



City of Independence
Transportation System Plan
Volume I: Transportation System Plan

August 2021

City of Independence Transportation System Plan

Independence, Oregon

Prepared For:

City of Independence

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EXECUTIVE SUMMARY

The Independence Transportation System Plan (TSP) identifies the plans, policies, programs, and projects needed to address gaps, deficiencies, and needs within the city's transportation system over the next 20 years. The preferred plan consists of all projects identified throughout the TSP planning process while the cost constrained plan consists of projects the City anticipates being able to fund over the next 20 years¹. The amount of local funds available for capital projects in the TSP is estimated to be approximately \$10.0 million or roughly \$0.5 million per year.

The full cost of the preferred plan is approximately \$71.3 million over the 20-year period, including \$18.3 million in high priority projects, \$14.7 million in medium priority projects, and \$38.3 million in low priority projects. Based on the anticipated funds available for capital improvements, the cost constrained plan includes the high priority projects.² Although the projected funding based on current revenue sources does not cover the full cost of the high priority projects, the City plans to pursue additional funding to support the cost constrained plan. The cost constrained plan projects are summarized in Table 1 and illustrated in Figure 1.

Table 1: Cost Constrained Plan Projects

Map ID	Location	Description	Cost
R3	4 th Street Extension	Extend 4 th Street south to the new east-west minor arterial	\$1,800,000
R8	Mountain Fir Avenue Extension (New east-west minor arterial)	Extend Mountain Fir Avenue east to Corvallis Road and west to the west City limits; coordinate with City of Monmouth on final alignment west of the City limits	\$9,055,000
R10	E Street Extension	Extend E Street west to 16 th Street and the west city limit	\$2,390,000
R11 ¹	OR 51/Polk Street	Install intersection control change that may include a traffic signal or roundabout. Coordinate with Project S2	\$450,000 ³
R13 ¹	OR 51-Monmouth Street	Install a center two-way left-turn lane on OR 51-Monmouth Street from east of Ash Creek to east of 4 th Street, including pavement rehabilitation. Continue to monitor the intersections at 4 th Street and 7 th Street and install intersection control changes that may include traffic signals or roundabouts when warranted. Coordinate with Projects R5 and R6.	\$270,000
R15	Main Street/ River Road	Install a southbound left-turn lane and reconfigure as all-way stop control in the near-term; Install a westbound left- or right-turn lane in conjunction with a new bridge OR other intersection control types (e.g., traffic signal, roundabout); Coordinate with Projects S3 and P20	\$195,000 ²
R16 ¹	OR 51-Monmouth Street/Gun Club Road	Optimize the signal timing/phasing to provide more green time to the southbound left-turn movement	\$10,000

¹ The cost constrained plan does not limit the City or ODOT from advancing other projects in the TSP in response to changes in development patterns and funding opportunities that are not known at this time. There is no obligation to do these projects, nor assurance that these projects will be completed.

² The high priority projects include those that are most likely to be funded by the City over the 20-year planning horizon. The medium and low priority projects are aspirational and will be funded through grants and additional funding sources as they become available and/or by private developers as part of future development.

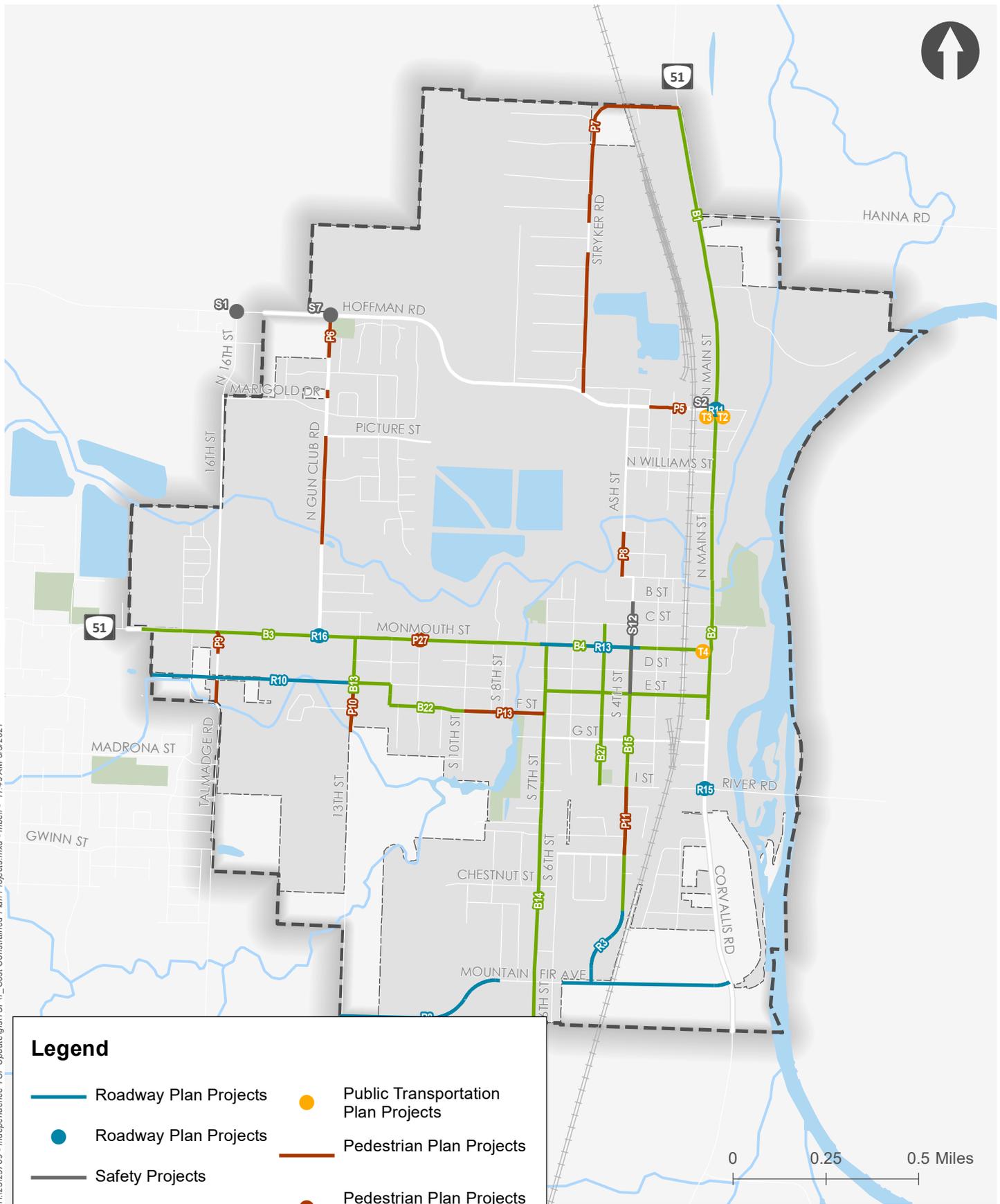
S1	Hoffman Road/ 16 th Street	Install advanced intersection warning signs, speed feedback signs, and traffic calming measures at the eastbound approach; Coordinate with City of Monmouth on potential traffic control changes	\$45,000
S2¹	OR 51-Main Street/ Polk Street	Install advanced intersection warning signs and traffic calming measures at the southbound approach. Consideration for freight movements will be needed. Coordinate with Project R11	\$35,000
S7	Hoffman Road/ Gun Club Road	Provide traffic calming measures on Hoffman Road approaching the intersection	\$50,000
S12	4 th Street Circulation and Safety Study	Conduct a study on 4 th Street between B Street and E Street in coordination with Independence Elementary School	\$50,000
T1	Local Transit System	Collaborate with Monmouth and other stakeholders to establish a local transit system based on the outcomes of the Local Transit Feasibility Study. This includes development of a complementary paratransit service if a dial-a-ride or deviated fixed route model is not put into service. ⁵	TBD
T2⁴	OR 51-Main Street/Polk Street (to Salem)	Install ADA-compliant pedestrian ramps leading to the bus stop; provide bicycle parking, storage, and/or repair station	\$20,000
T3⁴	OR 51-Main Street/Polk Street (to Dallas)	Install ADA-compliant pedestrian ramps leading to the bus stop; provide bicycle parking, storage, and/or repair station	\$20,000
T4⁴	Library – OR 51- Monmouth Street/2 nd Street (to Salem)	Install a “No Parking” zone adjacent to the bus stop; provide bicycle storage and/or repair station	\$15,000
B1¹	OR 51-Main Street	Install 7-foot buffered bike lanes on both sides of the roadway from Stryker Road to B Street (5-foot bike lane, 2-foot buffer) ^{6, 7, 8}	\$125,000
B2¹	OR 51-Main Street	Install shared lane pavement markings (sharrows) on both sides of the roadway from B Street to F Street	\$10,000
B3¹	OR 51-Monmouth Street	Install 7-foot buffered bike lanes on both sides of the roadway from the west city limits to the Ash Creek Bridge (5-foot bike lane, 2-foot buffer) ^{6, 7, 8}	\$120,000
B4¹	OR 51-Monmouth Street	Install shared lane pavement markings (sharrows) on both sides of the roadway from 7 th Street to OR 51-Main Street	\$10,000
B13	13 th Street	Install 6-foot bike lanes on both sides of the roads from OR 51-Monmouth Street to the new east-west collector ^{8, 9}	\$25,000
B14	7 th Street	Install 6-foot bike lanes on both sides of the roads from OR 51-Monmouth Street to the south city limits ^{8, 9}	\$175,000
B15	4 Street (south)	Install 6-foot bike lanes on both sides of the road from OR 51-Monmouth Street to the new east-west arterial ^{8, 9} . Coordinate with Project S10	\$345,000
B22	E Street/12 th Street/ F Street	Install bicycle boulevard treatments on E Street, 12 th Street, and F Street from 13 th Street to Main Street – the segments on 12 th Street and F Street will be replaced by Project B28 when the E Street bridge across Ash Creek is complete	\$20,000
B27	5 th Street	Install bicycle boulevard treatments on 5 th Street from Henry Hill Park to Independence Elementary School	\$20,000
P5	Polk Street	Fill in sidewalk gaps on the north and south sides of the road from Ash Street to OR 51-Main Street	\$170,000

P6	Gun Club Road	Fill in sidewalk gaps on west side of the road from Hoffman Road to OR 51-Monmouth Street	\$520,000
P7	Stryker Road	Fill in sidewalk gaps on both sides of the road from OR 51-Main Street to Polk Street	\$1,270,000
P8	Ash Street/4 th Street	Install sidewalks on the west side of the road from the Ash Creek Bridge to A Street	\$145,000
P9	16 th Street	Fill in sidewalk gaps on the east side of the road from OR 51-Monmouth Street to south city limits	\$150,000
P10	13 th Street	Fill in sidewalk gaps on the east side of the road from OR 51-Monmouth Street to south city limits	\$160,000
P11	4 th Street	Fill in sidewalk gaps on the east side of the road from I Street to the south city limits	\$225,000
P13	F Street	Fill in sidewalk gap on the north side of the road from 10 th Street to 7 th Street	\$260,000
P27^{1,10}	OR 51-Monmouth Street/11 th Street	Provide enhanced pedestrian crossing treatments	\$75,000
PP1	Downtown Parking Study	Prepare a municipal parking management plan for downtown Independence	\$50,000
Total Cost			\$18,280,000

Note: The cost estimates presented do not include costs associated with right-of-way acquisition due to its high variability depending on location, parcel sizes, and other characteristics. The cost estimates also reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer. Further evaluation may be required to determine the most appropriate form of traffic control.
2. Project cost includes the southbound left-turn lane. The westbound left- or right-turn lane will be provided with the new bridge.
3. Project cost includes a left-turn lane at the east-bound approach and a traffic signal when signal warrants are met. When conducting the intersection control evaluation, review the right-of-way impacts and proximity of the apartments to the roadway. In addition, any design for new intersection control at this location will need to address the large vehicle turning movements that occur from OR 51-Main Street.
4. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.
- 5: Project not shown on Transit Plan Map.
6. This roadway contains segments with existing bike facilities (on-street bike lanes, shoulders, etc.). These facilities will be reconfigured to accommodate the planned improvements.
7. Install green skip striping on arterial and collector roadways where bike lanes continue through major intersections.
8. Work with Cherriots to determine the bicycle facility configuration at bus stops for this intermodal facility.
9. On-street parking restrictions will be required and therefore the bike lane installation should be considered when traffic volumes exceed 2,000 ADT per City standard.
10. The location and type of enhanced crossing treatment(s) will be determined at the design/implementation stage.

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Legend

- Roadway Plan Projects
- Roadway Plan Projects
- Safety Projects
- Safety Projects
- Bike Plan Projects
- Public Transportation Plan Projects
- Pedestrian Plan Projects
- Pedestrian Plan Projects
- City Boundary
- Urban Growth Boundary

Cost Constrained Plan Projects Independence, OR

Figure 1

Data Source: Polk County Data Portal, ODOT



CHAPTER 1: INTRODUCTION

Community Description and Historical Overview

The City of Independence is located in Polk County, in the central part of the Willamette Valley. Independence is located on relatively flat terrace and floodplain areas between the Forks of the Ash Creek and the Willamette River. The City is located on the west bank of the Willamette River and immediately east of Monmouth, Oregon. Salem, the capital of Oregon, is located about 10 miles to the northeast of Independence.

The town was named after Independence, Missouri, and was established on a Donation Land Claim in 1846. A brief summary of Independence's history (Morrison and Pinger, 1985), with a focus on the role and type of transportation, illustrates that the location and prosperity of the town owes much to its function as a central shipping point for the Willamette Valley. This functional history is reflected in the transportation facilities currently present in Independence and illustrates the importance of an efficient transportation system to a community. The change in dominant transportation modes over time is also illustrated by Independence's experience.

E.A. Thorp platted "Old Town" on his Donation Land Claim located north of Ash Creek. A large flood on the Willamette River in 1861 devastated the town and encouraged development of a second core area south of Ash Creek. Henry Hill platted this portion of Independence in 1867. In 1885, "Old Town" and "New Town" were incorporated. Although the "towns" were laid out on similar grid patterns, streets north and south of Ash Creek are slightly misaligned due to a bend in the Willamette River which causes the plats to be offset.

In its early years, Independence served as an important central shipping point on the Willamette River. During this time the river was used to transport foodstuffs and materials out of the Willamette Valley to gold miners in California. Goods were taken from warehouses and docks in Independence, located at River Mile 95.5 (upstream of the confluence with the Columbia River) and shipped by steamboat to Portland. A ferry across the Willamette River was built at Independence in 1885.

The railroad first came to Independence in 1886 and rail freight gradually replaced commercial shipping on the river. The City Council gave the Oregon-Western Railroad right-of-way located in the middle of 2nd Street in 1879 and daily rail service to Portland and points south was soon available. These tracks are still used today, though under a different operator. Connecting stage service to Dallas, Salem, Airlie, and King's Valley existed.

Eventually, two other railroads were built through Independence. One line extended into Monmouth and the stop at a racetrack in the little community of Talmadge was a popular feature. This line was discontinued in 1917 when Oregon 51 was built. The Valley & Siletz Railroad was operating by 1918. This line was originally constructed to haul timber salvaged from a burned area in the Coast Range to mills and other shipping points. Later, the line transported passengers and hops, as well as lumber. The railroad shipped logs to as many as three mills in Independence before it was discontinued in 1982 or 1983.

The advent of the automobile signified another change in the dominant transportation mode which continues to make its mark on Independence. In 1907, a doctor became the first car owner in town. The Oregon "Good Road Movement" promoted improvements to the existing dirt roads in the Willamette Valley and six streets in Independence were paved by 1912. A bridge over Ash Creek was widened to accommodate cars in 1909 and updated again in 1915.

Historically, the agriculture and forest products industries have been the mainstays of the local economy. From the 1890s through the 1940s the economy of Independence was dominated by a

particular commodity - hops. The transportation system had to accommodate the annual shipment of thousands of hop bales and the conveyance of up to 25,000 hop pickers in and out of the area during the late summer months. Hops no longer dominate local agricultural production, but they helped to build a prosperous central business district in Independence. This cluster of brick buildings, as well as other structures, constitutes Independence's Historical District.

The only bridge spanning the Willamette River between Salem and Albany (a distance of about 22 miles), is located at Independence. This bridge was built in 1947 and connects to South River Road in Marion County. South River Road runs along the east side of the Willamette River into Salem. Buena Vista ferry crosses the Willamette River and is located about 5 miles south of Independence at about River Mile 106.3.

Local air and public transit travel modes are relative latecomers to Independence. The journey over the Oregon Trail was reenacted as a part of the Oregon Centennial celebration in 1959. The ceremonial trek began in Independence, Missouri and ended in Independence, Oregon. The airport was built to provide air travel services for this celebration. The Independence State Airport was officially dedicated in 1964. A public bus system operated between Independence, Monmouth, Dallas, and Salem in the 1970s.

Purpose of the Transportation System Plan

The Independence Transportation System Plan (TSP) is a long-range plan that identifies improvements to the city's transportation facilities and services to meet state, regional, and local transportation needs for the next 20 years. The TSP was developed with community and stakeholder input and is based on existing and projected future transportation system needs and anticipated funding. The plan also serves as the transportation element of the Independence Comprehensive Plan.

The purpose of the 2021 TSP update is to address growth in Independence and its surrounding communities as well as regulatory changes that have occurred in the region since 2007. The TSP addresses compliance with new or amended federal, state, and local plans, policies, and regulations including the Oregon Transportation Plan (OTP), the Oregon Highway Plan (OHP), the state's Transportation Planning Rule (TPR), and presents the investments and priorities for the multimodal transportation system.

TSP Organization and Methodology

The TSP is organized into chapters that address each mode of transportation. **Chapter 2** presents the goals and objectives along with the evaluation criteria used to evaluate and prioritize projects in the TSP. **Chapters 3 through 7** present the projects developed to address gaps and deficiencies and future needs in the City's transportation system. **Chapter 8** presents the funding, implementation, and monitoring plan for the TSP, including existing and potential future funding sources to finance the identified transportation system improvements. **Volume II: Technical Appendix** contains the Technical Memorandums completed throughout the TSP update process, which showcase the inventory, analysis, and project list identification efforts.

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 and objectives and evaluation criteria were then developed to guide the evaluation of existing and projected 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 travel demand. For each gap and deficiency, several alternatives were then evaluated to address the system needs. This process led to the development of a large number of potential projects that were then prioritized using the project evaluation criteria and organized into high, medium, and low priority – the high priority projects represent the cost constrained project list, or the list of projects expected to be funded over the 20-year horizon. The culmination of the TSP update process is this document, which presents the plans, policies, programs, and projects identified to address the existing gaps and deficiencies and future needs in the City's transportation system.

Committees

The TSP update was developed in coordination with City of Independence (City) and Oregon Department of Transportation (ODOT) staff along with key stakeholders and representatives from the community. Two formal committees participated in the TSP update, including a Technical Advisory Committee (TAC) and a Community Advisory Committee (CAC). The TAC consisted of representatives from city, county, and state agencies as well as local transportation and emergency service providers. The TAC provided technical guidance and coordination throughout the project. TAC members reviewed and commented on technical memorandums and participated in committee meetings, community meetings, and workshops. The CAC consisted of local residents and property owners with an interest in transportation who were appointed to serve on the CAC as well as representatives from the Independence Planning Commission and City Council. The CAC served as the voice of the community and the caretakers of the goals and objectives of the TSP update. Much like the TAC, CAC members reviewed and commented on technical memorandums and participated in committee meetings, community meetings, and workshops.

Public Involvement

Opportunities for public involvement were made available throughout the TSP update process. The opportunities consisted of continuous web-based communications about upcoming meetings, open houses, and work sessions via the project website (www.independencetsp.com). The project website also included an interactive map that allowed anyone with internet access to provide comments to the project team about transportation-related issues within the community. The project team met with the CAC four times throughout the TSP update process. Each CAC meeting was open to the public. The project team also hosted three virtual open houses via the project website and two Youtube Live events that offered participants the opportunity to provide input on project materials and share their concerns related to key issues in the transportation system. Additionally, the project team met with the Planning Commission and City Council four times throughout the planning process (two joint work sessions and two hearings). Each work session/hearing was open to the general public. The goal of the public involvement process was to develop a TSP that addresses the gaps and deficiencies in the transportation system while meeting the needs of the community.



CHAPTER 2: GOALS AND OBJECTIVES

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

Goals and Objectives

The goals and objectives for the TSP update are described below. 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. The goals and objectives are based on a review of the goals and objectives in the previous TSP, information from the ODOT TSP guidelines, and discussions with City staff about the important issues prevalent in the community and transportation system.

Goal 1 – Consistency with Community Vision

Develop and maintain a transportation system that is *consistent with the community vision* of a vibrant, historic, riverfront, full-service community that celebrates its unique multi-cultural heritage and respects the environment while fostering a stable, diversified economy.

- Objective 1A:** Enhance connectivity within and between major activity centers including employment centers, high density residential areas, and community resources like major parks
- Objective 1B:** Ensure planned improvements are consistent with community goals and vision
- Objective 1C:** Complement natural resources, scenic and historic areas, and open spaces to the greatest extent possible, while minimizing negative impacts
- Objective 1D:** Minimize negative impacts to existing and future neighborhoods
- Objective 1E:** Minimize negative impacts to developable and developed commercial and industrial sites
- Objective 1F:** Ensure consistency with local plans including the Comprehensive Plan, state plans, and the plans of neighboring jurisdictions

Goal 2 – Smooth and Safe Traffic Flow

Optimize the performance of the transportation system to provide *smooth and safe traffic flow* along area roads.

- Objective 2A:** Provide additional north-south and east-west routes through the City
- Objective 2B:** Improve vehicular mobility (over the no build scenario)
- Objective 2C:** Reduce vehicular delay at key intersections
- Objective 2D:** Address known safety issues at locations with a history of fatal or severe injury crashes
- Objective 2E:** Improve mobility on designated freight truck and rail routes (over the no build scenario)
- Objective 2F:** Manage access to key state, county, and city roadways
- Objective 2G:** Support roadway improvements that provide safe access for all users, regardless of age, ability, or mode of transportation

Goal 3 – Increased Walking, Bicycling, Scooter, and Non-motorized Trips

Enhance and expand the multimodal transportation system to encourage *increased walking, bicycling, scooter, and other non-motorized trips*.

- Objective 3A:** Create a non-motorized network that has a high degree of comfort (i.e., minimal Level of Traffic Stress) and, where possible, showcases Independence's unique natural and physical attributes
- Objective 3B:** Provide pedestrian or non-motorized connectivity to schools, business districts, transit stops and corridors, and/or parks
- Objective 3C:** Close key gaps in the pedestrian or non-motorized system, creating short, easy, and accessible loops within the network
- Objective 3D:** Address locations with a history of pedestrian and bicycle-related crashes
- Objective 3E:** Serve neighborhoods that have limited existing nonmotorized transportation routes

Goal 4 – Increased Transit Ridership

Support the development of an efficient public transportation system to encourage *increased transit ridership*.

- Objective 4A:** Support frequent and reliable transit service for transit stops and corridors
- Objective 4B:** Promote ridership by improving access to and amenities at transit stops
- Objective 4C:** Promote ridership by increasing transit frequency

Goal 5 – Future Focused

Support the development and implementation of transportation solutions that are *future focused* and enhance the mobility and safety of all travel modes.

- Objective 5A:** Encourage innovative and emerging transportation and mobility solutions where appropriate
- Objective 5B:** Provide flexibility in planned projects, planned programs, and the development code to consider evolving practices and standards within the transportation field

Goal 6 – Financial Stability

Develop funding solutions for transportation system improvements that maintain the *financial stability* of the City.

- Objective 6A:** Maximize the efficiency and life of existing transportation facilities
- Objective 6B:** Leverage investments in the existing transportation system where the existing system can meet future needs
- Objective 6C:** Prioritize investments and maximize partnerships to provide maximum benefit and return on investment for the associated cost
- Objective 6D:** Consider future operation and maintenance costs in investment choices
- Objective 6E:** Ensure planned improvements can be achieved given the City's existing financial stream and/or potential financial sources

Project Selections and Prioritization

The selection and prioritization of projects included in the TSP update was determined based on the goals and objectives described above and application of the project evaluation criteria. See *Tech Memo #2 and Tech Memo #6 in the Volume II Technical Appendix for additional information*.



CHAPTER 3: ROADWAY SYSTEM

The roadway system within Independence serves a majority of trips across all travel modes. In addition to motor vehicles, pedestrians, cyclists, transit riders, and others use the roadway system to travel throughout the city. The roadway system consists of one state highway (OR 51) and several city streets. The streets located near OR 51 and downtown Independence are based on a grid system while the streets located throughout the rest of the city reflect various constraints. There are several areas throughout the city where existing roadways could be improved and where new roadways could be constructed to increase the efficiency of the transportation system as well as improve access and circulation for all travel modes. The roadway plan includes projects to increase the efficiency of the transportation system through changes in the functional classification and designation of roadways and improvements in major street connectivity and roadway capacity.

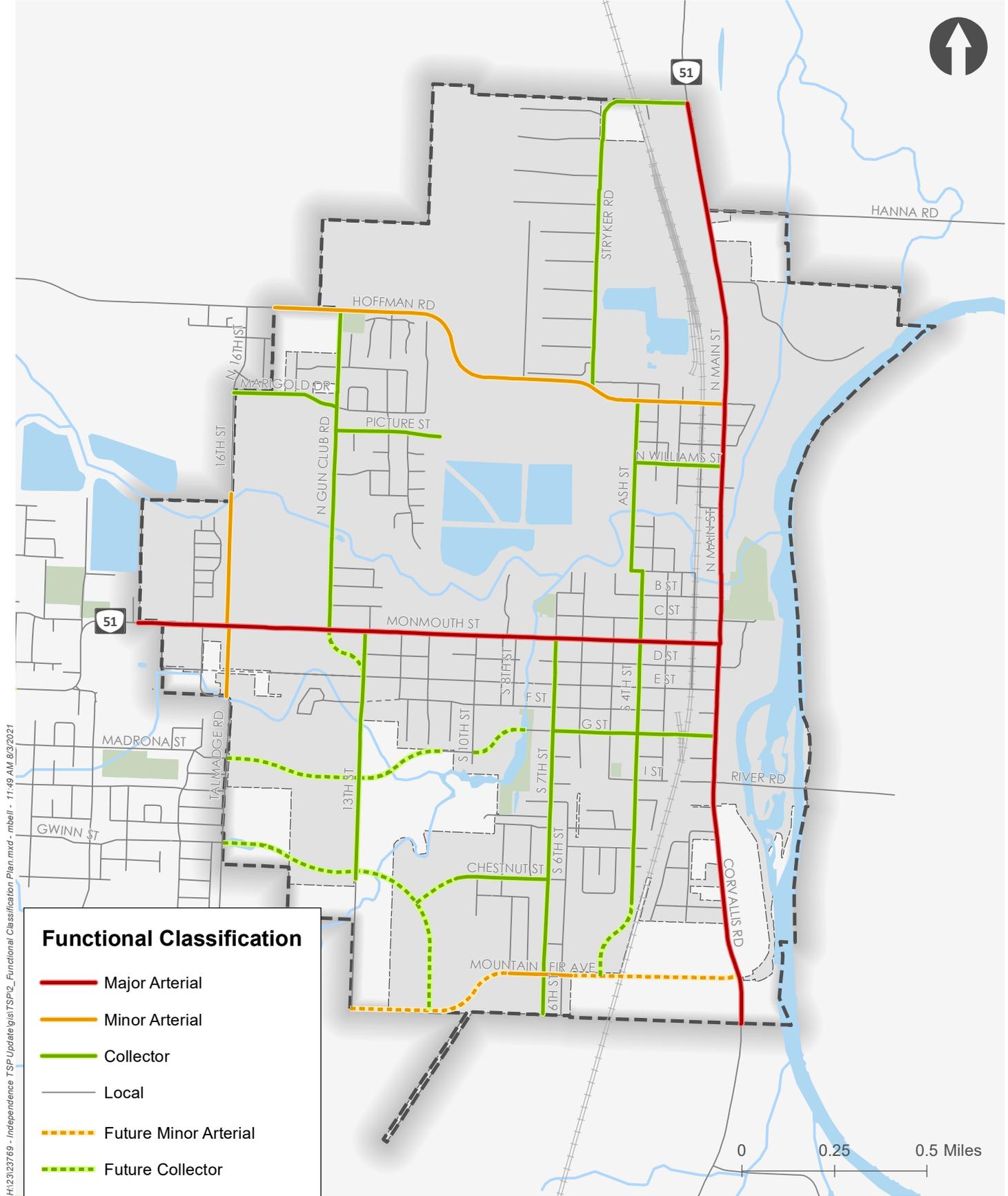
Functional Classification Plan

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. Figure 2 illustrates the functional classification of streets within Independence. The following provides a description of each functional classification.

- **Major Arterial:** This is a major facility for moving large volumes of inter-area traffic primarily carrying through traffic. An arterial is intended to provide for a majority of regional travel passing through an area as well as a majority of local trips entering and leaving the urban area. It should also provide continuity for all rural arterials which intercept the UGB and should include connections to all rural collectors. Arterials generally emphasize mobility over land access. Access to arterials should be managed to protect the mobility function of the street as much as possible.
- **Minor Arterial:** This is a two-lane facility that is designed to carry "through" traffic. Although a minor arterial is intended to provide more access than a major arterial, mobility is still the primary function of the street and should be preserved as much as possible. Minor arterials place more emphasis on land access and offer a lower level of traffic volume and mobility than major arterials.
- **Collector:** This facility connects intra-area traffic to the arterial system. Collectors provide links between an area or neighborhood and the arterial system. They supply abutting property with the same degree of land service as a local street but are usually given priority over local streets in any traffic control installations. Collectors penetrate into all areas of a City. Collectors provide a direct route to many destinations, and for longer trips, collectors connect to arterials or rural collectors.
- **Local:** This type of street primarily provides access to abutting properties and is protected from "through" traffic. Local streets entail all those not otherwise defined as arterials or collectors. While connectivity is encouraged for all streets, through traffic movement is not the intended purpose of a local street.

Special Transportation Area

The segment of OR 51-Main Street from B Street to OR 51-Monmouth Street and the segment of OR 51-Monmouth Street from OR 51-Main Street to 4th Street are designated as Special Transportation Areas (STA) by the Oregon Highway Plan (OHP). Per the OHP, an STA is a designated district of compact development located on a state highway within an urban growth boundary in which the need for appropriate local access outweighs the considerations of highway mobility.



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Functional Classification

- Major Arterial
- Minor Arterial
- Collector
- Local
- Future Minor Arterial
- Future Collector
- Future Local Street
- City Boundary
- Urban Growth Boundary

Functional Classification Plan **Figure**
Independence, OR **2**

Data Source: Polk County Data Portal, ODOT

Commercial Corridor

The segment of OR 51-Monmouth Street from 10th Street to west of Boyd Lane is designated as a Commercial Center (CC) by the OHP. Per the OHP, a CC is a large, regional center or node with limited access to the state highway. CCs generally include a high level of regional accessibility and connections to the local road network and accommodates pedestrian and bicycle access and circulation and, where appropriate, transit movements. These centers are intended for commercial or mixed commercial/retail/office activities, which may include public uses, public buildings, and leasable land. The primary objective of the state highway adjacent to a CC is to maintain through mobility, regional accessibility, and connectivity to the local road network. In addition, pedestrian, bicycle, and transit access and circulation should be provided along a CC. Table 2 summarizes the functional classifications of arterial and collector streets within Independence.

Table 2: Functional Classification (Arterial and Collector Streets)

Street	Segment	Classification
OR 51-Main Street	North CL to OR 51-Monmouth Street	Major Arterial
OR 51-Monmouth Street	West CL to OR 51-Main Street	Major Arterial
Main Street	OR 51-Main Street to River Road	Major Arterial
Corvallis Road	River Road to south CL	Major Arterial
16 th Street	North CL to OR 51-Monmouth Street	Minor Arterial ¹
16 th Street/Talmadge Road	OR 51-Monmouth Street to south CL	Minor Arterial ¹
Hoffman Road-Polk Street	West CL to OR 51-Main Street	Minor Arterial
Mountain Fir Avenue ²	West CL to Corvallis Road	Minor Arterial
Stryker Road	OR 51-Main Street to Polk Street	Collector
Gun Club Road	Hoffman Road to OR 51-Monmouth Street	Collector
Marigold Drive	16 th Street to Gun Club Road	Collector
Picture Street	Gun Club Road to eastern terminus	Collector
Williams Street	Ash Street to OR 51-Main Street	Collector
Ash Street	Polk Street to A Street	Collector
A Street	Ash Street to 4 th Street	Collector
4 th Street ²	A Street to southern terminus	Collector
7 th Street	OR 51-Monmouth Street to south CL	Collector
13th Street ²	OR 51-Monmouth Street to south CL	Collector
G Street ²	7 th Street to Main Street	Collector
Chestnut Street ²	Western terminus to 7 th Street	Collector

1. The City should coordinate with City of Monmouth and Polk County on the preferred functional classification for 16th Street with consideration to local schools.

2. This roadway includes a planned extension. The functional classification indicated in this table will apply to the extension.

Several changes to the City’s functional classification plan were made as part of the TSP update. The changes are intended to better align the classifications with roadway uses and to provide further arterial and collector connectivity within the built network. The City will coordinate with ODOT, Polk County, Marion County, and the City of Monmouth to address discrepancies in the functional classification of roadways between jurisdictions following adoption of the TSP.

Freight Routes

The OHP identifies all interstate highways and certain Statewide, Regional, and District Highways as freight routes. These routes are intended to facilitate efficient and reliable interstate, intrastate, and regional truck movement through a designated freight route system. There are no OHP designated freight routes in Independence. The closest OHP freight route is OR 99W, which is a north-south roadway that passes through Monmouth. Prior to adoption of this TSP, there were no City designated freight routes in Independence; however, Hoffman Road-Polk Street, between the western UGB and OR 51-Main Street, operated as the primary local and regional route for trucks traveling through the city. Passive measures, such as the curb extensions in place at the intersection of Main Street and Monmouth Street, make truck turning movements difficult, providing a disincentive for trucks to remain on OR 51 when traveling through Independence.

Freight and Farm Equipment Routes

Freight and farm equipment routes were developed for the TSP based on the location of major freight and farm equipment generators in the city as well as input from the project team and local residents. These routes will ensure that the City plans for the efficient movement of goods and services throughout the city while protecting neighborhood livability, maintaining public safety, and minimizing maintenance costs. Establishing these routes does not limit or restrict freight or farm equipment on other routes; they identify alternate routes for freight and farm equipment traveling through the City. The alternate freight and farm equipment routes include:

- OR 51-Main Street from the north City limits to Polk Street
- Hoffman Road-Polk Street from the west City limits to OR 51-Main Street
- 16th Street from the north City limits to the south City limits
- Future east-west arterial from the west city limits to Corvallis Road
- Corvallis Road from the south city limits to future east-west arterial

Figure 3 illustrates the alternate freight and farm equipment routes. Each of these routes should provide adequate travel lane width for freight movement as well as separate facilities for pedestrian and bicycle activity. Adequate turning radii should also be provided at all major intersections along these routes to ensure efficient freight travel.

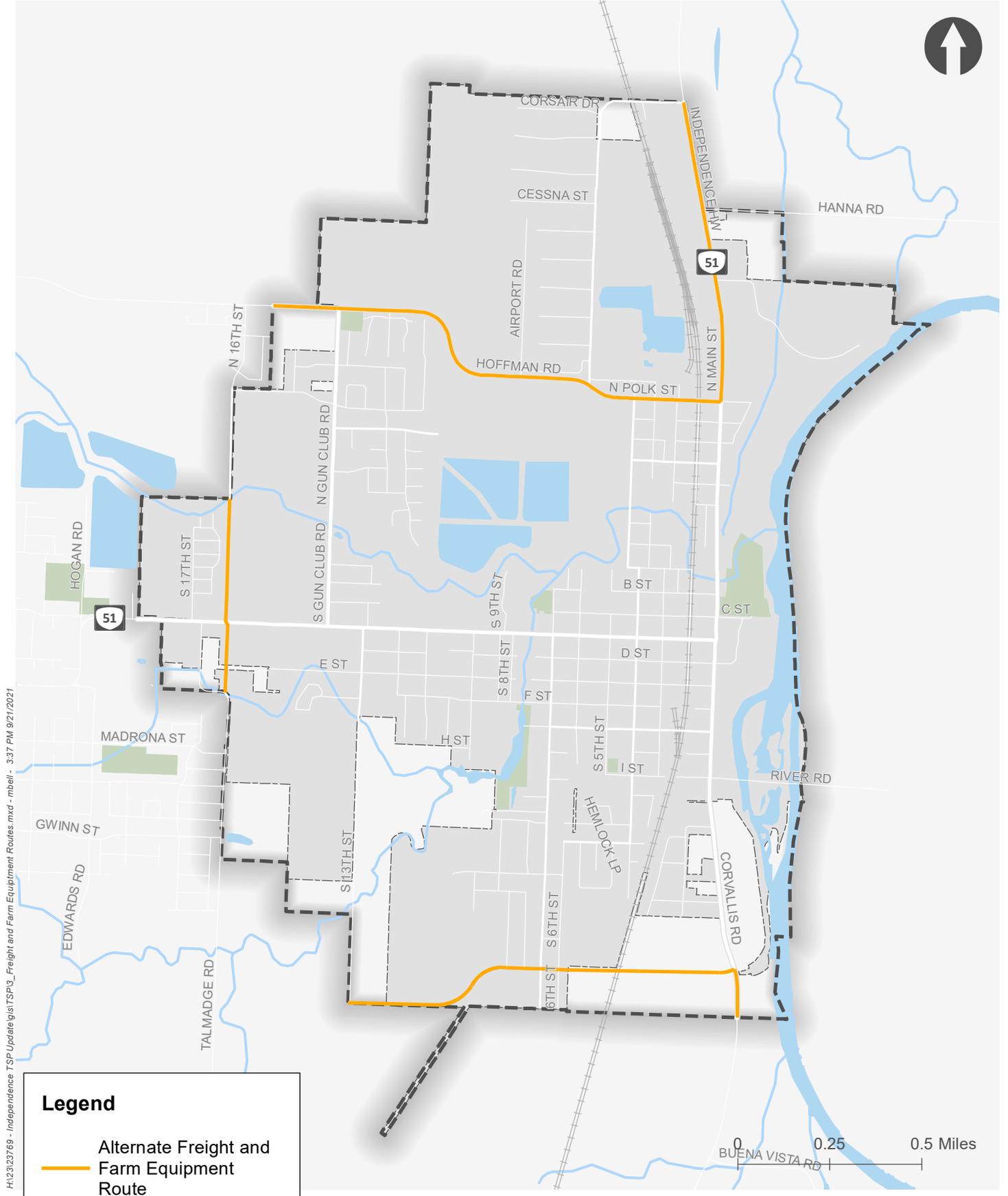
Freight Projects

No freight-specific projects were developed for the TSP. However, several of the projects developed for the roadway system will improve freight movement throughout the City, including the new east-west arterial and several of the safety and operational enhancements at the intersections.

Freight Policies

The freight policies are provided below.

- Develop policies related to maintenance along designated freight and farm equipment routes to ensure the facilities do not become degraded over time.
- Develop policies related to pedestrian and bicycle facilities along designated freight and farm equipment routes to ensure greater separation of travel modes.
- Establish truck loading zones within the downtown area and develop policies related to the use of the truck loading zones.



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Legend

-  Alternate Freight and Farm Equipment Route
-  City Boundary
-  Urban Growth Boundary



**Alternate Freight and Farm Equipment Routes
Independence, OR**

**Figure
3**

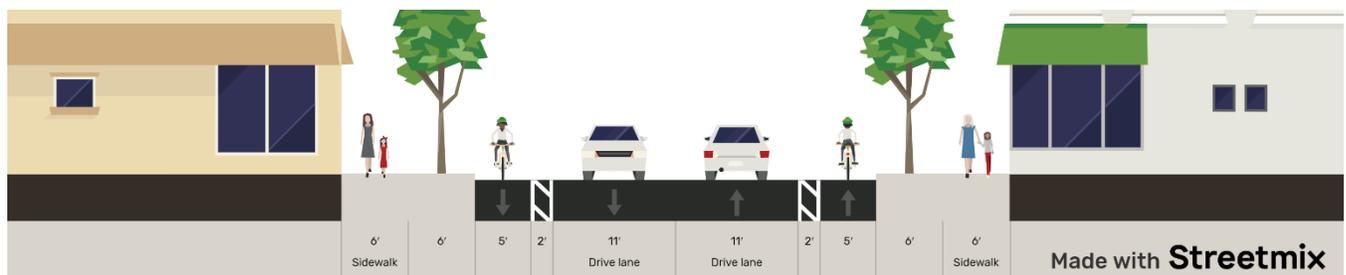
Data Source: Polk County Data Portal, ODOT

Roadway Cross Sections

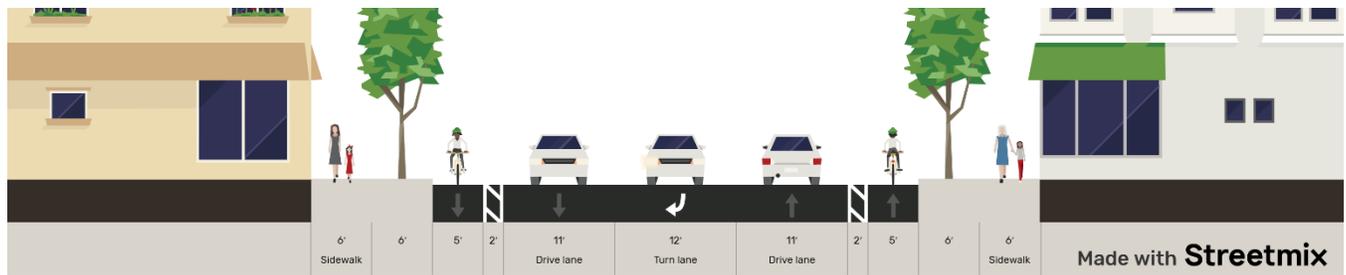
Roadway cross sections were developed for the TSP update based on the characteristics of the existing roadways within the city. The design of a roadway can (and will) vary from street to street and segment to segment due to adjacent land uses and demand. The roadway cross sections are intended to define a system that allows standardization of key characteristics to provide consistency, but also to provide criteria for application that provides some flexibility while meeting the design standards. Exhibits 1 through 6 illustrate the cross-section standards for each functional classification.

Unless prohibited by significant topographic or environmental constraint, newly constructed streets should meet the maximum standards indicated in the cross sections. When widening an existing street, the City may use lesser standards than the maximum to accommodate physical and existing development constraints where determined to be appropriate by the Public Works Director. In some locations "green streets" (those that utilize vegetation or pervious material to manage drainage) may be appropriate due to design limitations or adjacent land use.

Exhibit 1: Major Arterial Cross Sections



Major Arterial (Typical)



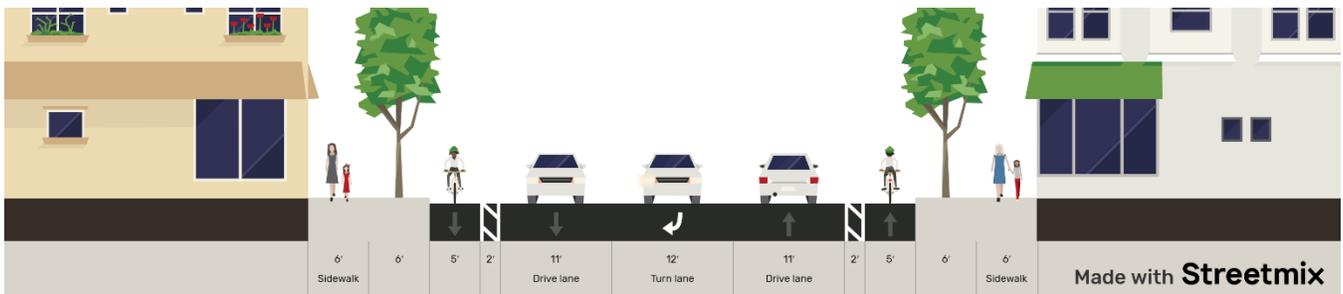
Major Arterial with Turn Lane

Major Arterial Cross Section Standards

Cross Section Element	Width (Feet)
Right-of-way	84 ¹
Curb-to-curb	34-48
Travel Lane	11-12
Turn Lane	12-13 ²
Bike Lane	6-7
Sidewalk	6
Parking Lane	7 ³
Planting Strip	6 ⁴

1. Additional right-of-way and roadway improvements may be required at major intersections to provide for turn lanes.
2. At all intersections where separate lanes are needed due to volume of turning movement activity.
3. The City may allow parking on Major and Minor Arterials, balancing the needs for accessibility to property, public safety, bicycle facilities, and roadway congestion. Parking allowances will be evaluated on an on-going basis as a part of roadway projects.
4. In commercially zoned areas, the City may require wider sidewalks with tree wells in place of the planting strip area.

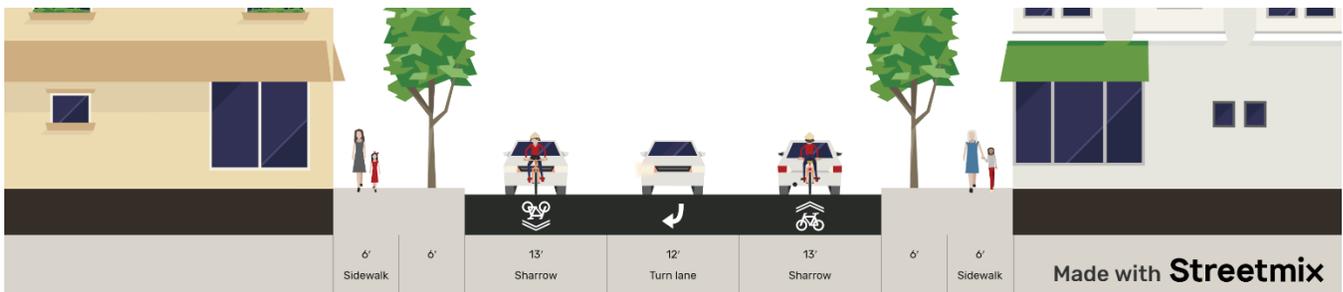
Exhibit 2: Major Arterial Cross Sections – OR 51-Monmouth Street



OR 51-Monmouth Street – West of Ash Creek (48-foot Curb-to-Curb, Requires Widening)



OR 51-Monmouth Street – East of Ash Creek (38-foot Curb-to-Curb)

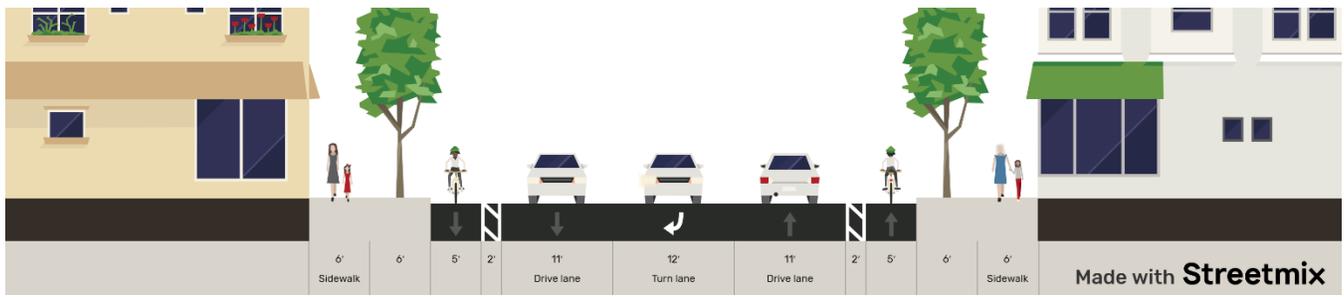


OR 51-Monmouth Street – East of Ash Creek (38-foot Curb-to-Curb)



OR 51-Monmouth Street – Downtown (44-foot Curb-to-Curb)

Exhibit 3: Major Arterial Cross Sections – OR 51 -Main Street

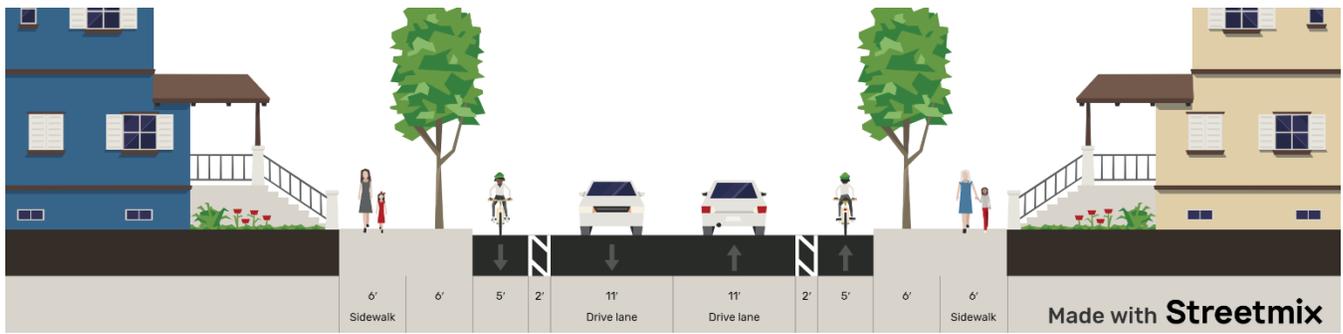


OR 51 -Main Street – North of Downtown (48-foot Curb-to-Curb)

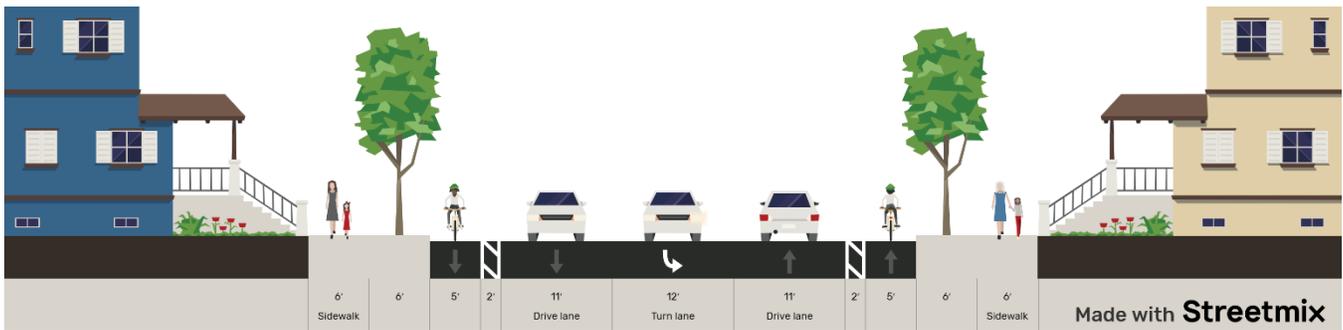


OR 51 -Main Street – Downtown (44-foot Curb-to-Curb)

Exhibit 4: Minor Arterial Cross Sections



Minor Arterial (Typical)



Minor Arterial with Left-Turn Lane

Minor Arterial Cross Section Standards

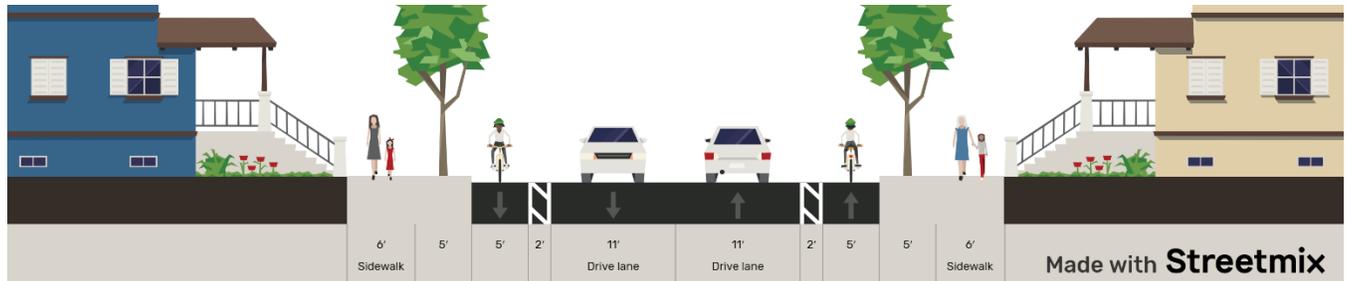
Cross Section Element	Width (Feet)
Right-of-way	66 ¹
Curb-to-curb	34-48
Travel Lane	11-12
Turn Lane	12-13 ²
Bike Lane	6-7
Sidewalk	6
Parking Lane	7 ³
Planting Strip	6 ⁴

1. Additional right-of-way and roadway improvements may be required at major intersections to provide for turn lanes.
2. At all intersections where separate lanes are needed due to volume of turning movement activity.
3. The City may allow parking on Major and Minor Arterials, balancing the needs for accessibility to property, public safety, bicycle facilities, and roadway congestion. Parking allowances will be evaluated on an on-going basis as a part of roadway projects.
4. In commercially zoned areas, the City may require wider sidewalks with tree wells in place of the planting strip area.

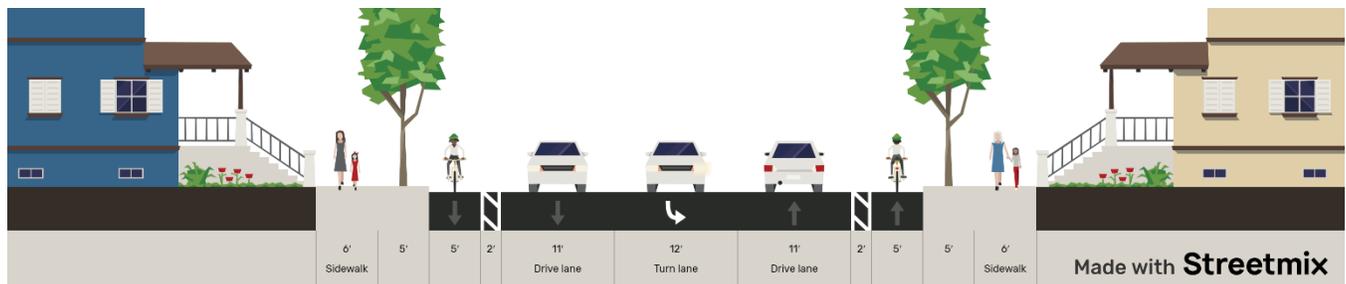
Exhibit 5: Collector Cross Sections



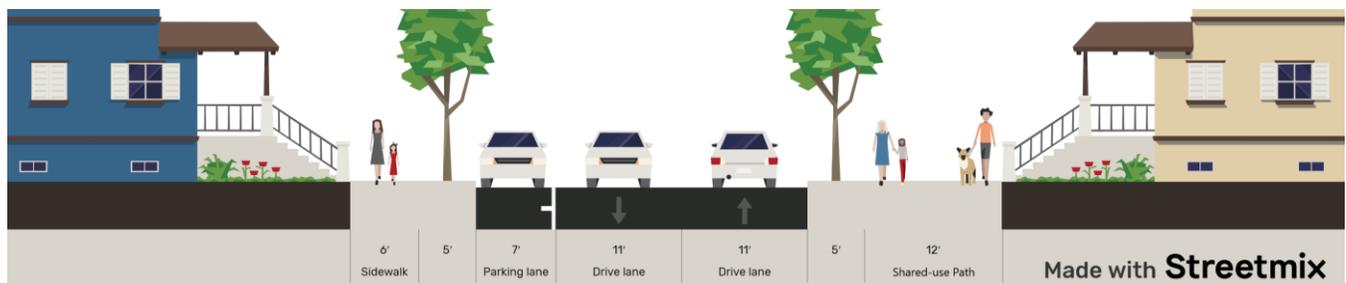
Collector with On-Street Parking (Typical of Collectors with <2,000 ADT)



Collector with Buffered Bike Lanes (Typical of Collectors with >2,000 ADT)



Collector with Left-Turn Lane



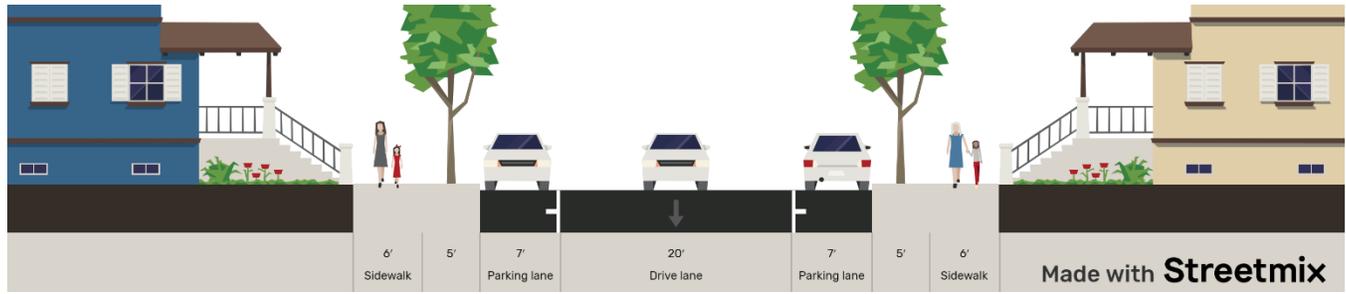
Collector with Shared-use Path – SW Concept Plan Area

Collector Cross Section Standards

Cross Section Element	Width (Feet)
Right-of-way	66 ¹
Curb-to-curb	34-48
Travel Lane	11-12
Turn Lane	12-13 ²
Bike Lane	6-7 ³
Sidewalk	6
Parking Lane	7 ³
Planting Strip	5 ⁴

1. Additional right-of-way and roadway improvements may be required at major intersections to provide for turn lanes.
2. At all intersections where separate lanes are needed due to volume of turning movement activity.
3. Collectors with < 2,000 ADT can accommodate on-street parking and shared use of road space by bicyclists and motor vehicles. These shared roadways will be designated with "sharrows." "Sharrows" are markings painted directly onto the road to promote the awareness that the road is a shared traffic lane to be used by both motorists and bicyclists. For collectors with > 2,000 ADT the city will study the need to eliminate on-street parking and provide bike lanes.
4. In commercially zoned areas, the City may require wider sidewalks with tree wells in place of the planting strip area.

Exhibit 6: Local Street Cross Sections



Local Street with On-Street Parking Both Sides (Typical)



Local Street with No On-Street Parking

Local Street Cross Section Standards

Cross Section Element	Width (Feet)
Right-of-way	52 ¹
Curb-to-curb	20-34
Travel Lane	10-11
Turn Lane	N/A
Bike Lane	N/A
Sidewalk	6
Parking Lane	7
Planting Strip	5 ²

1. The City may require up to 36 foot wide (60-foot right-of-way) Local Service streets in or along high density residential, industrial or commercially zoned areas, or those expected to exceed 400 ADT.
2. Planting strips are required, except in limited instances when they are not feasible. If built along Local Service streets, planting strips should be at least 4 feet wide, to accommodate tree plantings.

Major Street and Intersection Projects

The roadway plan includes several new major street (arterial and collector) connections that will enhance north-south and east-west connectivity within the City. The new connections reflect a review of existing major street connections as well as planned connections identified in the prior TSP and the 2012 Southwest Independence Concept Plan. The future street system needs to balance the benefits of providing a well-connected grid system with the connectivity challenges in the city due to existing waterways (e.g., Ash Creek), detention ponds, the airport, the railroad, and existing development.

Table 3 identifies the major street connectivity and intersection capacity projects developed for the roadway system. The priorities shown in Table 3 are based on the project evaluation criteria as well as input from the project team; the priorities were updated based on input from the advisory committees and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 4 illustrates the location of the roadway plan projects.

Table 3: Roadway Plan Projects

Map ID	Location	Description	Priority	Cost
Major Street Connectivity				
R1	Randall Way Extension	Extend Randall Way west to 13 th Street at F Street	Medium	\$820,000
R2	Chestnut Street Extension	Extend Chestnut Street southwest to the new east-west collector 3	Low	\$975,000
R3	4 th Street Extension	Extend 4 th Street south to the new east-west minor arterial	High	\$1,800,000
R4	Madrona Street Connection (west)	Construct a new east-west collector from 16 th Street/Talmadge Road at Madrona Street to 13 th Street	Low	\$2,995,000
R5	Madrona Street Connection (east)	Construct a new east-west collector from 13 th Street at Madrona Street to G Street, including a new bridge at Ash Creek. The project should consider and minimize impacts to Inspiration Garden	Low	\$4,325,000
R6	13 th Street Extension	Extend 13 th Street south to the south city limits	Low	\$3,420,000
R7	Gwinn Street Connection	Construct a new east-west collector from 16 th Street at Gwinn to Mountain Fir Avenue Extension	Low	\$7,245,000
R8	Mountain Fir Avenue Extension (New east-west minor arterial)	Extend Mountain Fir Avenue east to Corvallis Road and west to the west City limits; coordinate with City of Monmouth on final alignment west of the City limits	High	\$9,055,000
R9	Gun Club Road-13 th Street	Extend Gun Club Road south and realign to connect with 13 th Street	Low	\$1,285,000
R10	E Street Extension	Extend E Street west to 16 th Street and the west city limit	High	\$2,390,000
Intersection Capacity				
R11 ¹	OR 51/Polk Street	Install intersection control change that may include a traffic signal or roundabout. Coordinate with Project S2	High	\$450,000 ³

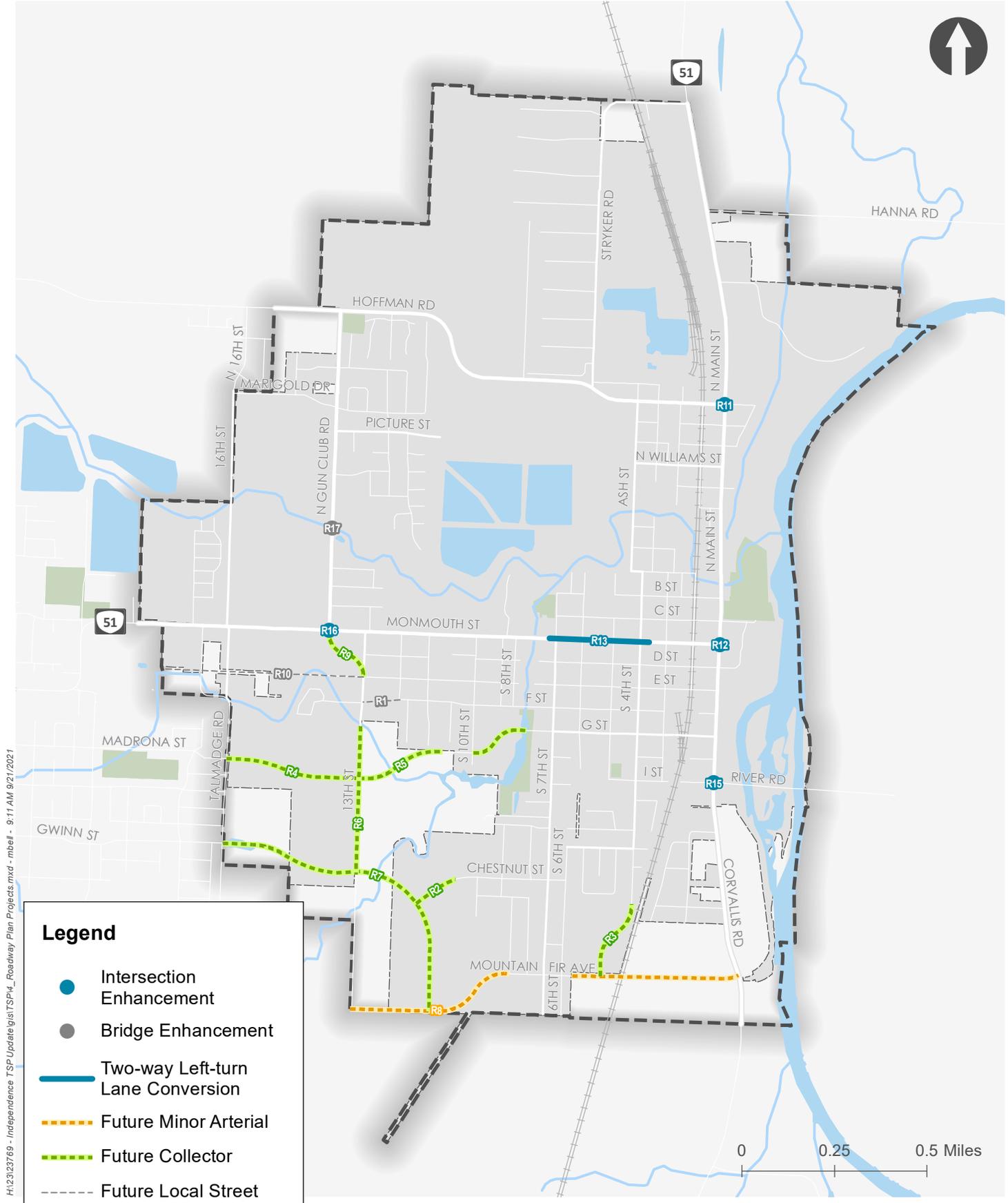
R12¹	OR 51-Main Street/ OR 51-Monmouth Street	Install intersection control change that may include a traffic signal or roundabout	Medium	\$350,000 ⁴
R13¹	OR 51-Monmouth Street	Install a center two-way left-turn lane on OR 51-Monmouth Street from east of Ash Creek to east of 4 th Street, including pavement rehabilitation. Continue to monitor the intersections at 4 th Street and 7 th Street and install intersection control changes that may include traffic signals or roundabouts when warranted. Coordinate with Projects R5 and R6.	High	\$270,000
R15	Main Street/ River Road	Install a southbound left-turn lane and reconfigure as all-way stop control in the near-term; Install a westbound left- or right-turn lane in conjunction with a new bridge OR other intersection control types (e.g., traffic signal, roundabout); Coordinate with Projects S3 and P20	High	\$195,000 ²
R16¹	OR 51-Monmouth Street/Gun Club Road	Optimize the signal timing/phasing to provide more green time to the southbound left-turn movement	High	\$10,000
R17	Gun Club Road Bridge	Install a new bridge along Gun Club Road at Ash Creek. Coordinate with Project B9 and P6	Medium	\$2,330,000
Total High Priority Cost				\$14,170,000
Total Medium Priority Cost				\$3,500,000
Total Low Priority Cost				\$20,245,000
Total Cost				\$37,915,000

Note: The cost estimates presented do not include costs associated with right-of-way acquisition due to its high variability depending on location, parcel sizes, and other characteristics. The cost estimates also reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer. Further evaluation may be required to determine the most appropriate form of traffic control.
2. Project cost includes the southbound left-turn lane. The westbound left- or right-turn lane will be provided with the new bridge.
3. Project cost includes a left-turn lane at the east-bound approach and a traffic signal when signal warrants are met. When conducting the intersection control evaluation, review the right-of-way impacts and proximity of the apartments to the roadway. In addition, any design for new intersection control at this location will need to address the large vehicle turning movements that occur from OR 51-Main Street.
4. Project cost includes left- and right-turn lanes at the eastbound approach and a traffic signal when signal warrants are met. Any design for new intersection control at this location will need to address the large vehicle turning movements that occur to and from OR 51-Monmouth Street. The City and community voiced interest in maintaining the curb bulb-outs.

OR 51-Main Street/OR 51-Monmouth Street

The existing conditions analysis indicates that the OR 51-Main Street/OR 51-Monmouth Street intersection operates acceptably per its applicable mobility target, despite congestion during peak time periods. The future conditions analysis indicates that it is projected to exceed its applicable mobility target in the horizon year of the TSP update, 2040; however, a sensitivity analysis indicates that it likely will not exceed its target until 2032. Therefore, several alternatives were evaluated at the OR 51-Main Street/OR 51-Monmouth Street intersection to address near-term and long-term needs with consideration to other enhancements within the larger transportation system.



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Legend

- Intersection Enhancement
- Bridge Enhancement
- Two-way Left-turn Lane Conversion
- - - Future Minor Arterial
- - - Future Collector
- - - Future Local Street
- City Boundary
- Urban Growth Boundary

**Roadway Plan Projects
Independence, OR**

**Figure
4**

Data Source: Polk County Data Portal, ODOT

No-build

The City could work to improve the street network around downtown, including implementation of the major street connectivity and intersection capacity projects identified in Table 4, and extend the life of the intersection as all-way stop control. It is worth noting that several projects identified in Table 4 as high priority would provide alternative routes and likely improve operations at the OR 51-Main Street/OR 51-Monmouth Street intersection through the horizon year of the TSP update.

Turn Lanes

The City could work with ODOT to install separate left and right turn lanes at the eastbound approach to the intersection to further extend the life of the intersection as all-way stop-control. This would impact on-street parking on the south side of OR 51-Monmouth Street approaching OR 51-Main Street and the curb extension in the southwest corner of the intersection.

Traffic Signal

The City could work with ODOT to install separate left and right turn lanes at the eastbound approach to the intersection and a traffic signal when warranted (Project R12); a traffic signal is expected to be warranted within the horizon year of the TSP due to increased traffic volumes at each approach. However, a traffic signal would change the character of the intersection and the downtown area.

Rectangle-about

The City could work with ODOT to install a rectangle-about. While multiple variations of the rectangle-about were considered, ultimately one that incorporates OR 51-Main Street, OR-51 Monmouth Street, 2nd Street, and B Street was identified as preferred. This variation maintains OR 51-Monmouth Street as a primary route through the intersection and provides the opportunity to use C Street as plaza space.

E Street Multimodal Corridor

E Street is intended to become a continuous parallel facility to OR 51-Monmouth Street, providing a low-stress facility for people walking and biking as well as access to retail and commercial businesses. The types of improvements developed for OR 51-Monmouth Street and E Street reflect the relationship of these two streets and their intended uses within the transportation system. The City will explore opportunities to emphasize E Street as the primary east-west multimodal corridor, with OR 51-Monmouth Street continuing to act as a primary east-west vehicular route through Independence.

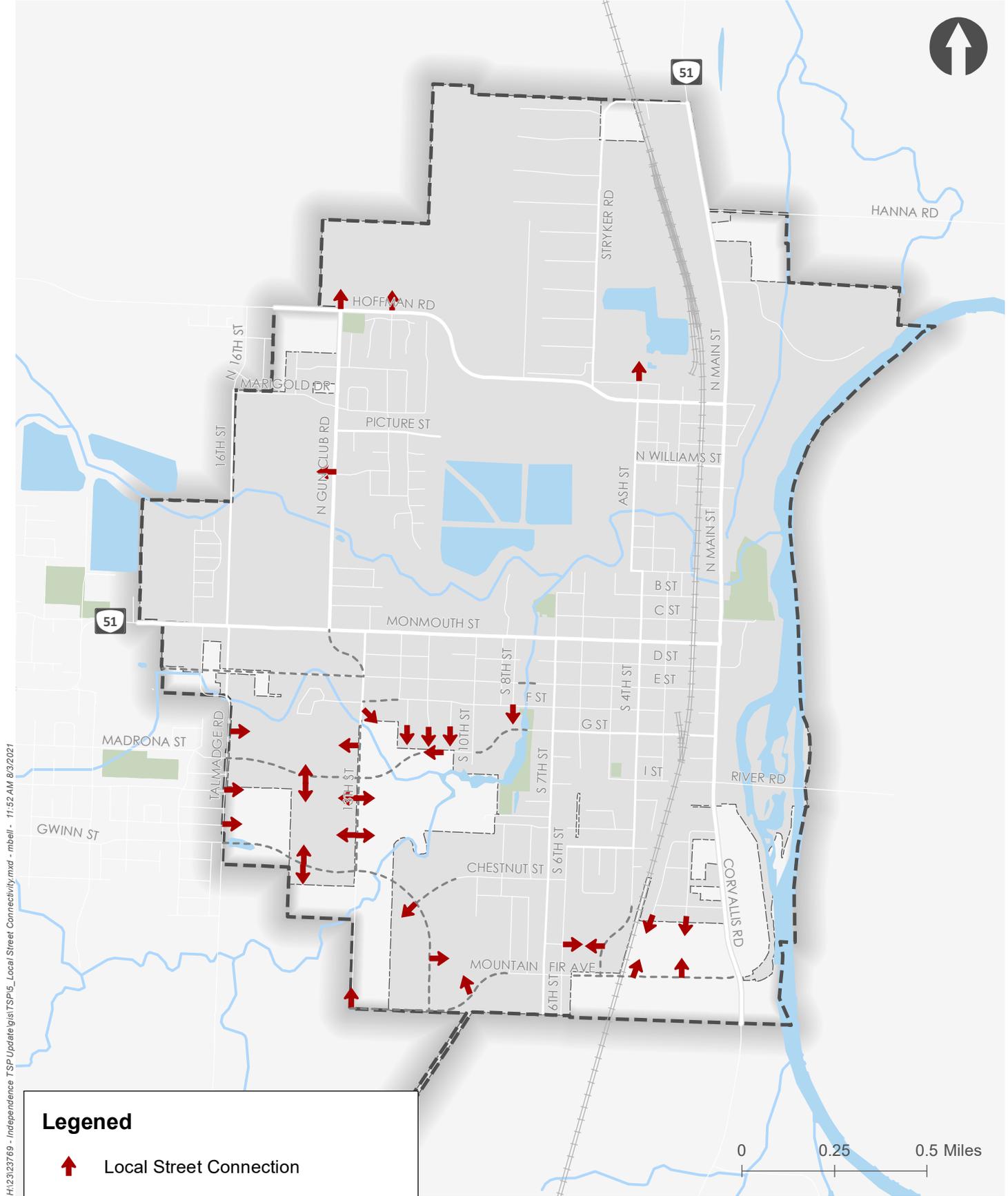
Major Street and Intersection Policies

- Independence shall develop a coordinated street network which facilitates the mobility and accessibility of community residents.
- As city limits are expanded, Independence shall simultaneously annex land and the county roads found within, or bordering, the newly annexed land.

Polk County maintains the County road system, which exists largely outside of urban areas, to a rural standard. Traditionally, as city limits expand to encompass County road segments, ownership of these road segments are transferred to the City, so the roads may be maintained to urban standards.

Local Street Connectivity

Several local street connections were identified for the Independence TSP update. Figure 5 illustrates the location and general orientation of the connections. Roadway alignments and cost estimates are not provided as they are anticipated to be determined as part of future development. The City will refer to the local street connections shown in Figure 5 during development review to ensure future development and redevelopment improve local street access and circulation within the city.



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Legened

-  Local Street Connection
-  Future Collector or Arterial Roadway
-  City Boundary
-  Urban Growth Boundary

Local Street Connectivity Independence, OR **Figure 5**

Data Source: Polk County Data Portal, ODOT

Traffic Safety

Traffic safety has a significant impact on how people use the transportation system, particularly in areas where real or perceived safety risks may prevent people from using more active travel modes, such as walking, biking, and taking transit. Several of the traffic safety projects identified throughout the TSP update are addressed under the roadway, bicycle, and pedestrian plans. These projects include roadway and intersection enhancements that address specific safety issues and new bike lanes, sidewalks, crosswalks, etc. that provide separation between travel modes. The traffic safety projects described below include those that are not addressed under other plans.

Traffic Safety Projects

Table 4 identifies the projects developed for the TSP update to address traffic safety. The priorities shown in Table 4 are based on the project evaluation criteria as well as input from the project team; the priorities were updated based on input from the advisory committees and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 6 illustrates the location of the traffic safety projects.

Table 4: Traffic Safety Projects

Map ID	Location	Description	Priority	Cost
Intersections				
S1	Hoffman Road/ 16 th Street	Install advanced intersection warning signs, speed feedback signs, and traffic calming measures at the eastbound approach; Coordinate with City of Monmouth on potential traffic control changes	High	\$45,000
S2 ¹	OR 51-Main Street/ Polk Street	Install advanced intersection warning signs and traffic calming measures at the southbound approach. Consideration for freight movements will be needed. Coordinate with Project R11	High	\$35,000
S3	S Main Street/ River Road S	Install advanced intersection warning signs, speed feedback signs, and traffic calming measures at the northbound approach; Coordinate with Projects R15 and P20	Medium	\$55,000
S4 ¹	OR 51-Main Street/ Stryker Road	Install advanced intersection warning signs, speed feedback signs ² , and traffic calming measures at the southbound approach	Medium	\$55,000
S5 ¹	OR 51-Monmouth Street/4 th Street	Provide traffic calming measures on OR 51-Monmouth Street approaching the intersection; Coordinate with Project R13	Medium	\$50,000
S6 ¹	OR 51-Monmouth Street/7 th Street	Provide traffic calming measures on OR 51-Monmouth Street approaching the intersection; Coordinate with Project R13	Medium	\$50,000
S7	Hoffman Road/ Gun Club Road	Provide traffic calming measures on Hoffman Road approaching the intersection	High	\$50,000
S8	Stryker Road/Hoffman Road-Polk Street	Close Hoffman Road at the westbound approach to Stryker Road; Coordinate with Project P21	Medium	\$40,000

S9 ¹	OR 51-Monmouth Street – West City Limits to Gun Club Road	Install eastbound dynamic speed feedback sign ² east of west City Limits and reflectorized back plates for all traffic signal heads at 16 th Street and Gun Club Road intersections	Medium	\$15,000
S10	4 th Street – OR 51-Monmouth Street to Spruce Avenue	Provide traffic calming measures on 4 th Street; improve visibility between OR 51-Monmouth Street and Spruce Avenue by providing “No Parking” zones and additional lighting on both sides of the street at intersections. Coordinate with Project B15	Low	\$485,000
S11	Corvallis Road – South of River Road	Conduct a speed study to evaluate the ability to move the posted speed sign further south	Medium	\$20,000 ³
S12	4 th Street Circulation and Safety Study	Conduct a study on 4 th Street between B Street and E Street in coordination with Independence Elementary School	High	\$50,000
Total High Priority Cost				\$180,000
Total Medium Priority Cost				\$285,000
Total Low Priority Cost				\$485,000
Total Cost				\$950,000

Note: The cost estimates presented do not include costs associated with right-of-way acquisition due to its high variability depending on location, parcel sizes, and other characteristics. The cost estimates also reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.
2. Speed feedback signs are considered enforcement tools, and the City will be expected to fund, operate, and maintain the speed feedback signed under an ODOT permit.
3. ODOT will conduct the speed study if requested by the City at no cost. Therefore, the cost estimate reflects the cost to relocate the speed limit signs.

Several additional intersections and roadway segments were identified by the project team, the advisory committees, and the community as potential safety concerns. While specific projects to address these concerns have not been developed, there are a wide variety of potential safety treatments that could be considered for implementation. The City should continue to monitor these locations and, if necessary, implement the following treatments:

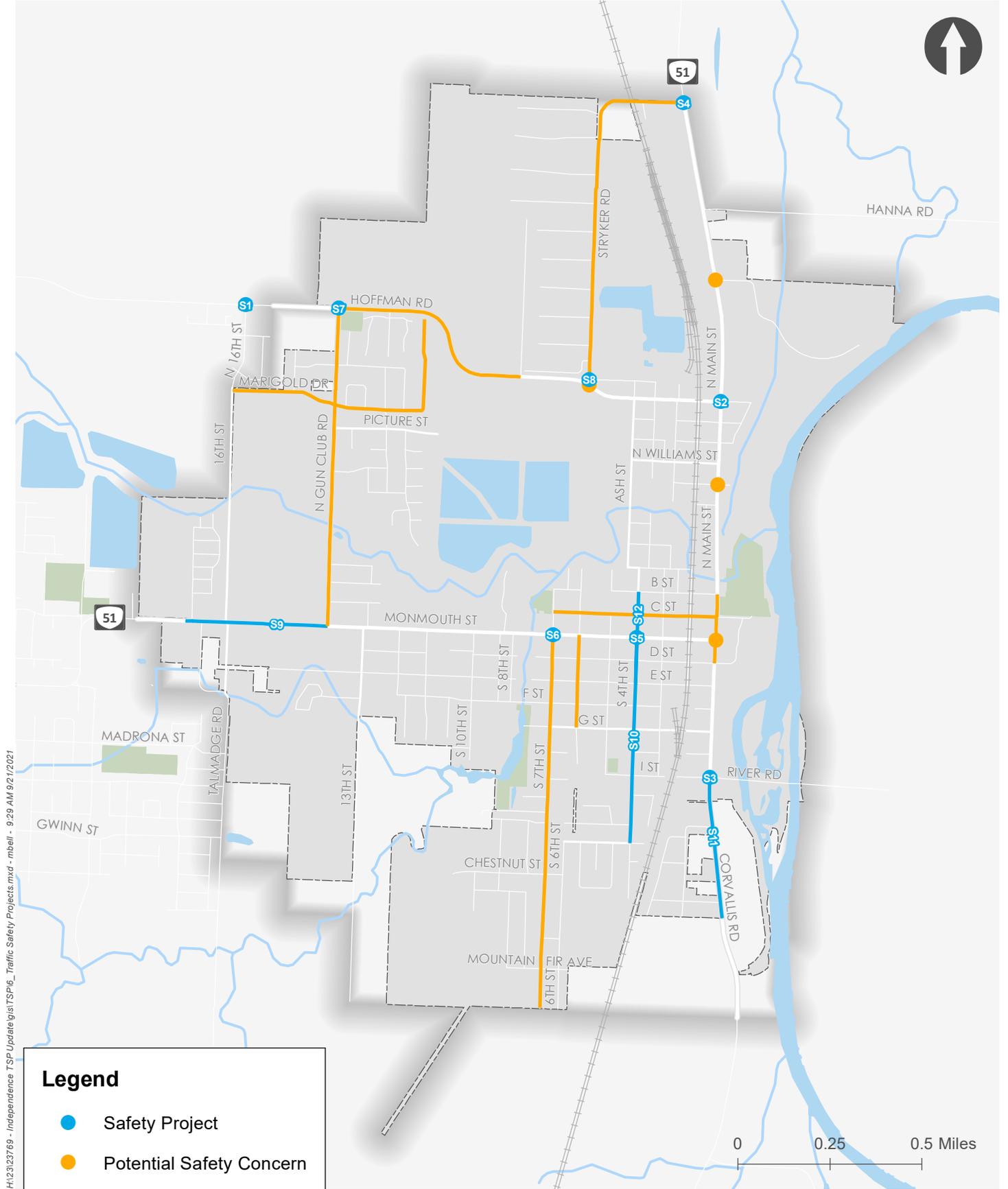
- Install advance intersection warning signs
- Install dynamic speed feedback signs
- Install traffic calming measures
- Install additional street lighting

Figure 6 illustrates the additional locations. A comprehensive list of traffic safety alternatives for roadway segments, intersections (signalized and unsignalized), and for pedestrian and bicycle facilities is provided in Tech Memo 5: Alternatives Analysis in the Volume II Technical Appendix.

Traffic Safety Policies

The traffic safety policies are provided below.

- Provide increased community education on sharing the road, both for drivers and bicyclists.
- Review lighting, and systemically provide additional lighting on arterial and collector street segments and at intersections throughout Independence.
- Review sign reflectivity and visibility, and systemically upgrade throughout Independence.



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Legend

- Safety Project
- Potential Safety Concern
- Safety Projects
- Potential Safety Concern
- City Boundary

0 0.25 0.5 Miles

Traffic Safety Projects Independence, OR **Figure 6**

Data Source: Polk County Data Portal, ODOT



CHAPTER 4: PUBLIC TRANSPORTATION SYSTEM

The public transportation system in Independence consists of fixed-route and deviated fixed-route service provided as part of the Cherriots Regional system. There are no other public bus or passenger rail services in the city. Cherriots operates the regional routes, providing transportation options to Polk County and Marion County residents. All regional express routes connect to the Salem Downtown Transit Center and the Cherriots Local system.

In addition to the services provided by Cherriots, the educational institutions in the area provide services for their students.

- The Central School District 13J covers the cities of Independence and Monmouth, providing school bus service within and between the two cities. Students in Grades K-5 who live more than one mile from their school, and students in Grades 6-12 who live more than 1.5 miles from their school can receive bus services.
- Western Oregon University provides the WOLF Ride Program, which is operated by students and funded through student fees. The safe ride shuttle service is available on a first come, first served basis every day of the week from 5:00 p.m. to 12:00 a.m.

Public Transportation System Needs

The following provides a summary of the public transportation system needs:

- Bus stops within Independence are not all comfortable and accessible.
- There is interest in a higher frequency of transit service between Independence and Monmouth.
- There is a lack of consistent marketing for existing public transit facilities and service in Independence.
- Gaps and deficiencies in the pedestrian and bicycle systems that provide access to public transportation facilities as well as other key destinations in Independence. See *Chapter 5: Bicycle and Pedestrian System for related projects*.

Public Transportation Plan

In addition to coordinating with local and regional transit agencies to help implement their planned service enhancements, the City of Independence can support development of a more efficient transit service by:

- Providing easy and safe walking and bicycling connections between key roadways, neighborhoods, and local destinations;
- Providing amenities, such as shelters and benches, at transit stops;
- Encouraging an appropriate mix and density of uses that support public transit; and
- Providing and planning for park-and-ride locations.

These types of enhancements can encourage increased transit ridership consistent with Goal 4 of the TSP update.

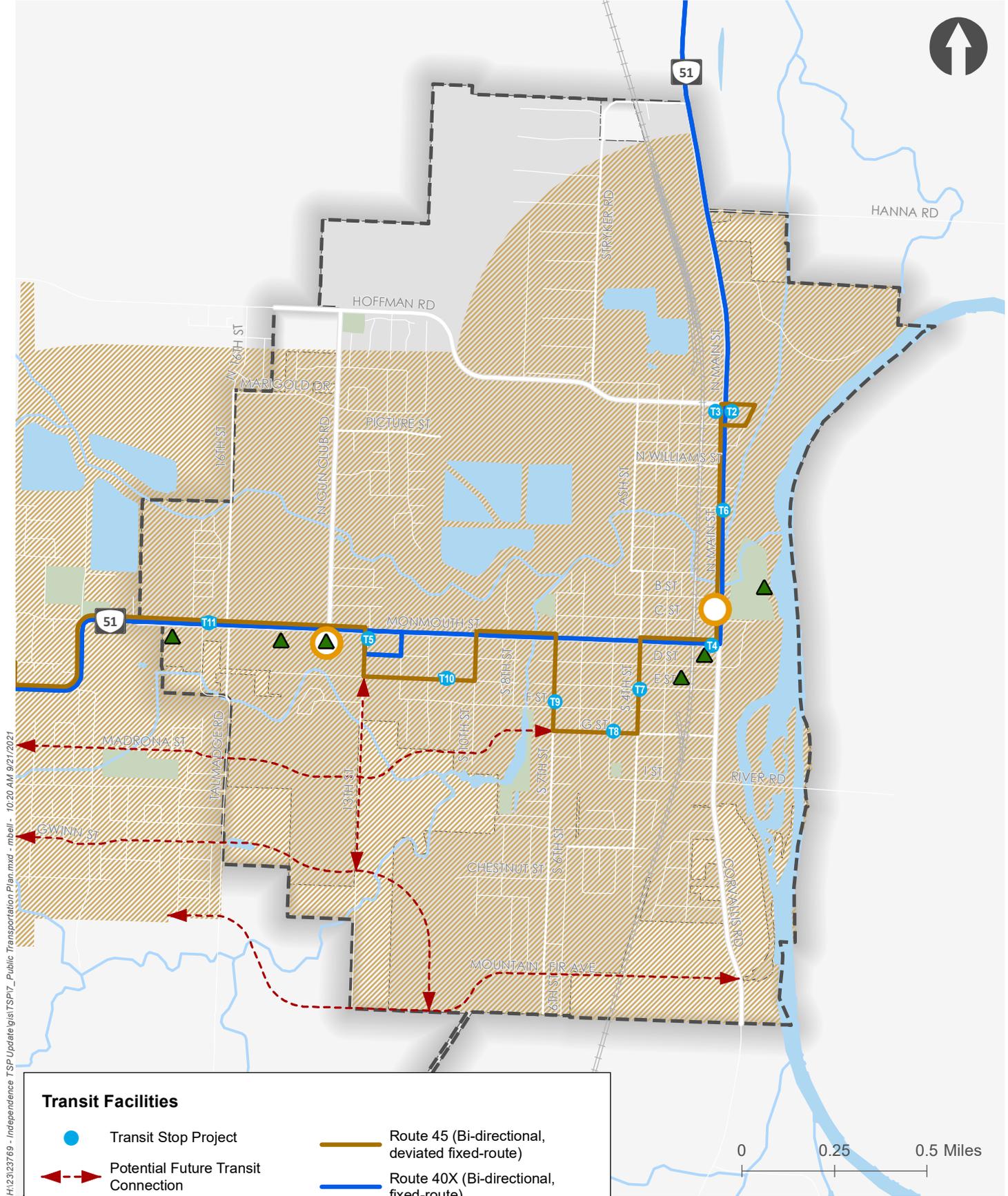
Table 5 identifies the public transportation system plan projects developed for the transit system. The priorities shown in Table 5 are based on the project evaluation criteria as well as input from the project team. Priorities were updated based on input from the advisory committees and the community. Figure 7 illustrates the location of the public transportation plan projects, where applicable.

Table 5: Public Transportation Plan Projects

Map ID	Location/Name	Description	Priority	Cost
T1	Local Transit System	Collaborate with Monmouth and other stakeholders to establish a local transit system based on the outcomes of the Local Transit Feasibility Study. This includes development of a complementary paratransit service if a dial-a-ride or deviated fixed route model is not put into service. ²	High	TBD
T2 ¹	OR 51-Main Street/Polk Street (to Salem)	Install ADA-compliant pedestrian ramps leading to the bus stop; provide bicycle parking, storage, and/or repair station	High	\$20,000
T3 ¹	OR 51-Main Street/Polk Street (to Dallas)	Install ADA-compliant pedestrian ramps leading to the bus stop; provide bicycle parking, storage, and/or repair station	High	\$20,000
T4 ¹	Library – OR 51-Monmouth Street/2 nd Street (to Salem)	Install a “No Parking” zone adjacent to the bus stop; provide bicycle storage and/or repair station	High	\$15,000
T5 ¹	13 th Street/OR 51-Monmouth Street (bi-directional)	Relocate the bus stop to Monmouth Street, east of Gun Club Road; install street lighting; install ADA-compliant pedestrian ramps leading to the bus stop; install “No Parking” zone signage adjacent to the stop; provide bicycle parking, storage, and/or repair station; install a real-time bus arrival reader board; and establish stops in both directions.	Medium	\$60,000
T6	OR 51-Main Street/Oak Street – both directions	Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	\$20,000
T7	4 th Street/E/D Street – both directions	Install street lighting at the D Street (southbound) bus stop; Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	\$35,000
T8	5 th Street/G Street – both directions	Install street lighting at both bus stops; Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	\$50,000
T9	7 th Street/F Street – both directions	Install street lighting at both bus stops; Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	\$50,000
T10	1038 E Street (single stop to serve both directions)	Install street lighting; install ADA-compliant pedestrian ramps leading to the bus stop	Low	\$50,000
T11	OR 51-Monmouth Street/Talmadge Road – both directions	Install street lighting at both bus stops; Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	\$50,000
			Total High Priority Cost	\$55,000
			Total Medium Priority Cost	\$60,000
			Total Low Priority Cost	\$255,000
			Total Cost	\$370,000

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.

2. Project not shown on Transit Plan Map.



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Transit Facilities

	Transit Stop Project		Route 45 (Bi-directional, deviated fixed-route)
	Potential Future Transit Connection		Route 40X (Bi-directional, fixed-route)
	Potential Park-and-Ride Locations		Route 45 Service Area
	Potential Mobility Hub Locations		City Boundary
			Urban Growth Boundary

Public Transportation Plan Projects Independence, OR Figure 7

Data Source: General Transit Feed Service

Transit System Policies

The transit system policies are provided below.

- Work with Cherriots to make Route 40X as efficient and frequent as possible.
- Consider Route 40X the primary regional transit service in the community and ensure that any existing or new local service supports this route (through either making local connections to the stops or adding frequency to the service along the main route).
- Ensure safe walking and cycling routes to bus stops.
- Support transit routes and facilities through on-street measures such as improved bus stops, pullouts, optimum road geometrics, or parking restrictions.
- Work with Cherriots to provide further marketing, outreach, and education about the available services. Remove references to the previous CARTS regional bus system.
- Collaborate with Cherriots, willing private property owners, and local stakeholders to establish mobility hubs/park-and-rides for public transit and carpool users. Potential locations to explore include:
 - Central Plaza (supporting Routes 40X and 45)
 - Independence Library/Umpqua Bank (supporting Routes 40X and 45)
 - Riverview Park (supporting Routes 40X and 45)
 - Independence Cinema 8 (supporting Routes 40X and 45)
 - First Baptist Church (supporting Routes 40X and 45)
 - Waremart (supporting Route 45)
- Work with Cherriots and other partner agencies to provide a "one-stop-shop" for real-time transit information for riders, especially as more routes and service types become available within the city.
- Ensure new retail, office, and institutional developments include transit routes and facilities and/or convenient pedestrian access to transit through walkways and connections.
- Allow existing developments to redevelop portions of parking areas for transit-oriented uses, such as carpool parking, park-and-ride parking, and public transit stations and platforms, where appropriate.
- Coordinate with Cherriots to evaluate fares for local service, such as Route 45, every two years beginning in 2021. Local service fares are recommended to be cheaper than a trip to Salem via private vehicle.
- Work with Cherriots to determine bus stop locations for any new roadways built within the city, including consideration of planned future routes that are not yet in place. Any new bus stop established should include the removal of on-street parking, per Cherriots service design standards.



CHAPTER 5: BICYCLE AND PEDESTRIAN SYSTEM

BICYCLE SYSTEM

Bicycle facilities in Independence consist of on-street bike lanes, shoulder bikeways, and unmarked shared roadways, as well as off-street shared-use paths and trails and bicycle parking. These facilities provide residents with the ability to travel between residential areas, schools, parks, retail/commercial centers, and other activity centers within Independence and neighboring cities by bike.

Bicycle System Needs

Streets with no bicycle facilities or intermittent bicycle facilities force cyclists to share the travel lane with motor vehicles or use the shoulder if available. In many cases, this is not a desirable option for cyclists due to narrow lane widths or uneven pavement conditions. Adequate bicycle facilities should be provided to allow for safe travel between neighborhoods and essential destinations. The following provides a summary of the bicycle system needs:

- There are no designated and marked shared roadways on streets where traffic conditions would support mixed traffic.
- There are gaps in the bicycle facilities on many arterial and collector streets where traffic conditions would support on-street bike lanes or other facilities.

Several of these gaps and deficiencies limit connectivity between residential areas and essential destinations throughout the city, including schools, parks, and transit stops. These gaps also limit connectivity to regional bicycle facilities.

Bicycle Plan

The bicycle plan consists of new on-street bike lanes, shared-lane pavement markings (sharrows), bicycle boulevard treatments, and enhanced bicycle crossings that enable people to safely cross streets, railroad tracks, and other transportation facilities. Collectively, these facilities will help enhance and expand the multimodal transportation system and encourage biking and other non-motorized trips consistent with Goal 3 of the TSP Update.

Table 6 identifies the bicycle plan projects. The priorities shown in Table 6 are based on the project evaluation criteria as well as input from the project team and were updated based on input from the advisory committees and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 8 illustrates the location of the bicycle plan projects.

Table 6: Bicycle Plan Projects

Map ID	Location	Description	Priority	Cost
Bike Lanes				
B1 ¹	OR 51-Main Street	Install 7-foot buffered bike lanes on both sides of the roadway from Stryker Road to B Street (5-foot bike lane, 2-foot buffer) ^{2, 3, 4}	High	\$125,000
B2 ¹	OR 51-Main Street	Install shared lane pavement markings (sharrows) on both sides of the roadway from B Street to F Street	High	\$10,000
B3 ¹	OR 51-Monmouth Street	Install 7-foot buffered bike lanes on both sides of the roadway from the west city limits to the Ash Creek Bridge (5-foot bike lane, 2-foot buffer) ^{2, 3, 4}	High	\$120,000

B4¹	OR 51-Monmouth Street	Install shared lane pavement markings (sharrows) on both sides of the roadway from 7 th Street to OR 51-Main Street	High	\$10,000
B5	Main Street	Install 7-foot buffered bike lanes on both sides of the roadway from F Street to River Road (5-foot bike lane, 2-foot buffer) ²	Low	\$90,000
B6	Corvallis Road	Install 7-foot buffered bike lanes on both sides of the roadway from River Road to the south city limits (5-foot bike lane, 2-foot buffer) ²	Low	\$640,000
B7	Hoffman Road	Install 7-foot buffered bike lanes on both sides of the roadway from the west city limits to Airport Road (5-foot bike lane, 2-foot buffer) ^{2, 3}	Medium	\$500,000
B8	Polk Street	Install 7-foot buffered bike lanes on both sides of the roadway from Airport Road to OR 51-Main Street (5-foot bike lane, 2-foot buffer) ^{2, 3}	Medium	\$180,000
B9	Gun Club Road	Fill in bike lane gaps with 6-foot bike lanes on both sides of the roadway from north of the high school property to Hoffman Road	Low	\$305,000
B10	Stryker Road	Install 6-foot bike lanes on both sides of the road from Polk Street to OR 51-Main Street	Low	\$1,275,000
B11	Ash Street/ 4 th Street (north)	Install 6-foot bike lanes on both sides of the roads from Polk Street to OR 51-Monmouth Street ⁵	Low	\$295,000
B12	16 th Street	Install 6-foot bike lanes on both sides of the road from OR 51-Monmouth Street to the south city limits	Low	\$160,000
B13	13 th Street	Install 6-foot bike lanes on both sides of the roads from OR 51-Monmouth Street to the new east-west collector ^{4, 5}	High	\$25,000
B14	7 th Street	Install 6-foot bike lanes on both sides of the roads from OR 51-Monmouth Street to the south city limits ^{4, 5}	High	\$175,000
B15	4 Street (south)	Install 6-foot bike lanes on both sides of the road from OR 51-Monmouth Street to the new east-west arterial ^{4, 5} . Coordinate with Project S10	High	\$345,000
B16	Picture Street	Install 6-foot bike lanes on both sides of the road from Gun Club Road to the eastern terminus ⁵	Low	\$25,000
B17	Williams Street	Install 6-foot bike lanes on both sides of the road from Ash Street to OR 51-Main Street ⁵	Low	\$115,000
B18	G Street	Install 6-foot bike lanes on both sides of the road from the western terminus to Main Street ^{4, 5}	Low	\$280,000
B19	Chestnut Street	Install 6-foot bike lanes on both sides of the road from 6 th Street to the western Terminus ⁵	Low	\$45,000
B20	C Street	Install shared-lane pavement markings from 7 th Street to OR 51-Main Street	Medium	\$10,000
B21	D Street	Install shared-lane pavement markings (sharrows) from 7 th Street to Main Street	Medium	\$10,000
B22	E Street/12 th Street/ F Street	Install bicycle boulevard treatments on E Street, 12 th Street, and F Street from 13 th Street to Main Street – the segments on 12 th Street and F Street will be replaced by Project B28 when the E Street bridge across Ash Creek is complete	High	\$20,000

B23	River Road - Willamette River Bridge	Install 6-foot bike lanes on both sides of the Willamette River Bridge; this would require widening the bridge or providing cantilevered bike paths on one or two sides; Coordinate with Project P39	Medium	\$1,500,000
B24	Marigold Drive	Install 6-foot bike lanes on both sides of the road from 16 th Street to Gun Club Road ⁵	Medium	\$25,000
B27	5 th Street	Install bicycle boulevard treatments on 5 th Street from Henry Hill Park to Independence Elementary School	High	\$20,000
B28	E Street	Install bicycle boulevard treatments on E Street from 12 th Street to 7 th Street when the E Street bridge across Ash Creek is completed. Coordinate with Project P42	Medium	\$20,000
Enhanced Crossings and Bicycle Amenities				
B25¹	OR 51-Main Street/ OR 51-Monmouth Street	Install a bike corral on OR 51-Main Street near the OR 51-Main Street/OR 51-Monmouth Street Intersection	Low	\$5,000
B26¹	OR 51-Main Street/ OR 51-Monmouth Street	Install a bike corral on OR 51-Monmouth Street near the OR 51-Main Street/OR 51-Monmouth Street Intersection	Low	\$5,000
Total High Priority Cost				\$850,000
Total Medium Priority Cost				\$2,245,000
Total Low Priority Cost				\$3,240,000
Total Cost				\$6,335,000

Note: The cost estimates presented do not include costs associated with right-of-way acquisition due to its high variability depending on location, parcel sizes, and other characteristics. The cost estimates also reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.
2. This roadway contains segments with existing bike facilities (on-street bike lanes, shoulders, etc.). These facilities will be reconfigured to accommodate the planned improvements.
3. Install green skip striping on arterial and collector roadways where bike lanes continue through major intersections.
4. Work with Cherriots to determine the bicycle facility configuration at bus stops for this intermodal facility.
5. On-street parking restrictions will be required and therefore the bike lane installation should be considered when traffic volumes exceed 2,000 ADT per City standard.

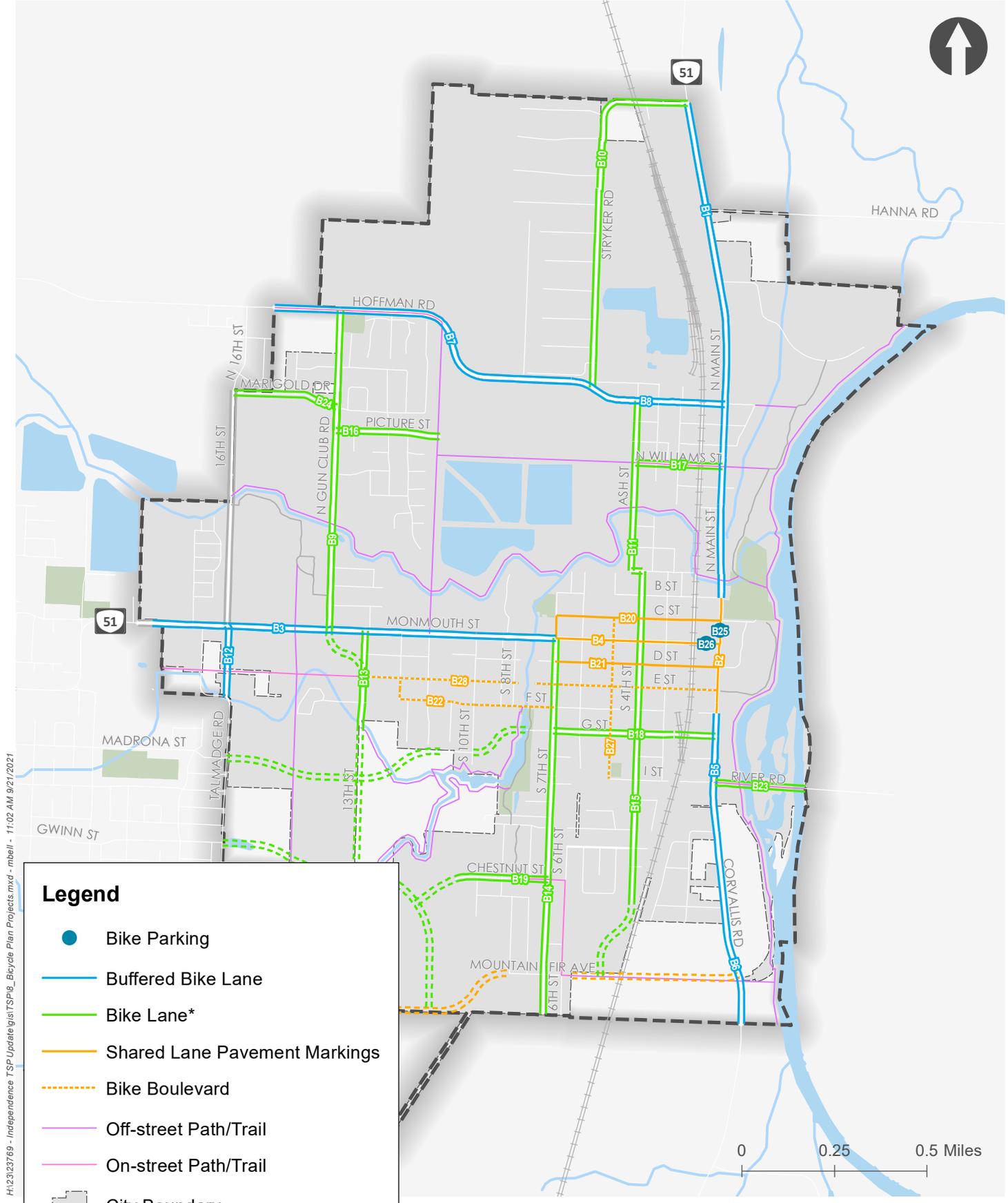
PEDESTRIAN SYSTEM

Pedestrian facilities in Independence consist of sidewalks, shared-use paths, and off-street trails, as well as marked and unmarked, signalized and unsignalized pedestrian crossings. These facilities provide residents with the ability to travel between residential areas, schools, parks, churches, retail/commercial centers, and other essential destinations in Independence by foot.

Pedestrian System Needs

Adequate pedestrian facilities, such as continuous sidewalks, marked crossings, and ADA-compliant ramps, should be provided to allow for convenient and safe travel between neighborhoods, activity centers, and essential destinations. The following provides a summary of the pedestrian system needs:

- There are several pedestrian ramps throughout the city that are not ADA-compliant and should be brought into compliance.
- There are several major (and minor) intersections that do not provide marked pedestrian crossings.
- There are several arterial and collector streets that currently do not have sidewalks along one or two sides of the roadway.



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Legend

- Bike Parking
- Buffered Bike Lane
- Bike Lane*
- Shared Lane Pavement Markings
- - - Bike Boulevard
- - - Off-street Path/Trail
- On-street Path/Trail
- City Boundary
- Urban Growth Boundary

* Buffered bike lanes are preferred along roadway segments with sufficient width

Bicycle Plan Projects **Figure 8**
Independence, OR

Data Source: Polk County Data Portal, ODOT

Several of the gaps and deficiencies identified above limit connectivity between residential areas and activity centers throughout the city, including schools, parks, and transit stops.

Pedestrian Plan

The pedestrian plan consists of new sidewalks that fill gaps and provide new facilities along city streets, shared-use paths/trails that augment and support the sidewalks, and enhanced crossings that enable people to safely cross streets, railroad tracks, and other transportation facilities. Collectively, these facilities will help enhance and expand the multimodal transportation system and encourage walking and other non-motorized trips consistent with Goal 3 of the TSP Update.

Table 7 identifies the pedestrian plan projects developed for the pedestrian system. The priorities shown in Table 7 are based on the project evaluation criteria as well as input from the project team; the priorities were updated based on input from the advisory committees and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 9 illustrates the location of the pedestrian plan projects.

Table 7: Pedestrian Plan Projects

Map ID	Location	Description	Priority	Cost
Sidewalks				
P1 ¹	OR 51-Main Street	Fill in sidewalk gaps on the east side of the road from Stryker Road to OR 51 Monmouth Street	Low	\$715,000
P2	Main Street	Install sidewalks on the east side of the road from F Street to River Road	Medium	\$225,000
P3	Corvallis Road	Install sidewalks on both sides of the road from River Road to the south city limits	Medium	\$1,435,000
P4	Hoffman Road	Install sidewalks on the north side of the road from the west city limits to Airport Road; Coordinate with Project P38	Medium	\$705,000
P5	Polk Street	Fill in sidewalk gaps on the north and south sides of the road from Ash Street to OR 51-Main Street	High	\$170,000
P6	Gun Club Road	Fill in sidewalk gaps on west side of the road from Hoffman Road to OR 51-Monmouth Street	High	\$520,000
P7	Stryker Road	Fill in sidewalk gaps on both sides of the road from OR 51-Main Street to Polk Street	High	\$1,270,000
P8	Ash Street/4 th Street	Install sidewalks on the west side of the road from the Ash Creek Bridge to A Street	High	\$145,000
P9	16 th Street	Fill in sidewalk gaps on the east side of the road from OR 51-Monmouth Street to south city limits	High	\$150,000
P10	13 th Street	Fill in sidewalk gaps on the east side of the road from OR 51-Monmouth Street to south city limits	High	\$160,000
P11	4 th Street	Fill in sidewalk gaps on the east side of the road from I Street to the south city limits	High	\$225,000
P12	Williams Street	Install sidewalks on the north side of the road from Log Cabin Street to Marsh Street	Medium	\$75,000

P13	F Street	Fill in sidewalk gap on the north side of the road from 10 th Street to 7 th Street	High	\$260,000
P14	Downtown Sidewalk Enhancements	Install new sidewalks on both sides of B Street, C Street, D Street, and E Street from 2 nd Street to Main Street; both sides of 2 nd Street from B Street to D Street; and the west side of Main Street from D Street to F Street. Install curb extensions at all major intersections	Low	\$1,750,000
Enhanced Crossings and Pedestrian Amenities				
P15 ^{1,2}	OR 51-Main Street/Stryker Road	Provide enhanced pedestrian crossing treatments	Low	\$125,000
P16 ^{1,2}	OR 51-Main Street/Deann Drive	Provide enhanced pedestrian crossing treatments	Medium	\$125,000
P17 ^{1,2}	OR 51-Main Street/Williams Street	Provide enhanced pedestrian crossing treatments on the south leg of the intersection to connect the bus stop	Medium	\$125,000
P18 ^{1,2}	OR 51-Monmouth Street/13 th Street	Provide enhanced pedestrian crossing treatments	Medium	\$125,000
P19	Main Street/G Street	Provide enhanced pedestrian crossing treatments	Low	\$40,000
P20	Main Street-Corvallis Road/River Road	Provide enhanced pedestrian crossing treatments; Coordinate with Projects R15 and S3	Medium	\$40,000
P21	Stryker Road/Hoffman Road	Install a marked crosswalk on the north leg of the intersection; Coordinate with Project S8	Low	\$25,000
P22	Ash Street/Polk Street	Provide enhanced pedestrian crossing treatments	Medium	\$25,000
P23	Gun Club Road/Marigold Street	Provide enhanced pedestrian crossing treatments	Medium	\$25,000
P24	Stryker Road Rail Crossing	Provide enhanced pedestrian crossing treatments across the rail line	Low	\$150,000
P25 ^{1,2}	OR 51-Main Street/Main Street	Consider opportunities for street patios, street furniture, and other amenities in the downtown area	Low	\$25,000
P26 ^{1,2}	OR 51-Monmouth Street/2 nd Street	Consider opportunities for street patios, street furniture, and other amenities in the downtown area	Low	\$25,000
P27 ^{1,2}	OR 51-Monmouth Street/11 th Street	Provide enhanced pedestrian crossing treatments	High	\$75,000
Shared-Use Paths/Trails				
P28	North South Connector Trail #1	Install a shared-use path/trail south from Hoffman Road to Wildfang Park	Low	\$980,000
P29	North South Connector Trail #2	Install a shared-use path/trail north from OR 51-Monmouth Street to Wildfang Park	Low	\$155,000
P30	Ash Creek Trail Phase I	Install an east-west shared-use path/trail from Riverview to Wildfang Park and the west CL	Low	\$2,665,000
P31	Mt. Fir North-South Trail	Install a north/south shared-use path/trail from F Street to Mt. Fir Park and south across Becken Road – may include some on-street segments	Low	\$845,000

P32	Mt. Fir Connector Trail	Install an east/west shared-use path/trail from Mt. Fir Street to Corvallis Road	Low	\$740,000
P33	River Trail	Install a north/south shared-use path/trail along Willamette Riverfront	Medium	\$2,980,000
P34	Going to the River Trail	Install an east/west shared-use path/trail from Williams Street to Howard Court – may include some on-street segments	Medium	\$1,210,000
P35	Central High School (HS) Connector Trail	Install a north/south shared-use path/trail from Central High School to neighborhoods south of OR 51-Monmouth Street	Medium	\$780,000
P36	South Fork Trail	Install two north/south shared-use path/trails on the east/west sides of the South Fork Ash Creek	Low	\$2,875,000
P37	Drainage Trail	Install an east/west shared-use path/trail from 13th Street to the South Fork Trails	Low	\$395,000
P38	Old Highway 99 Trail	Install an east/west shared-use path/trail to the existing shared-use path along OR 99 – may include some on-street segments; Coordinate with Project P4	Low	\$620,000
P39	Willamette Valley Trail	Install an east/west shared-use path/trail to the Willamette Valley Scenic Bikeway – may include some on-street segments; Coordinate with Project B23	Low	\$335,000
P40	Polk Street Trail	Install an east/west shared-use path/trail from the eastern terminus of Polk Street to the River Trail	Low	\$150,000
P41	E Street Trail	Install an east/west shared-use path/trail from 13 th Street to OR 51-Monmouth Street – may include some on-street segments.	Low	\$735,000
Pedestrian Bridge				
P42	E Street Bridge	Install a new pedestrian bridge along E Street at Ash Creek. Coordinate with Project B28	Medium	\$720,000
P43	Trestle Bridge	Repurpose the existing Trestle Bridge across south Ash Creek as a pedestrian bridge; Coordinate with Project P35	Low	\$720,000
Total High Priority Cost				\$2,975,000
Total Medium Priority Cost				\$8,595,000
Total Low Priority Cost				\$14,070,000
Total Cost				\$25,640,000

Note: The cost estimates presented do not include costs associated with right-of-way acquisition due to its high variability depending on location, parcel sizes, and other characteristics. The cost estimates also reflect the full cost of the projects, including costs likely to be funded by others, such as ODOT or private developers.

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.
2. The location and type of enhanced crossing treatment(s) will be determined at the design/implementation stage.

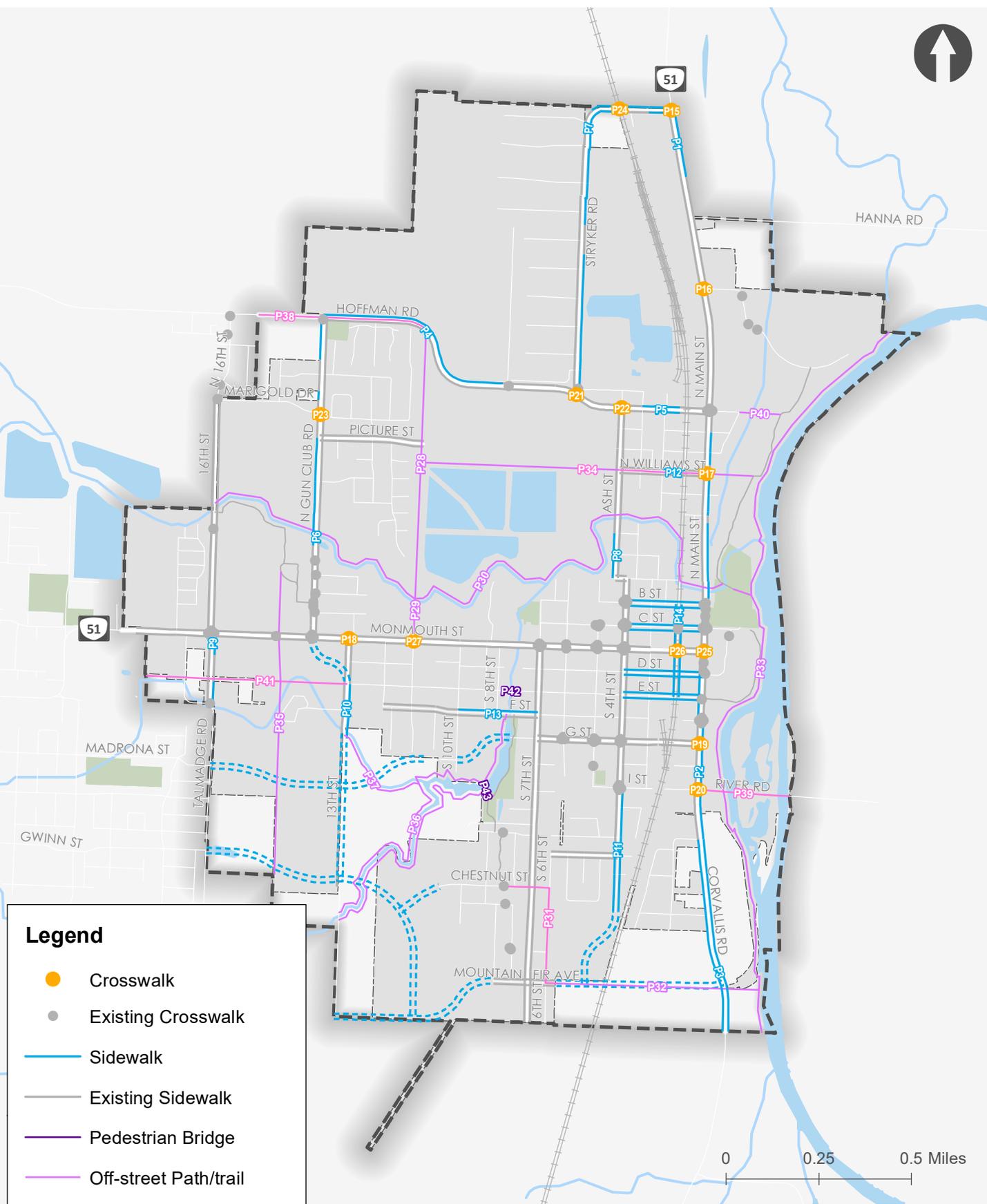
Pedestrian System Policies

The pedestrian system policies are provided below.

- Explore opportunities to further connect the shared-use path and trail system, including the locations adjacent to the river or the oxbow.

- Re-establish the Monmouth-Independence Safe Routes to School Program (Central School District 13J) and ensure that the program includes middle and high school students.
- Develop an evaluation program that assesses successful strategies and approaches, ensures that initiatives support equitable outcomes, and identifies unintended consequences or opportunities.
- Continue to implement physical improvements to the transportation system aimed at addressing specific needs which make walking and biking to school safer, more comfortable and convenient.
- The City will preserve right-of-way for shared-use paths/trails as part of future development to ensure adequate right-of-way is available.

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Legend

- Crosswalk
- Existing Crosswalk
- Sidewalk
- Existing Sidewalk
- Pedestrian Bridge
- Off-street Path/trail
- On-street Path/Trail
- City Boundary
- Urban Growth Boundary

**Pedestrian Plan Projects
Independence, OR**

**Figure
9**

Data Source: Polk County Data Portal, ODOT



CHAPTER 6: AIR, RAIL, WATER, AND PIPELINE PLAN

No specific projects are proposed for the air, rail, water or pipeline systems. However, policies for each of these systems are presented below.

AIR SYSTEM

The Independence State Airport accommodates light single- and multi-engine aircraft weighing less than or equal to 12,500 pounds. Although most of the airport property resides within the City's UGB, a small portion stretches across the northern UGB boundary. The airport is owned, operated, and maintained by the Oregon Department of Aviation. The single north-south paved runway is 2,935 feet long by 60 feet wide. The airport does not have an instrument landing system, so operations are limited to visual flight rules. There is no scheduled service provided by commercial air carriers.

There is a residential airpark development located on the east side of the airport. The airpark development currently has 90 homes with hangars and has attained national recognition. Zoning within the residential airpark includes a Residential Single Family Airport Overlay zone designed to minimize "exposure to crash hazards and high noise levels generated by airfield operations by encouraging future development which is compatible with the continued operation of airfields, and established Airpark development" (Independence Development Code).

Air System Needs

The March 2020 Draft Independence State Airport Master Plan provides a range of improvements to support airport operations.

Air System Policies

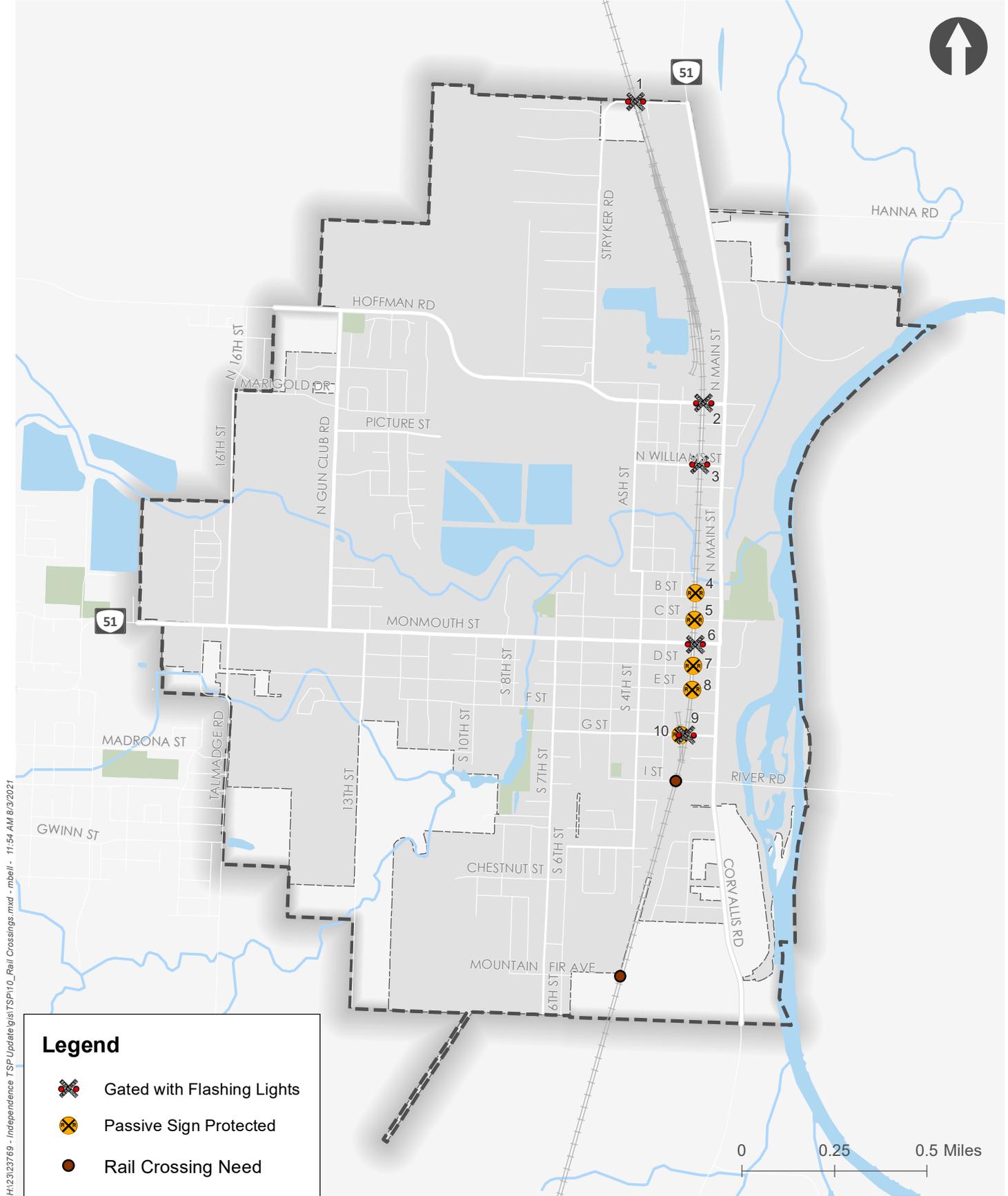
The air system policies are provided below.

- Maintain airport overlay zoning that ensures future approach surfaces match FAR Part 77 standards and Oregon Department of Aviation guidelines.
- Collaborate with Oregon Department of Aviation to ensure land use along Hoffman Road does not impact the Runway Protection Zone.

RAIL SYSTEM

There is one rail line in Independence. The line runs north and south, parallel to OR 51-Main Street before crossing OR 51-Monmouth Street. South of OR 51-Monmouth Street, the line continues running parallel to Main Street and Corvallis Road, veering to the west as it approaches the southern UGB. The line provides freight service for a large variety of commodities including forest products, iron and steel products, feed grains, fertilizers, and some manufactured consumables, such as food products. No rail passenger service is currently provided in Independence.

There are nine rail crossings in Independence and approximately 2.5 miles of track within the UGB. All crossings are at-grade. Figure 10 illustrates the location of the rail crossings in Independence. The configuration of the railroad crossings results in temporary interruptions on the major east-west routes when trains pass through Independence. Interruptions in east-west traffic on OR 51-Monmouth Street also leads to interruptions to north-south traffic on OR 51-Main Street.



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Legend

-  Gated with Flashing Lights
-  Passive Sign Protected
-  Rail Crossing Need
-  Railroads
-  City Boundary
-  Urban Growth Boundary

0 0.25 0.5 Miles

Rail Facilities **Figure**
Independence, OR **10**

Data Source: Polk County Data Portal, ODOT

Rail System Needs

The following provides a summary of the rail system needs:

- Community concern regarding:
 - Line maintenance, especially pavement maintenance on 2nd Street
 - Noise of trains through town because they must use their horns at the passively protected crossings
 - High frequency of railroad crossings, particularly the passively protected crossings
 - Potential compromised emergency response capabilities should a train become stalled on the tracks and block crossings. The fire and police stations are located west of the track, which gives them access to most of the city. However, trains can delay and/or cause detours for emergency vehicles trying to reach the eastern edge of town, including the downtown, waterfront park, residences, and businesses
- Although the rail line is actively used for freight, no passenger rail service is provided.

Rail System Policies

The rail system policies are provided below.

- Create a maintenance program to specifically address pavement condition on 2nd Street.
 - The City will keep all design solutions to the existing railroad subgrade failure along 2nd Street open for discussion, including a potential median strip to separate train and vehicular traffic.
- Create a maintenance/improvement program to ensure ADA compliance of pedestrian crossings of the rail line.
- Work with the rail operators to reduce noise of trains passing through city limits.
 - Follow the Federal Railroad Administration's guidance for creating quiet zones, including installing of flashing lights and gates at each public crossing.
- Work with ODOT rail to determine the location of an at-grade or grade-separated rail crossing that would provide additional east-west connectivity of the roadway network.
 - Consideration can be given to removing a crossing to the north to ensure similar continued rail operations.
- Identify and evaluate the economic feasibility of various alternatives to provide for emergency access and response capabilities to the entire City. Some alternatives include building a collector/arterial crossing or providing a satellite emergency response capability for the east side of Independence.
- Work with ODOT rail to consider potential compromised emergency response capabilities should a train become stalled on the tracks and block crossings. The fire and police stations are located west of the track. Trains can delay and/or cause detours for emergency vehicles trying to reach the eastern edge of town, including the downtown, Riverview Park, residences and businesses.
- Reduce environmental degradation (noise impacts) and conflicts by requiring new residential development adjacent to the railroad to use sound mitigation structures or planting buffers.

WATER SYSTEM

Independence is located on the Willamette River, which has functioned as a transportation facility in the past. Currently, no freight shipping or passenger service occurs on the river, and a limited amount of recreational use, such as kayaking, of the river occurs. Independence has encouraged recreational use of the river.

While there are no water transportation projects included in the TSP, Independence will continue to support and promote improvements to the local and regional transportation system to ensure adequate access for residents. The City will also promote recreational use of the river and investigate the feasibility of river transportation in the future.

PIPELINE SYSTEM

Independence has no major regional pipeline facilities within the UGB. Monmouth has water and sewer mains that traverse Independence.

While there are no pipeline projects included in the TSP, the City will continue to support and promote improvements to the local and regional pipeline system to ensure adequate facilities and services for residents. The City will also continue to cooperate with Monmouth regarding their sewer and water line needs.



CHAPTER 7: MANAGING THE TRANSPORTATION SYSTEM

Transportation System Management (TSM) and Transportation Demand Management (TDM) are two complementary approaches to managing and maximizing the efficiency of the transportation system.

Transportation System Management

Transportation System Management (TSM) focuses on low-cost strategies that can be implemented within the existing transportation infrastructure to enhance operational performance. Finding ways to better manage the transportation system while maximizing urban mobility and treating all modes of travel as a coordinated system is a priority. TSM strategies include traffic signal timing and phasing optimization, traffic signal coordination, and intelligent transportation systems (ITS). Traffic signal modifications and ITS applications typically provide the most significant tangible benefits to the traveling public. The primary focus of TSM measures are region-wide improvements, however there are a number of TSM measures that can be applied in Independence, including: traffic signal timing and phasing optimization at signalized intersections, real-time traveler information along OR-51 Monmouth Street and OR 51-Main Street, and real-time transit information at local transit stops, on-line, and via smartphone applications. Several of these measures are included in other elements of the TSP.

Transportation Demand Management

Transportation Demand Management (TDM) works to remove single occupancy vehicle (SOV) trips from the transportation system during peak time periods. As growth in the city occurs, the number of trips will also increase. The ability to change travel behavior and provide alternative modes will help accommodate the growth in trips without the need for significant investments in new infrastructure. A major focus of TDM is on major employers; however, there are many things the City can do to support TDM implementation, including providing sidewalks and bike lanes that allow people to travel safely and efficiently on foot or by bike; providing local transit facilities and services that allow people to travel by bus, and establishing development patterns that encourage non-auto-oriented travel. Several of these strategies are included in other elements of the TSP.

Transportation Demand Management Strategies

There are several strategies that may be effective for managing demand in Independence. Table 8 summarizes the strategies that best meet the goals and objectives of the TSP. As with all new public and private investments, the implementation of TDM strategies is sure to draw opposition from some. Given Independence's limited experience with TDM, it is important that decision-makers understand their long-term costs and benefits and can evaluate these along-side arguments from opponents in achieving outcomes that best reflect the City's vision and goals while effectively reducing travel demand.

Table 8: Potential TDM Strategies

Strategy	Description
Bicycle Improvements	Improved design and maintenance of shared streets, bike lanes, and paths
Bicycle Parking	Improved bicycle parking, storage, and changing facilities
Bike/Transit Integration	Improved bicycle access and storage at transit stops and stations, and the ability to carry bikes on transit vehicles
Pedestrian Improvements	Improved design and maintenance of sidewalks, crosswalks, paths, and amenities
Bike/Walk Encouragement	Promotion campaigns, events, educational programs, guides and user info
Transit Improvements	Improve transit facilities and service (stop amenities, hours, frequency, coverage)
Shuttle Service	Shuttle buses, demand response and other special mobility services
Ridesharing	Carpool/vanpool programs and services

Wayfinding	Provide wayfinding improvements and other multimodal navigation tools
Streetscape Improvements	Redesign roadways to support multimodal transportation and create more attractive and accessible communities
Connectivity Improvements	Improved roadway and pathway connectivity
Traffic Calming	Roadway design features intended to reduce traffic speeds and volume
Vehicle Use Restrictions	Limit vehicle traffic at a particular time or place
Parking Management	Various management strategies that result in more efficient use of parking
Park-and-ride	Park-and-rides can support ridesharing and public transit use
Downtown Centers	Creating vibrant downtowns mixed-use activity centers

Transportation Demand Management Policies

The City's TDM policies are provided below.

- Implement TDM solutions in the City.
- Build partnerships with community organizations (such as WOU, state employers in Salem, Cherriots, the City of Monmouth, and Central School District) to support TDM implementation.
- Promote carshare, ridesharing, bikeshare, e-scooters, and other micromobility services.
- Utilize TDM strategies, such as commute trip reductions programs for employees, and special transportation management when sponsoring events that attract crowds.

TDM policies and strategies help achieve many of the City's goals, including reduced traffic congestion, reduced parking demand, improved mobility for non-drivers, improved community livability, improved public fitness and health, and others.

Neighborhood Traffic Management

Neighborhood Traffic Management (NTM) is a term used to describe traffic control devices that reduce travel speeds and traffic volumes in residential neighborhoods. NTM is also commonly referred to as traffic calming because of its ability to calm traffic and improve neighborhood livability. NTM solutions have been implemented in locations throughout the city; however, there are many areas where additional NTM could be considered. Table 9 lists several common NTM options that are typically supported by emergency response as long as minimum street criteria are met.

Table 9: Neighborhood Traffic Management (NTM) Options by Functional Classification

Measure	Roadway Classifications		
	Arterial	Collector	Local
Curb Extension	Supported	Supported	NTM measures are generally supported on lesser response routes that have connectivity (more than two accesses)
Raised Median Island	Supported	Supported	
Pavement Texture	Supported	Supported	
Speed Hump	Not Supported	Not Supported	
Raised Crosswalk	Not Supported	Not Supported	
Speed Cushion	Not Supported	Not Supported	
Choker	Not Supported	Not Supported	
Traffic Circle	Not Supported	Not Supported	
Diverter	Not Supported	Supported	
Meandering Alignments	Not Supported	Not Supported	

Note: NTM measures are supported with the qualification that they meet emergency response guidelines including minimum street width, emergency vehicle turning radius, and accessibility/connectivity.

As shown in Table 9, several NTM solutions are limited to local streets; on arterial or collector streets, implementation of these NTM solutions can be counterproductive and lead to cut through traffic on local streets. NTM solutions on arterial and collector streets can also cause conflicts with emergency access/public safety as well as conflicts with freight traffic and public transit. While no specific NTM projects are identified in the TSP, they are an important part of the City's ongoing effort to improve livability. Any future NTM projects should be coordinated with emergency service providers to ensure public safety is not compromised.

Parking Management

Parking in downtown Independence is provided along both sides of most streets, including OR 51-Main Street and OR 51-Monmouth Street. Parking is also provided in several public and private off-street parking lots. There are currently no limitations or restrictions on the use of the on-street or off-street parking stalls, in terms of who can park there and for how long. Several strategies were considered for implementation as part of the TSP to address parking concerns within the downtown area; however, it was determined that further evaluation of parking conditions is required. Therefore, the TSP includes a downtown parking study as indicated below.

Parking Management Plan

Parking management is an important component of managing the efficiency and effectiveness of the transportation system. The project in Table 10 is intended to provide a parking management plan for downtown Independence. The priority shown in Table 10 is based on the project evaluation criteria as well as input from the project team, project advisory committees, and the community.

Table 10: Parking Management Plan Projects

Map ID	Location/Name	Description	Priority	Cost
PP1	Downtown Parking Study	Prepare a municipal parking management plan for downtown Independence	High	\$50,000
			Total High Priority Cost	\$50,000
			Total Medium Priority Cost	\$0
			Total Low Priority Cost	\$0
			Total Cost	\$50,000

1. The cost of the downtown parking study includes the study only and does not include the costs associated with implementing recommendations.

The plan should consider the following parking management strategies (at a minimum):

- Truck loading zones, taxi zones, zones for rideshare vehicles (e.g., Uber, Lyft)
- Time limits (2-hours, 30 minutes, 15 minute) in the marked stalls on OR 51
- Disabled parking (location and design)
- Parking enforcement policies and strategies
- Work with local business owners to establish parking areas for employees
- Develop "how to park" resources and parking maps
- Invest in pick-up drop-off loops and adaptive reuse design for any parking structures/lots.

The City will need to coordinate with ODOT to implement the parking management strategies identified above within downtown Independence on OR 51-Main Street and OR 51-Monmouth Street.

Access Management

Access management is a set of measures regulating access to local streets and state highways from public roads and private driveways. Access management is a policy tool which seeks to balance mobility, the need to provide efficient, safe, and timely travel and the ability to allow access to individual properties. Proper implementation of access management techniques could result in reduced congestion, reduced crash rates, less need for roadway widening, conservation of energy, and reductions in 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 associated with road traffic accessing the main facility.

ODOT and the City have adopted access spacing standards for the study area roadways. The following summarizes ODOT's access spacing standards, as defined in Oregon Administrative Rule (OAR) 734 Division 51, and the City's access spacing standards.

ODOT Access Spacing Standards

Oregon Administrative Rule (OAR) 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 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 highway classification and differ depending on posted speed and average annual daily traffic (AADT). Within Independence, OR 51-Main Street and OR 51-Monmouth Street are classified as district highways with speeds that range from 20 to 45 MPH, and all AADTs are above 5,000 vehicles. Table 11 summarizes ODOT's current access spacing standards for OR 51 within Independence.

Table 11: ODOT Access Spacing Standards

Posted Speed (MPH)	Urban Areas Access Management Spacing Standards for >5,000 AADT (Feet)
25 and lower	250
30 and 35	350
40 and 45	500
50	550
55 or higher	700

Access Spacing Standards

The City's access spacing standards are determined by functional classification and provide standards for minimum intersection and driveway spacing. Table 12 summarizes City's access spacing standards.

Table 12: City Access Spacing Standards

Functional Classification	Minimum Spacing Between Intersections (Feet)	Minimum Spacing Between Driveways (Feet)
Major Arterial	1,320	250
Minor Arterial	250	250
Collector	250	100-150
Local Street	250	50-100

Access Management Policies

The access management policies are provided below.

- Defer to ODOT access spacing standards and policies on ODOT facilities.
- Ensure new development meets the access spacing standards.
- Consolidate non-conforming access points to move toward the access spacing standards.
- Establish access variance policies for parcels whose highway/street frontage, topography, or location would otherwise preclude conforming access spacing.

A comprehensive list of potential access spacing variance policies and an approach for access consolidation are provided in Tech Memo #5: Alternative Analysis in the Volume II Technical Appendix.

Emerging Technologies

Transportation technologies are rapidly evolving, and the City should continue to evaluate steps that they can take to be prepared. The following policies summarize several steps (primarily planning and policy related) that the City can follow to be prepared for the emerging technologies.

Emerging Transportation Technology Policies

- Create a Transportation Liaison or Alternative Transportation Workgroup in conjunction with Monmouth, Western Oregon University, and Cherrits.
- Monitor emerging technologies that may be well suited for Independence and Monmouth.
- Establish mobility hubs (or areas served by multiple modes of travel), in collaboration with Cherrits, private property owners, and local stakeholders. Potential locations to explore include:
 - Downtown Independence, adjacent to Riverview Park (supporting Routes 40X and 45)
 - Central Plaza shopping center (supporting Routes 40X and 45)
 - Within the southwest concept plan area as it develops
 - Near the Independence State Airport
- Establish an "alternative modes main street" designed for bicycles and pedestrians, as well as micromobility services such as E-scooters, trolleys, and/or people movers. E Street is one candidate facility.
- Consider adding an electric vehicle charging requirement to the development code.
- Allow ride-hailing and micromobility services (E-scooters, bike share, etc.) to be established in Independence.



CHAPTER 8: IMPLEMENTATION PLAN

The TSP identifies all the plans, policies, programs, and projects needed to address the gaps, deficiencies, and needs within the city over the next 20 years. The preferred plan consists of all projects identified throughout the TSP planning process while the cost constrained plan consists of projects the City anticipates being able to fund over the next 20 years³. The amount of local funds available for capital projects in the TSP is estimated to be approximately \$10.0 million or roughly \$0.5 million per year.

Current Transportation Funding and Sources

Transportation revenue in Independence primarily consists of state revenue from the state gas tax, which was changed by House Bill (HB) 2017, and local revenue from a transportation system development charge (SDC). Increases in state revenues will depend primarily on gas consumption. Table 13 summarizes the historical revenue sources for Fiscal Year (FY) 2010-11 through FY 2017-18 and includes estimates for FY 2015-16⁴ and FY 2018-2019. The adopted FY 2019-2020 budget is also provided.

Table 13: City of Independence Historical Revenue Sources

Revenue Source	FY 2010-2011	FY 2011-2012	FY 2012-2013	FY 2013-2014	FY 2014-2015 ¹	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019 ¹	FY 2019-2020 ²
Work by City	--	--	\$3,881	\$1,990	--	--	--	--	--	--
Gas Tax	\$395,958	\$468,473	\$469,337	\$455,425	\$496,479	\$525,500	\$541,077	\$599,227	\$677,000	\$698,395
State Fund Exchange Program	\$82,414	--	\$180,535	\$86,460	\$50,291	\$70,638	\$78,687	--	--	\$217,000
ROW Fee Allocation /Transfers In	--	--	--	\$13,000	--	--	--	\$165,794	\$152,000	\$153,750
Capital Loans	--	\$216,844	\$60,000	\$100,000	\$70,735	\$75,000	\$100,000	--	--	--
Investment Income	--	--	--	--	--	--	--	\$1,416	\$4,000	\$3,000
Misc. Revenues	\$1,700	\$4,298	\$1,713	\$5,389	\$127	\$543	\$3,070	--	\$4,800	\$4,800
Grants	--	\$37,665	--	--	--	--	--	\$5,000	--	\$460,000
Transp. SDC Fund	\$31,966	\$35,106	\$999,305	\$468,514	\$746,849	\$127,089	\$188,675	\$87,978	\$171,847	\$172,316
Total	\$512,038	\$762,386	\$1,714,771	\$1,130,778	\$1,364,481	\$798,770	\$911,509	\$859,415	\$1,009,647	\$1,709,261

- 1. Estimated
- 2. Adopted Budget

State Revenue

The primary state revenue source is the state gas tax. State gas taxes are comprised of proceeds from excise taxes imposed by the state and federal government to generate revenue for transportation funding. The proceeds from these taxes are distributed to Oregon counties and cities in accordance with Oregon Revised Statute (ORS) 366.764, by county registered vehicle number, and ORS 366.805, by

³ The cost constrained plan does not limit the City or ODOT from advancing other projects in the TSP in response to changes in development patterns and funding opportunities that are not known at this time. There is no obligation to do these projects, nor assurance that these projects will be completed.

⁴ Recorded historical values for revenue sources were not available on the City's website for FY 2015-2016 when the forecast was completed. <https://www.ci.independence.or.us/finance/budgets>

city population. The Oregon Constitution states that revenue from the state gas tax is to be used for the construction, reconstruction, improvement, maintenance, operation and use of public highways, roads, streets, and roadside rest areas.

Based on data provided by the City, total revenue from the state gas tax has increased steadily since fiscal year 2010-2011. The increase between 2015 and 2016 reflects an adjustment in the population estimate used by the state to determine the amount of funding to distribute to the City. While the population is expected to continue to increase by approximately 2.7 percent per year over the next several years, revenue from the state gas tax depends on gas consumption, which is expected to go down over time.

Local Revenue

The primary local revenue source is from Transportation SDCs. Transportation SDCs are fees assessed on developments for impacts to the transportation infrastructure. All revenue is dedicated to transportation capital improvement projects designed to accommodate growth. The City can offer SDC credits to developers that provide public improvements beyond the required street frontage, including those that can be constructed by the private sector at a lower cost. For example, SDC credits might be given for providing off-site improvements, such as sidewalks and bike lanes that connect the site to nearby transit stops. Independence uses the revenue from SDCs on eligible projects that cannot be funded by other means.

Implementation Plan

Table 14 summarizes the full cost of the preferred and cost constrained plans for the TSP Update. As shown, the full cost of the preferred plan is approximately \$71.3 million over the 20-year period, including \$18.3 million in high priority projects, \$14.7 million in medium priority projects, and \$38.3 million in low priority projects. Based on the anticipated funds available for capital improvements, the cost constrained plan includes the high priority projects.⁵ Although the projected funding based on current revenue sources does not cover the full cost of the high priority projects, the City plans to pursue additional funding to support the financially constrained project list.

Table 14: Planned Transportation System Cost Summary

Project Type	High Priority	Medium Priority	Low Priority	Total
Roadway	\$14,170,000	\$3,500,000	\$20,245,000	\$37,915,000
Safety	\$180,000	\$285,000	\$485,000	\$950,000
Public Transportation	\$55,000	\$60,000	\$255,000	\$370,000
Bicycle	\$850,000	\$2,245,000	\$3,240,000	\$6,335,000
Pedestrian	\$2,975,000	\$8,595,000	\$14,070,000	\$25,640,000
Parking	\$50,000	\$0	\$0	\$50,000
Total	\$18,280,000	\$14,685,000	\$38,295,000	\$71,260,000

Potential Transportation Funding Sources

Given limited funding, the City will need to identify additional revenue sources to implement all transportation-related capital improvement projects identified in the financially constrained and the preferred plan over the next 20 years.

⁵ The high priority projects include those that are most likely to be funded by the City over the 20-year planning horizon. The medium and low priority project are aspirational and will be funded through grants and additional funding sources as they become available and/or by private developers as part of future development.

The City will likely rely upon transportation improvements grants, partnerships with regional and state agencies, and other funding sources to help implement future transportation-related improvements. Table 15 summarizes the funding opportunities and identifies the intended use of the funds and any applicable project types. *Tech Memo #5: Alternatives Analysis and Funding Program provided in Volume II contains detailed descriptions of the funding opportunities identified below.*

Table 15: Funding Opportunities Summary

Funding Source	Intended Use
Federal Sources	
Fixing America’s Surface Transportation (FAST) Act	Road, bridge, bicycling, and pedestrian improvements
Surface Transportation Block Grant (STBG)	Preserve and improve surface transportation investments from a flexible funding source
Transportation Alternatives (TA) Set-Aside	Smaller-scale transportation projects
Congestion Mitigation and Air Quality (CMAQ)	Support programs that reduce emissions from transportation-related activities
Highway Safety Improvement Program (HSIP)	Reduce traffic fatalities and serious injuries on all public roads
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	Road, rail, transit, and port projects that achieve national objectives and have significant local and regional impact
Recreational Trails	Develop and maintain recreational trails and trail-related facilities
National Highway Performance Program (NHPP)	Projects that improve conditions along NHS Routes
State Sources	
Statewide Transportation Improvement Program (STIP)	Multi-modal projects on federal, state, and local facilities
State Highway Trust Fund	Bicycle and pedestrian infrastructure improvements
Sidewalk Improvement Program (SWIP)	Projects that enable people to move across or around the state highway system
Safe Routes to School (SRTS)	Projects that improve safety for children walking or biking to school
All Roads Transportation Safety (ARTS)	Projects that address hotspot and systemic safety issues and concerns (roadway departure, intersection safety, and bicycle and pedestrian safety); part of STIP program and utilizes federal HSIP funds
Oregon Community Paths (OCP)	Create and maintain connections through shared-use paths
House Bill (HB) 2017	Create a steady funding stream for statewide transportation improvements
Multimodal Active Transportation (MAT) Fund	Expected to support bicycle and pedestrian infrastructure improvements
Local Sources	
Transportation System Development Charge (SDC)	Increase capacity of transportation system to accommodate growth
Transportation Utility Fee (TUF)	Provide additional funding for transportation infrastructure
Local Fuel Tax	Adds a tax on top of gasoline costs that support street operation, maintenance, and preservation
Local Improvement District (LID)	Pools funds from property owners to make local transportation improvements

Economic Improvement District (EID)	Pools funds from area businesses to make improvements in the business district.
Urban Renewal/Tax Increment Financing (TIF)	Raises revenue from increased property values in an area to fund localized improvements
Local Bond Measures	Asks voters for bond funding to finance a set list of infrastructure investments
Street Utility Fee/Road Maintenance Fee	Calculates trips generated for land uses and charges owners a fee relative to the number of trips

Southwest Independence Concept Area

The Southwest Independence Concept Area has special funding considerations because the transportation system does not currently extend into this area. Therefore, there are major investments that will need to be made as development occurs, specifically facilities that provide connectivity for vehicles, pedestrians, and bicyclists. In addition to the funding sources that will be available city-wide, funding sources that may be more specifically targeted to the Southwest Independence Concept Area include the following (all previously described above):

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant (previously the Better Utilizing Investments to Leverage Development [BUILD] Grant)
- Recreational Trails Program
- Statewide Transportation Improvement Program (STIP)
- Safe Routes to School Program (SRTS)
- Oregon Community Paths Program (OCP)
- House Bill (HB) 2017 Transportation Investments
- Multimodal Active Transportation Fund (MAT)
- System Development Charges (SDC)
- Local Improvement Districts (LID)

The Southwest Independence Concept Plan also outlined the following mechanisms around cost-sharing approaches as this area develops:

- Require developers to provide for local streets, as well as water, wastewater and stormwater facilities required to serve proposed development, consistent with existing city Comprehensive Plan policies and code provisions.
- Generally, use the City's system development charges to pay for system-wide improvements associated with new growth, including growth and development in the planning area.
- To the extent that some needed improvements are not currently included in the Capital Improvement Plans associated with those SDCs, update the CIPs and SDC methodologies and/or fees to accurately reflect the cost of improvements needed in the Planning Area.
- Use rough proportionality requirements to ensure that developers construct or pay for their proportional share of new collector and arterial roads within the Planning Area to the extent that they are needed to serve development within that area.
- Consider use of development agreements to clarify responsibilities for funding and constructing new improvements, including cost-sharing among multiple property owners.
- Consider use of "late-comers" agreements to identify how property owners or developers may be reimbursed for a portion of the cost of a needed improvement if the improvement also will benefit other future development but must be constructed before that development occurs.

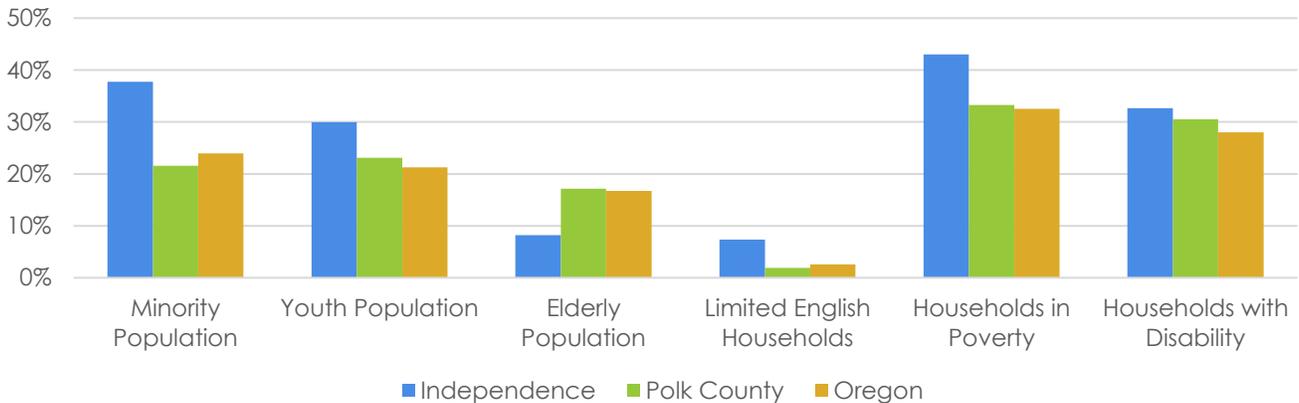
- Consider the establishment of a Local Improvement District (LID) so that a group of property owners can share in the cost of transportation infrastructure improvements or other types of public improvements such as installing water and sanitary sewer lines.

Equity Plan

Title VI and Environmental Justice (EJ) populations are a special focus in this transportation plan and the projects identified. Identifying Title VI and EJ populations early on was intended to make participation in the transportation planning and project development process more inclusive of diverse communities. The information gathered through this effort was valuable in identifying the transportation needs that will provide the most benefits to identified populations. Six population groups were considered for transportation impact susceptibility, representing those who may rely more heavily on public infrastructure or transit for access to day-to-day needs and jobs. They include minority groups, low-income populations, populations under 17 or over 64 years of age, low-English proficiency households, and people with disabilities.

Information on each of these groups was obtained from the American Community Survey and evaluated at the State, County, and local level. The results indicated that Independence had a higher proportion of each of these groups than the State and County except for populations over 64 years of age. Minority groups, for example, represent 38 percent of the population, as compared to 24 percent of the overall state and 22 percent of the county; whereas populations over the age of 64 represent 8 percent of the population as compared to 17 percent of the state and county. The make-up of specific Title VI and EJ populations is shown below.

Chart 1: Title VI and EJ Population Summary



With a few notable exceptions, these groups are distributed relatively evenly throughout the city. The areas with the highest concentrations of minorities and youth are located outside of the downtown area in northern and southern Independence while the areas with the highest concentration of people with low income are in the downtown area. *Additional information on the make-up and location of these groups is available in the Volume II: Technical Appendix.*

The needs of these groups are reflected in the goals and objectives used to guide development of the TSP update and in the evaluation criteria used to develop the preferred and cost constrained plans. Many of the projects included in the TSP will enhance access and circulation within independence for people walking, biking, and taking transit. Of the 34 projects included in the cost constrained plan, 26 are pedestrian, bicycle, or transit projects while the remaining have elements that will enhance each of these modes. In addition, many of the policies included in the modal chapters of the plan are intended to ensure the transportation system will continue to develop in a way to further enhances transportation options for local residents, especially those that are dependent on non-motorized travel.