the United States Department of Transportation (USDOT) to specify the standards by which traffic signs, road surface markings, and signals are designed, installed, and used.

Multi-Modal: Involving several modes of transportation including bus, rail, bicycle, motor vehicle etc.

Multi-Use Path: Off-street route (typically recreationally focused) that can be used by several transportation modes, including bicycles, pedestrians and other non-motorized modes (i.e. skateboards, roller blades, etc.)

National Highway System (NHS): The National Highway System is interconnected urban and rural principal arterial and highways that serve major population centers, ports, airports and other major travel destinations, meet national defense requirements and serve interstate and interregional travel.

Neighborhood Route (Street): A street designated in the functional class system that's primary purpose is to provide access to land use but provides more mobility than a local street. These streets typically have moderate volumes and are shorter in relation to collectors and arterials.

Northbound (NB): Traveling or leading toward the north.

Oregon Administrative Rules (OAR): The official compilation of rules and regulations having the force of law in the U.S. state of Oregon. It is the regulatory and administrative corollary to Oregon Revised Statutes and is published pursuant to ORS 183.360 (3).

Oregon Highway Plan (OHP): The document that establishes long range policies and investment strategies for the state highway system in Oregon.

Oregon Revised Statutes (ORS): The codified body of statutory law governing the U.S. state of Oregon, as enacted by the Oregon Legislative Assembly, and occasionally by citizen initiative. The statutes are subordinate to the Oregon Constitution.

Peak Period or Peak Hour: The period of the day with the highest number of travelers. This is normally between 4:00 p.m. to 6:00 p.m. on weekdays.

Pedestrian Connection: A continuous, unobstructed, reasonability direct route between two points that is intended and suitable for pedestrian use. These connections could include sidewalks, walkways, accessways, stairways and pedestrian bridges.

Pedestrian Facility: A facility provided for the benefit of pedestrian travel, including walkways, crosswalks, signs, signals and benches.

Right-Of-Way (ROW or R/W): A general term denoting publicly-owned land or property upon which public facilities and infrastructure is placed.

Safety Priority Index System (SPIS): An indexing system used by Oregon Department of Transportation to prioritize safety improvements based on crash frequency and severity on state facilities.

Safe Routes to School (SRTS): Federal, state, and local programs that create safe, convenient, and fun opportunities for children to bicycle and walk to and from schools.

Shared Roadway: Roadways where bicyclists and autos share the same travel lane. May include a wider outside lane and/or bicycle boulevard treatment (priority to through bikes on local streets).

Single-Occupancy Vehicle or Single-Occupant Vehicle (SOV): A vehicle containing only a single occupant, the driver.

Southbound (SB): Traveling or leading toward the south.

Statewide Transportation Improvement Plan (STIP): The capital improvement program that identifies founding and schedule of statewide projects.

System Development Charge (SDC): Fees that are collected when new development occurs in the city and are used to fund a portion of new streets, sanitary sewers, parks and water.

Technical Advisory Committee (TAC): An advisory committee consisting of state, county, and city staff that review and provide feedback on technical memorandums.

Traffic Control Devices: Signs, signals or other fixtures placed on or adjacent to a travelway that regulates, warns or guides traffic. Can be either permanent or temporary.

Transportation Analysis Zone (TAZ): A geographic sub-area used to assess travel demands using a travel demand forecasting model. Often defined by the transportation network and US Census blocks.

Transportation Planning Rule (TPR): A series of Oregon Administrative Rules intended to coordinate land use and transportation planning efforts to ensure that the planned transportation system supports a pattern of travel and land use in urban areas that will avoid the air pollution, traffic and livability problems faced by other large urban areas of the country through measures designed to increase transportation choices and make more efficient use of the existing transportation system.

Transportation System Plan (TSP): Is a comprehensive plan that is developed to provide a coordinated, seamless integration of continuity between modes at the local level as well as integration with the regional transportation system.

Two-Way Stop Control (TWSC): An intersection, where one or more approaches is stop controlled and must yield the right-of-way to one or more approaches that are not stop controlled.

Urban Area: The area immediately surrounding an incorporated city or rural community that is urban in character, regardless of size.

Urban Growth Boundary (UGB): A regional boundary, set in an attempt to control urban sprawl by mandating that the area inside the boundary be used for higher density urban development and the area outside be used for lower density development.

Vehicle Miles Traveled (VMT): The cumulative distance a vehicle travels, regardless of number of occupants.

Volume to Capacity Ratio (V/C): A measure that reflects mobility and quality of travel of a roadway or section of a roadways. It compares roadway demand (vehicle volumes) with roadway supply (carrying capacity).

Westbound (WB): Leading or traveling toward the west.