City of Millersburg Transportation System Plan

Prepared for

City of Millersburg 4222 NE Old Salem Road Millersburg, Oregon



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Volume 2 – Reference Material

Volume 2 is a separate companion document to the Millersburg Transportation System Plan (Volume 1) and contains technical memorandums and other supporting documentation.

- A. Technical Memorandum #1: Public and Stakeholder Involvement Strategy
- B. Technical Memorandum #2: Review of Plans and Policies
- C. Technical Memorandum #3: Regulatory Review
- D. Technical Memorandum #4: Goals, Policies, and Objectives
- E. Technical Memorandum #5: Evaluate Existing Conditions
- F. Technical Memorandum #6: Baseline Conditions and Needs
- G. Technical Memorandum #7: Solutions Evaluation
- H. Technical Memorandum #8: Finance Program
- I. Technical Memorandum #9: Transportation Guidelines
- J. Technical Memorandum #10: Implementing Ordinances
- K. Technical Memorandum #11: Summary of Findings

ACRONYMS AND ABBREVIATIONS LIST

AAMPO RTP	Albany Area MPO Regional Transportation Plan
ACS	Albany Construction Specifications
ADA	Americans with Disabilities Act
CALM	Corvallis, Albany, Lebanon Model
CIP	Capital Improvement Program
DLCD	Department of Land Conservation and Development
I-5	Interstate 5
LOS	level of service
LUDC	Land Use Development Code
MPO	Metropolitan Planning Organization
OCWCOG	Oregon Cascades West Council of Governments
ODOT	Oregon Department of Transportation
PMT	Project Management Team
PNWR	Portland & Western Railroad
RRFB	Rapid Rectangular Flashing Beacon
RTP	Regional Transportation Plan
SDC	system development charge
SOV	single-occupant vehicle
SPIS	Safety Priority Index System
SRTS	Safe Routes to School
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TAC	Technical Advisory Committee
TGM	Transportation Growth Management
TPR	Transportation Planning Rule
TSMO	Transportation System Management and Operations
TSP	Transportation System Plan
UGB	Urban Growth Boundary
UP	Union Pacific
VMT	Vehicle Miles Traveled

EXECUTIVE SUMMARY

The Millersburg Transportation System Plan (TSP) details projects and policies that address transportation facilities in the City of Millersburg. Population growth and new development in recent years has led to the need for creation of a TSP. This document provides a 20-year list of improvement projects and a plan for implementing the projects to serve as a vision for the community. The project team developed a TSP consistent with state, regional, and local plans and in compliance with the requirements of the state Transportation Planning Rule (TPR).



The TSP will serve as the transportation element of the Millersburg Comprehensive Plan. The Comprehensive Plan includes goals and policies, whereas the TSP provides detail on the sub policies and implementation strategies.

What Is a Transportation System Plan (TSP)?

A TSP provides a long-term guide for investments in the transportation network that improve existing facilities and plan for future growth. At the most basic level, it provides a blueprint for all modes of travel: vehicle (both personal and freight), bicycle, pedestrian, and transit. It is also an opportunity to build on community values and protect what makes Millersburg a great place to live, work, and visit.

The Millersburg TSP contains goals, objectives, projects, and implementation guidelines needed to provide mobility

for all users, now and in the future. It examines current transportation conditions and looks ahead 20 years at what may be needed to accommodate planned growth in the city and surrounding communities. Elements of the plan can be implemented by agencies (city, state or federal) as well as private developers.

What Are the Planned Improvements?

The preferred improvements list resulting from the selection and prioritization process is summarized in Table 1. These improvements may be as simple as adding a sidewalk to one side of the street or may involve a complete upgrade to improve the quality of the facility for vehicles, bicyclists, and pedestrians. All new street construction for development would meet the city standards. The trails projects are off-street facilities that connect and expand the trail network and also connect to, or cross, the street network.

How Will Improvements Get Funded and Implemented?

Assuming that the current trend in Millersburg's system development charge (SDC) receipts and gas tax revenues continues, and assuming revenue from regular receipts from Oregon's discretionary funds program, Millersburg's transportation revenue may exceed \$194,000 annually (2016 dollars) and a total of \$4.47 million by year 2040.

This TSP offers a menu of 21 projects that can be selected as funding sources become available or as adjacent improvements are made. Recognizing that current funding resources are not sufficient for implementing all of the city improvements, the project list was further divided into *Financially Constrained Improvements* (see Table 1), which have a reasonable likelihood of being funded with existing sources, and *Aspirational Improvements*, which would require new funding sources for implementation. There were ten projects identified as Financially Constrained Improvements. The total comes to nearly \$4 million in cityfunded improvements, which is within the forecast of city revenue for transportation projects, based on recent trends.

Table 1. Summary of Financially Constrained Improvements

				Planning-Level		
ID	Improvement	Description	Purpose	(2016 Dollars) ¹		
S6	Reconstruct Millersburg Dr	Reconstruct Millersburg Dr west of Woods Rd to city limits; upgrade to arterial cross-section (bike lanes, curb, gutter, sidewalk) with development	Regional multimodal connectivity and safety	\$1.14 mil ²		
S7	Reconstruct Morningstar Rd	Reconstruct Morningstar Rd to arterial cross-section (bike lanes, curb, gutter, sidewalk)	Regional multimodal connectivity and safety	\$650,000		
S8	Reconstruct Woods Rd	Two Phases: Reconstruct Woods Rd to arterial cross- section (bike lanes, curb, gutter, sidewalk) – <i>Would</i> <i>preclude need for Improvement B3</i> Phase I: North of Alexander Ln Phase II: South of Alexander Ln	Regional multimodal connectivity and safety	l: \$1 mil II: \$500,000		
B4	Old Salem Rd Shoulder Lanes (interim project)	Construct continuous bicycle access on Old Salem Rd from north to south city limits by widening shoulder at locations where shoulder is less than 2 feet	Regional bicycle connectivity and safety	\$50,000		
B5	Conser Rd Bicycle Lanes	Extend bicycle lanes on Conser Rd to west city limits (paint only)	Local bicycle and pedestrian access, active living, safety, and connectivity	\$10,000		
P1	Millersburg Park- City Hall Shared- Use Path	Construct shared-use path between Millersburg Park and City Hall, providing important inter-neighborhood connectivity	Multimodal safety and connectivity	\$100,000		
Р5	Multi-Use Path	Proposed 12' off-street path within a linear park separating Conser Road from Transition Parkway (park features and landscaping not included in cost)	Pedestrian access, safety, and connectivity	\$885 <i>,</i> 000⁵		
P6	Old Salem Rd Sidewalks	Construct new sidewalks along west side of Old Salem Rd, north of Nygren Rd	Pedestrian access, safety, and connectivity	\$200,000		
P7	Alexander Dr Pedestrian Crossing	Provide a RRFB ³ and ADA ⁴ ramp pedestrian crossing across Alexander Dr near city park	Pedestrian access, safety, and connectivity	\$40,000		
S11	Transition Parkway	New arterial street connecting the Woods Road and Conser Road intersection to Old Salem, south of existing Conser Road	Regional multimodal connectivity and safety	\$6.0 mil⁵		
	\$3,940,000 ⁶					
Millersburg Forecasted Funds through Planning Horizon						
Approximate Funds Available (Pavement Maintenance/Other) \$530						

				Planning-Level
				Cost Opinion
ID	Improvement	Description	Purpose	(2016 Dollars) ¹
Notes:				

1. Does not include the cost of right-of-way.

- 2. This improvement is development-driven; cost is expected to be shared with developer.
- 3. RRFB = Rapid Rectangular Flashing Beacon.
- 4. ADA = Americans with Disabilities Act.
- 5. This project was added in a 2023 TSP amendment, therefore the dollars shown for this project are 2023 dollars. This project is driven by development of industrial property south of Conser Road and has been planned since 2018. The project will be funded by a combination of development fees and state economic development grants.
- 6. This amount was not updated to reflect the additions made in 2023.

INTRODUCTION

The Millersburg Transportation System Plan (TSP) details projects and policies that address transportation facilities in the City of Millersburg (the City). Population growth and new development in recent years has led to the need for creation of a TSP. This document provides a 20-year list of improvement projects and a plan for implementing the projects. The TSP has been developed in compliance with the requirements of the state Transportation Planning Rule (TPR) and to be consistent with state, regional, and local plans.

Transportation System Planning

Process Why Have a TSP? Whv? The purpose of the TSP is to guide the maintenance, development, and of implementation the transportation system, to What? accommodate 20 years of growth in population and employment, and to implement the plans and How? regulations of the regional government and the State of Oregon, including Regional the

Transportation Plan (RTP) and the Oregon TPR.

The TSP will serve as the transportation element of the Millersburg Comprehensive Plan. The Comprehensive Plan includes goals and policies, whereas the TSP provides greater detail on the subpolicies and implementation strategies.

Why Is a TSP Important?

Transportation is part of everyday life for citizens and businesses in Millersburg. Whether you are heading to Millersburg City Park, commuting around town, traveling to another nearby community, or just passing through, you are using some form of transportation to achieve that task. Businesses rely on transportation for employees and transportation of goods, both locally or on highways, such as Jefferson Highway (OR 164) or Interstate 5 (I-5), for longer trips. It is also important to remember that transportation is not just about driving a car or truck; it could be walking, riding a bicycle, or taking transit. It can also include rail, air, water, and pipeline facilities that serve both businesses and people. A healthy transportation system is vital to the livability and economy of a community.

So, what does a healthy transportation system look like? It should:

- Provide a well-connected travel network for both residents and businesses
- Offer choices of how to travel (driving, walking, bicycling, transit)
- Support safe travel for all system users
- Accommodate the needs of both local users and those visiting or traveling through the community

The City of Millersburg is a compact community located in the Willamette Valley. It already has a transportation system with many of these features, but there are gaps in the system that need to be completed. As the community grows, the system also needs to expand. These are the reasons for developing, and continually updating, a TSP. One such update was done in 2023.

What Is a TSP?

A TSP provides a long-term guide for investments in the transportation network that improve existing facilities and plan for future growth. At the most basic level, it provides a blueprint for all modes of travel: vehicle (both personal and freight), bicycle, pedestrian, and transit. It is also an opportunity to build on community values and protect what makes Millersburg a great place to live, work, and visit.

The Millersburg TSP contains goals, objectives, projects, and implementation guidelines needed to provide mobility for all users, now and in the future. It examines current transportation conditions and looks ahead 20 years at what may be needed to accommodate planned growth in the city and surrounding communities. Elements of the plan can be implemented by agencies (city, state or federal) as well as private developers.

How Was the TSP Developed?

The Millersburg TSP was produced through a collaborative process that involved public agencies and the community.

Over a period of one year, members of the Project Management Team (PMT), and Technical Advisory Committee (TAC) met to aid in the development of the TSP. Additionally, the Planning Commission members and City Councilors attended joint sessions to help shape the TSP, and open houses were held to solicit input from the community.



Citizens help identify areas of concern at the first community Open House in March, 2016.

This document (Volume I of the TSP) provides a summary of each of the key analysis and evaluation steps. The majority of this report focuses on the modal plans, proposed projects, and transportation standards. Volume II of the TSP provides the detail and supporting documentation that led to the development of the plan.

Study Area

The study area boundary is consistent with the City of Millersburg city limits in 2016 as shown in Figure 1. The Urban Growth Boundary (UGB) was also taken into consideration for the planning horizon (20 years).





Coordination with Area Plans

The transportation system in the City of Millersburg is influenced by state, regional, and local transportation and land use regulations, plans, and policies, as well as planned transportation improvement projects. A few roads within the City are under the jurisdiction of Linn County, and several ODOT facilities serve to connect Millersburg with the region. The TSP included coordination with existing and ongoing plans to ensure that the new plan was consistent with other regional efforts. These efforts were to ensure that the development of the Millersburg TSP is compatible and compliant with applicable regulations, plans, and policies.

The screening of existing and ongoing plans included:

- Projects from Other Planning Documents (Ongoing):
 - Linn County Transportation System Plan
 - Albany Area MPO Regional Transportation Plan (AAMPO RTP)
 - Albany TSP
- Projects in Capital Plans:

- 2015-2018 Oregon (Final) Statewide Transportation Improvement Program (STIP)
- Millersburg Streets Capital Improvement Program (CIP)

That said, the TSP is a City of Millersburg document; this TSP, including the project lists, does not have any legal or regulatory effect on state or county land or transportation facilities. Without additional action by the State of Oregon or Linn County, any project that involves a non-city facility is only a recommendation. Coordination and cooperation with the City and governmental partners are needed to develop and plan a well-connected and efficient transportation network. The TSP does not, however, obligate the State of Oregon, Linn County or any other governmental partner to take any action or construct any projects.

Goals and Objectives

The vision for Millersburg's transportation system is reflected in its goals and objectives. These were developed by reviewing the goals from the transportation element of the current Comprehensive Plan (1984) and modified slightly to be consistent with the Millersburg Strategic Plan.

- Goals Are broad, overarching statements about the City's desired outcomes. While not always appearing attainable, a goal describes a principle that will influence how decisions are made about future transportation investments in Millersburg.
- PoliciesDescribe the approach that will be used by
Millersburg to guide the City toward each
goal.ObjectiveIs a measureable outcome, sometimes
referred to as a "performance indicator,"
that indicates if (or how) a policy is
achieved. These objectives also address the
performance-based planning requirements
established in MAP-21, which are also
embodied in the Draft AAMPO RTP.

Goal 1: Increase safety and security for all travel modes.

Policies

- Educate the public about areas of multimodal transportation safety concerns
- Identify improvements at locations with existing safety issues
- Coordinate with emergency response agencies to design and operate a transportation system that supports timely and safe response

Objectives

- 1. Reduce the number of injury and fatal crashes
- 2. Reduce emergency response times through improved connectivity

Goal 2: Enhance connectivity for all travel modes.

Policies

- Develop a balanced transportation system that includes all modes of transportation
- Coordinate with regional planning partners to introduce accessible, regular, and reliable public transportation services
- Encourage compact community development to facilitate multimodal network connectivity and circulation

Objectives

- 1. Increase the sidewalk coverage on collector and arterial streets
- 2. Increase the total length of shared-use paths (offstreet) and collector/arterial bike lanes (on-street)
- 3. Introduce and improve transit frequency and coverage
- 4. Reduce out-of-direction travel

Goal 3: Promote economic development and preserve the mobility of existing freight routes to ensure the efficient movement of goods.

Policies

 Facilitate the through-movement of goods and services along city arterial streets and state highways

- Facilitate the movement of freight by rail and truck
- Promote intermodal safety at and near railway crossings

Objective:

1. Increase total number of jobs by enhancing freight mobility

<u>Goal 4: Provide for a balanced, multimodal transportation</u> system that meets existing and future needs.

Policies

- Maximize efficiency of existing street system
- Maintain acceptable roadway and intersection operations
- Adopt access management standards, multimodal level of service policies/mobility targets, street functional classification, and design standards that balance the need for access with the need for automobile, transit, pedestrian, and bicycle safety, and with the need for efficient movement of through traffic
- Ensure that the benefits and impacts of the transportation system are socially equitable
- Maintain the condition of the street and sidewalk system infrastructure
- Plan for transportation improvements necessary to support future growth and transportation system needs
- Provide a transportation system that serves a balance of transportation modes

Objectives

- 1. Add local streets, as identified in the adopted TSP, to increase connectivity
- 2. Increase walking, bicycling, and transit mode shares
- 3. Maintain the transportation system in a state of good repair
- 4. Increase transit frequency and reliability
- 5. Reduce Vehicle Miles Traveled (VMT) per capita

<u>Goal 5: Plan and design a transportation system to</u> enhance livability and support positive health impacts.

Policies

- Identify the 20-year, multimodal system needs to accommodate developing or undeveloped areas without undermining the "small town" character of Millersburg
- Design and construct transportation system improvements that, to the degree possible, mitigate noise, energy consumption, and neighborhood disruption
- Design and construct transportation facilities with aesthetics and streetscaping to enhance livability, where appropriate and financially feasible
- Encourage bicycle tourism by promoting and upgrading recreational routes through the City and surrounding areas
- Support active transportation options
- Identify and support beneficial public health impacts when planning and funding transportation projects
- Support physical activity by maintaining existing recreational corridors and increasing pathway and trail connections

Objectives

- 1. Increase the total length of shared-use paths and trails
- 2. Improve health and wellness of the general population by increasing active transportation choices and access to care facilities

Goal 6: Demonstrate responsible stewardship of funds and resources.

Policies

- Prioritize preservation of the existing transportation system
- Maximize the cost-effectiveness of transportation improvements
- Support inter-jurisdictional coordination to improve project delivery and leverage funding opportunities

Objectives

- 1. Minimize new capital cost expenditures when possible
- 2. Reduce system lifecycle costs through advanced planning (maintenance and preservation)
- 3. Increase total transportation revenue

<u>Goal 7: Coordinate transportation and land use decision-</u> making to foster development patterns that increase transportation options, encourage physical activity, and decrease reliance on the automobile

Policies

- Provide transportation facilities and services that reflect and support the land use designations and development patterns identified in the Millersburg Comprehensive Plan
- Encourage integration of bicycle and pedestrian facilities into site designs for community activity centers such as schools, parks, employment and shopping areas, and major transit stops

Objectives

1. Increase relative land values

<u>Goal 8: Provide for a diversified transportation system</u> that ensures mobility for all.

Policies

- Provide greater transportation options for those who are transportation-disadvantaged
- Improve accessibility of the public transportation system

Objectives

- 1. Distribute transportation system user benefits evenly across all population groups
- Confirm or revise city transportation design standards (as needed) to help ensure that they meet the requirements set forth in the Americans with Disabilities Act (ADA)

<u>Goal 9: Protect the natural and built environment by</u> judicious use of capacity enhancements and reduction in single-auto trip dependence.

Policies

- Maintain acceptable roadway and intersection operations where feasible, considering environmental, land use, and topographical factors
- Reduce regional roadway environmental impacts by promoting transportation options and/or transportation system management and operations (TSMO) strategies in place of capacity upgrades, wherever feasible
- Reduce the regional carbon footprint by reducing stopped delay, trip lengths, and vehicle miles traveled
- Increase multimodal access to public parks and nature reserves to better expose the public to the benefits of environmental stewardship

Objectives

- 1. Reduce total air contaminates and toxins created by the regional transportation system
- 2. Reduce total CO₂ impacts on lifecycle caused by the transportation system
- 3. Reduce transportation-system-related risks to the natural, built, and cultural resources

DESIGN GUIDELINES AND

MULTIMODAL POLICY

Design guidelines provide clear guidance for how projects in this plan should look and, combined with supporting code, the guidelines also ensure that future development is consistent with the goals of this TSP. This section defines the functional classification of the transportation system and the appropriate street design, access, and mobility targets for these functional classifications.

Functional Classification Plan

Street and highway classifications indicate purpose, design, and function. This functional classification plan ensures that streets are built and maintained with features to support demand from both the surrounding land uses and from traffic that may be traveling through parts of the city. It also describes how adjacent properties are accessed and how much mobility the street provides, as illustrated below.



The functional classification system for the Millersburg street network includes four general classifications, as listed below and depicted in Figure 2. Though not specifically called out, all Millersburg streets are urban; Millersburg city limits are included in the Federal Aid Urban Boundary (FAUB). The next section (Multimodal Street Design Guidelines) provides detailed descriptions of each functional classification. **Arterial** streets are intended to move traffic, loaded from collector streets, between areas and across portions of a city or region. Arterials can be principal or minor arterials given the level of traffic served.

Collector streets gather traffic from neighborhoods but also serve abutting lands, particularly commercial uses. Major collector streets can serve higher density residential, commercial, industrial, or mixed land uses than minor collectors.

Local residential streets are intended to serve the adjacent land without carrying through traffic. To maintain low volumes, local residential streets shall be designed to encourage low-speed travel.

Private streets do not serve local traffic and are not maintained by the City.

Federal Functional Classification

The Federal Functional Classification system is used to identify roadways eligible for federal funds. The size of Millersburg supports a simplified functional classification plan (described above). However, in order to be eligible for federal aid funding, Millersburg is consistent with the federal aid classification system.

All Federal Functional Classification are listed below. The categories apply to both urban and rural areas.

Princip	al Arterial
0	Interstate
0	Other Freeways & Expressways
Minor <i>i</i>	Arterial
Collect	or
0	Major Collector
0	Minor Collector
Local	

The federal classifications of streets in Millersburg are urban minor arterials, urban major collectors or local streets. Federal Aid eligible roads include roads federally designated as urban minor collector, major collector, minor arterial and principal arterial.

Interstate See *Technical Memorandum 9: Transportation Guidelines* in Volume 2 of this plan for further details.

Figure 2. Millersburg Functional Classification Plan (revised 2023)



Note: Conser Road between Woods Road and Old Salem Road will be downgraded to a Residential/Local Road once Transition Parkway is completed. Until that time it is classified as an Arterial.

Multimodal Street Design Guidelines

The traditional term "street standards" implies a focus on the requirements to serve motor vehicles but the design guidance actually addresses pedestrian, bicycle, and motor vehicle needs. The guidelines included in the TSP are multimodal and generally apply to new development. When determining a street cross-section, both functional classification and surrounding land use should be considered.

Where the City is upgrading existing streets and cannot obtain more right-of-way, it shall not be bound by a strict application of the standard cross-sections in the design guidelines. Safety and efficiency for all modes should be the primary concern when designing the upgrade. In many cases, the right-of-way width is more than necessary to provide the suggested cross-section; this limits fences from abutting the sidewalk and allows the City flexibility in adjusting sidewalks/landscaping, adding new features, putting in utilities, or addressing other future unknowns.

The TSP right-of-way and roadway widths are outlined in the City of Millersburg Land Use Development Code (LUDC) to make them consistent with the emphasis on multimodal connectivity. The City is expected to continue to follow the adopted Albany Construction Specifications (ACS) for all public construction.

Arterials

Arterial streets form the primary roadway network within and through a region. They provide a continuous roadway system that distributes traffic between different neighborhoods and major traffic generators. They provide limited access to abutting land, and have a greater focus on mobility and through traffic movement. Arterial streets carry the highest volumes on the City's network. On-street parking is rarely provided on new arterial streets.

Figure 3 illustrates a three-lane arterial that follows the LUDC guidelines. The center turn lane has potential to accommodate a raised median or pedestrian refuge. Figure 4 also illustrates an arterial cross-section, but without a center turn lane and/or median. Roundabouts may also be included on Arterials.



Figure 3. Three-Lane Arterial Cross-Section

Figure 4. Two-Lane Arterial Cross-Section



Collectors

Collector streets gather traffic from and distribute traffic to the local neighborhood and arterial streets. Collector streets are primarily intended to serve abutting lands and local access needs of neighborhoods. Collector streets can serve residential, commercial, industrial, or mixed land uses. This section provides guidelines for suggested crosssections for collectors depending on the use. These guidelines are intended to be flexible. For example, roundabouts may be included on collectors. The residential collector cross-section includes two travel lanes with bike lanes and sidewalk, and may or may not have a landscape buffer, as illustrated below in Figure 5. An option to include on-street parking on both sides of the street has also been included (see Table 2).

A residential collector with a shared-use path has been identified as an option that provides an off-street bicycle facility for users who are not equipped for or are uncomfortable bicycling adjacent to vehicular travel lanes.



Figure 5. Residential Collector (No Parking) Cross-Section

Local Streets

Local streets are intended to serve adjacent land uses with unrestricted access and almost no traffic traveling through the area. These streets serve all modes of travel and should have sidewalks to accommodate pedestrians. Bicyclists are expected to share the roadway with motor vehicles because demands are low and travel speeds are slow. Local residential streets are narrower and generally allow onstreet parking (see Figure 6), while local industrial streets may be wider to accommodate turning trucks.

Skinny (Narrow Street Exception)

An exception to the local residential standard may be considered by the Planning Commission under certain conditions (suggested update to LUDC Section 5.123 (5)(d)):

- Distance between cross streets is no more than 600 feet.
- The street shall be adequate to serve the number of dwelling units.

- The street is a cul-de-sac not designed to provide future through-connection.
- Expected parking demand can be met off street (considering the land uses/zoning in the vicinity).
- The street is provided as an infill connecting street within an existing grid system or will be a short segment (no more than two blocks) fulfilling a similar secondary role in a proposed subdivision.

Although the City may agree that a wide street is not necessary *now*, it may become necessary in the future. For this reason, the Planning Commission may require dedication of a standard right-of-way—with reduced paving width when initially built—so that the City is able increase capacity when needed. The Planning Commission may also consider requiring the provision of additional parking on a one-to-one basis to compensate for loss of on-street parking. Such parking may be located in mini-lots or some other alternative.



Figure 6. Local Residential Cross-Section

Note: This graphic does not include dimensions for the "Alley" cross-section - see Table 2 for details.

Cul-de-Sac Streets

Cul-de-sac streets are common in the newer parts of the community. Few are longer than 200 feet, although the current LUDC allows a maximum length of 400 feet.¹ Culde-sac streets are intended to serve only the adjacent land in residential neighborhoods. Based on recent guidance from the Department of Land Conservation and Development (DLCD) and from various urban planning organizations, it is suggested that the City of Millersburg prohibit cul-de-sac streets except in special circumstances. New cul-de-sac streets should not be permitted except where topography or other natural or human-made features prohibit through connections. If a cul-de-sac is used and it is longer than 150 feet, it should be designed to provide adequate space for access and maneuverability of large and emergency vehicles.

Trails and Shared-Use Paths

Shared-use paths and trails can provide opportunities for bicycle and pedestrian connectivity where new street connections are not feasible. The term "Shared-Use Path" means a multi-use trail or other path, physically separated from motorized vehicular traffic by an open space or barrier and usable for transportation purposes. Shared-use paths can be used by pedestrians, bicyclists, skaters, equestrians, and other nonmotorized users.

Trails generally have a soft surface (barkdust, woodchips, etc.) while shared-use paths are harder surfaces (see Figure 7). The design guidelines in Table 2 suggest a minimum width of 10 feet, although the City may reduce the width of the travelway surface to a minimum of 8 feet in constrained areas such as environmentally sensitive, rural, or development-limited areas of the City. Another exception could be made to reduce the paved shared-use path to an 8 foot width and provide a "single-track" (one-way) soft surface running path on one side.





¹ City of Millersburg Land Use Development Code Section 3.02.030

Table 2. City of Millersburg Multimodal Street Design Guidelines

		Design Widths						
			W	/ithin Curb-To	o-Curb Ar	ea		
Functional Classification	Right-of- Way ¹	Curb- To-Curb Paving ²	Motor Vehicle Travel Lane	Median and/or Center Turn Lane	Bike Lane (Both Sides)	On-Street Parking	Landscap e Buffer (Both Sides)	Sidewalks (Both Sides)
Arterial ⁸								
2 Lanes	60 ft	36 ft	12 ft	N/A	6 ft	N/A	5 ft	5 ft
2 Lanes + Center Turn	80 ft	50 ft	12 ft	14 ft	6 ft	N/A	5 ft	5 ft
Collector – Residential ⁸								
No parking	60 ft	36 ft	12 ft		6 ft	N/A	0–5 ft	5 ft
Parking both sides	60 ft	50 ft	12 ft		6 ft	7 ft	N/A	5 ft
With Shared-Use Path ³	60 ft	36 ft	12 ft	N/A	6 ft	N/A	4.5 ft	5 ft one side, 10 ft multi-use path other side
Local – Residential ⁸								
Parking one side	50 ft	32 ft	Unstriped			Unstriped	4 ft	5 ft
Parking both sides	50 ft	36 ft	Unstriped	NI (A		Unstriped	None or 4 ft	5 ft
Skinny ^{4,5}	50 ft	28 ft	Unstriped	N/A	N/A	Unstriped	5–6 ft	5–6 ft
Alley ⁵	20–24 ft	18– 20 ft	N/A			N/A	N/A	Optional
Local – Industrial ⁸								
Parking both sides	60 ft	40 ft	Unstriped	N/A	N/A	Unstriped	Behind ⁶	5–6 ft
Local – Commercial Ser	vice/Alley							
No parking	30 ft	20 ft	Unstriped	NI / A	NI / A	N/A	NI / A	4.f + 7
Parking one side	40 ft	28 ft	Unstriped	N/A	N/A	Unstriped	N/A	4 11
Trails								
Trails	10–20 ft	10– 12 ft	N/A	N/A	N/A	N/A	2–7 ft	N/A

Notes:

1. Right-of-way may be wider than the suggested cross-section; this limits fences from abutting the sidewalk and allows for flexibility in cases of unforeseen growth or development.

2. Curbs are generally 6 inches wide.

3. Collector with Shared-Use Path includes sidewalk on one side of street and path on other side of street.

4. This standard is only applicable to residential streets under certain conditions and requires Planning Commission approval for the exception.

5. Not appropriate standards for commercial streets.

6. Street trees shall be located on the outside edges of the right-of-way.

7. Sidewalk required on one side only.

8. Center medians and roundabouts may be included

Access Guidelines

Design and analysis guidelines generally are put in place to encourage a reduction in trip length by providing connectivity and limiting out-of-direction travel. Improving roadway network connectivity can enhance accessibility for various travel modes and balance traffic levels among existing roadways and streets by better dispersing traffic. Proper implementation of certain design techniques will improve safety, reduce congestion, and potentially lessen the need to invest in capacity-adding roadway projects.

Local Street Connectivity

Much of the local street network in Millersburg is centralized and fairly well connected in a grid network. However, several physical and natural barriers exist, such as rivers, railroad tracks, and wetlands. Collector streets should be located wherever necessary to relieve congestion on local streets. In general, collectors should be spaced ¼ mile apart.



Road to Old Salem Road could improve local street connectivity.

Roadway and Access Spacing

Access management is key to balanced urban growth. As evidence, the lack of prudent access management plans has led to miles of strip commercial development along the arterial streets of many urban areas. Business activities along arterial streets lead to increased traffic demand and, in turn, the provision of roadway improvements to accommodate the increasing traffic demand. Roadway improvements stimulate more business activity and traffic demand. This cycle often continues to build, and requires extensive capital investments for roadway improvements and relocation. However, with the tightening of budgets by federal, state, and local governments, the financial resources to pay for such solutions are becoming increasingly scarce.

Reducing capital expenditures is not the only argument for implementing access management. Additional driveways along arterial streets lead to an increased number of potential conflict points among vehicles entering and exiting the driveways and the through vehicles on the arterial streets. This increased conflict leads to increased vehicle delay and deterioration in the level of service on the arterial. Increases in volumes and conflict points may also lead to a reduction in safety. Thus, it is essential that all levels of government try to maintain the efficiency of existing streets through better access management.

Table 3 describes access spacing guidelines by roadway functional classification for all categories of city streets in Millersburg.

Table 3. Access Management Guidelines

Functional Classification	Posted Speed	Minimum Spacing between Driveways ^{1,2}	Minimum Spacing between Intersections ^{1,2}
State-managed Arterial	35–45 mph	ODOT Standard	ODOT Standard
Arterial	35–45 mph	300 ft	600 ft
Collector	25–30 mph	50 ft	300 ft
Local Residential	25 mph	Access to each lot permitted	125 ft
Local Industrial	25 mph	Access to each lot permitted	300 ft

Notes:

1. Desirable design spacing; existing spacing will vary. Each parcel is permitted one driveway regardless of the minimum driveway spacing standard, although shared access is encouraged.

2. Spacing standards are measured centerline to centerline.

Mobility Targets

Mobility targets help agencies maintain acceptable and reliable performance, primarily vehicular, for a transportation system. They apply to land use decisions as a way to understand how development could impact the function of the transportation system. The Transportation Planning Rule (TPR) also requires that comprehensive plan amendments and zone changes be consistent with the adopted TSP, and uses mobility targets as one tool for evaluating consistency.

Level of service (LOS) is a widely recognized and accepted measure and descriptor of traffic operations. At both stopcontrolled and signalized intersections, LOS is a function of control delay, which includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Six standards have been established, ranging from LOS A, where there is little or no delay, to LOS F, where there is delay of more than 50 seconds at unsignalized intersections, or more than 80 seconds at signalized intersections.

The City of Millersburg's mobility targets would be applicable to roads owned by the City and are based on LOS, as listed below:

- LOS D or better for signalized intersections²
- LOS D or better for unsignalized intersections

County facilities within the City of Millersburg will be required to meet Linn County mobility targets, which are currently under review as part of the Linn County TSP update process. At the time the Millersburg TSP was written, Linn County had established a goal of maintaining LOS D or better throughout the county-owned arterial and collector system for the planning horizon.









anticipated for the intersection of Transition Parkway and Old Salem Road.

MODAL PLANS

This chapter describes the preferred transportation system plan for the City of Millersburg, which includes seven different elements (multimodal street system; bicycle and pedestrian system; transit; and air, rail, pipeline, and water transportation). There were three parts to the assessment of each of these elements of the transportation system:

- Conduct an inventory of transportation facilities to understand what is complete (fully meets standards) and where gaps in the system exist.
- Evaluate how the system works today from an operational perspective and a safety perspective.
- Anticipate how well the system will accommodate future growth in Millersburg and the surrounding region over the next 20 years.

Each of these elements is summarized briefly in this section, and the detailed inventory is presented in *Technical Memorandum #5: Evaluate Existing Conditions* and *Technical Memorandum #6: Future Baseline Conditions and Needs* (these technical memos can be found in TSP Volume II).

Multimodal Street System

Millersburg generally has a well-connected network of arterial and collector streets that allow traffic to move through the city. The residential developments also loosely follow a grid system, though street connections between neighborhoods are limited by the presence of wetlands.

The railroad tracks to the west and I-5 to the east are significant barriers to future expansion. Old Salem Road is the main arterial providing north-south access to Millersburg and it is a Linn County facility within Millersburg city limits.

A full inventory of the street network is included in *Technical Memorandum #5: Evaluate Existing Conditions* in TSP Volume II.

Existing and Future Traffic Conditions

A review of how existing intersections are working shows little to no congestion on the transportation network. Not surprisingly, given its connection to the City of Albany to the south and access to I-5, the intersection of Old Salem Road (east-west) at Old Salem Road (north-south) is the busiest in the city, but even this intersection experiences only minor congestion during peak travel hours in the morning and evening.

Millersburg's current population is just over 1,600 residents within the city limits. The Corvallis, Albany, Lebanon Model (CALM) travel demand forecasting model, which is based on the regional long-range land use assumptions for the year 2040, anticipates an almost 48 percent increase in households for the City of Millersburg for that time frame. This population growth and the projected increase in employment will create an added stress on the transportation network in the future.

Future traffic volumes were estimated for the year 2040, which is consistent with regional forecasting for the region. Volumes on the street system are forecasted to increase by 20 to 30 percent over the next 20 years. Most of the growth in volume would occur on Old Salem Road. With this growth, study area intersections would still operate within mobility targets, even during the busiest hours of the day. Additional data about future conditions is included in *Technical Memorandum #6: Future Baseline Conditions and Needs* in TSP Volume II.

Safety Review

A safety analysis was conducted to determine whether any significant, documented safety issues exist within Millersburg and to inform future measures or general strategies for improving overall safety. The detailed analysis includes a review of crash records, critical crash rates, and ODOT Safety Priority Index System (SPIS) data which is included in *Technical Memorandum #5: Evaluate Existing Conditions* of TSP Volume II.

A review of five-year of crash data³ showed that of the 28 documented crashes, approximately 60 percent occurred at intersections and about 40 percent were along street segments. Just over one-third of the crashes resulted in minor injury or injuries, but there were no crashes that resulted in a fatality or severe injury.

³ Between January 1, 2009, and December 31, 2013.

The two areas within Millersburg that had the greatest number of crashes were:

- Old Salem Road at Conser Road (3 crashes)
- Old Salem Road between Conser Road and Nygren Road (6 crashes)

When compared to state averages and comparable locations within Millersburg, these locations did not raise significant concerns. However, the majority of crashes were fixed object collisions that occurred due to driver error. Insufficient signage, striping or roadway lighting are common causes for this type of collision; modernization and maintenance of these facilities could improve safety. A roundabout at Old Salem Road and Conser Road would help address safety.

Street System Deficiencies and Projects

Most of the deficiencies in the street system are related to network connectivity (all modes) and substandard roadway facilities.

The street network was assessed for urban design deficiencies, such as missing curb and gutter, sidewalks, or bike facilities. Streets that include all of these amenities are multimodal and provide a range of safe travel options for all types of users. Millersburg has street segments throughout its system that provide multimodal connectivity, but many streets remain unimproved along some segments.

The multimodal street system improvements focus on auto, truck, and associated pedestrian and bicycle system enhancements. These improvements are summarized in Figure 8, and the financially constrained improvements are described in further detail below (and summarized in Table 4). Descriptions of the aspirational improvements are summarized in Table 5, which is located in the Implementation chapter at the end of this document.

S6 – Reconstruct Millersburg Drive (Modernization)

Currently, Millersburg Drive west of Woods Road is a twolane roadway without a shoulder or any dedicated bicycle or pedestrian facilities, although it is classified as an arterial. Project S6 would modernize Millersburg Drive to an arterial standard (assumed two travel lanes, bike lanes, sidewalks, landscaping, no parking) west of Woods Road to the city limits. Looking east: Millersburg drive west of Woods Road currently lacks sidewalks, bike lanes and drainage.



S7 – Reconstruct Morningstar Road (Modernization)

Currently, Morningstar Road within the city limits is a twolane roadway without a shoulder or any dedicated bicycle or pedestrian facilities, although it is classified as an arterial. Project S7 would modernize Morningstar Road to an arterial standard (assumed two travel lanes, bike lanes, sidewalks, potential landscaping, no parking) within the city limits. Morningstar serves as an access to the northern residential areas of Millersburg and also farmland to the north. This project should include coordination with Linn County.



S8 – Reconstruct Woods Road (Modernization)

Currently, Woods Road is a two-lane roadway without a shoulder or any dedicated bicycle or pedestrian facilities, although it is classified as a collector. Project S8 would modernize Woods Road to a collector standard (assumed two travel lanes, bike lanes, sidewalks, potential landscaping, no parking) within the city limits.

Woods Road serves as the most direct connection to Millersburg City Park for the northern residential areas of Millersburg and future planned residential developments. Currently, bicycles and pedestrians in the northwestern region of Millersburg are forced to share a high-speed facility with motor vehicles. If funding is limited, the project would be implemented in two phases that would incrementally upgrade Woods Road to a collector standard (assumed two travel lanes, bike lanes, sidewalks, potential landscaping, no parking) for its entire length. Phase I would complete the modernization of Woods Road from Alexander Lane to Millersburg Drive. Phase II would modernize Woods Road from Conser Road to Alexander Lane.



Looking south: Woods Road lacks pedestrian and bicycle facilities.



Looking west: Zuhlke Road currently dead ends. Extending Zulhke Road to Woods Road could improve local street connectivity. (Project S1)

S11 – Construct Transition Parkway (New Street)

To accommodate traffic growth associated with development of Millersburg industrial properties, route higher speed away from Millersburg's residential areas, and provide a buffer between the existing residential zones north of Conser Road and the industrially zoned property south of Conser Road, a new street is proposed. Transition Parkway, an Arterial, will provide a parallel route to the south of Conser and feature a park with a multimodal path between the two streets. Once constructed, industrial and pass-through local traffic will use Transition Parkway. Conser will continue to serve as a frontage street for residents and will be downgraded to a Residential/Local street classification. Conser Road will terminate near Woods Road to discourage truck and pass-through traffic from using Conser Road. The geometry of the new road where it intersects with Old Salem Road should align with west side access to a future Millersburg I-5 interchange.

Future Connections

Many of the aspirational (unfunded) multimodal street projects that were identified are future local roadway connections that would improve connectivity of neighborhoods to arterial and collector routes. The City previously identified the Zuhlke Lane extension (Project S1) in the 2015 capital improvement plan. All of the future new roadway connections are expected to be driven by development. Because alignments have not yet been determined, the lines on Figure 8 are intended only to indicate the concept and to serve as starting points for planning. Past Goal Exceptions by Linn County and an I-5 Reconnaissance Study completed by ODOT in 2022 contemplate a new I-5 interchange serving Millersburg located almost entirely on the east side of the Interstate. The western landing of the future I-5 interchange over crossing would be located south of Conser Road, according to the study, and should align with the future Transition Parkway at the planned signalized intersection at Old Salem Road. An Interchange Area Management Plan process would further refine the future Millersburg I-5 interchange design, seek public input and work with affected property owners.

Figure 8. Multimodal Street Improvement Options (revised 2023)



MILLERSBURG TSP

Data Sources: ESRI, ArcGIS Online, World Topography Map. 2015. Linn County, Oregon. 2015.



Figure 8

Street Modal Plan

Bicycle and Pedestrian System

Millersburg's bicycle and pedestrian system would benefit from many of the modernization projects identified under the multimodal street system improvements. Additionally, a conceptual trail system was developed that would connect neighborhoods to community gathering places (such as Millersburg Park, City Hall, and Simpson Park).

Existing Conditions

The condition of the City of Millersburg bicycle and pedestrian system varies widely from neighborhood to neighborhood. Most of the newer subdivisions have complete sidewalk systems, while older neighborhoods lack adequate facilities. Generally, the arterial or collector roadways either have shoulder or striped bicycle lanes, but not both. Morningstar Road and Woods Road do not have any bicycle or pedestrian facilities.

Most of the collector and arterial streets are two lanes with narrow cross-sections, low traffic demand and posted speeds greater than 30 mph. Because there are no schools within Millersburg, the major bicycle and pedestrian generators are the two city parks (generally accessed via Alexander Lane) and City Hall.

Bicycle Projects

Figure 9 illustrates the location of existing bicycle facilities along with the type and location of future improvements. It identifies all projects that benefit the system, including those described for the pedestrian plan. The financially constrained improvements are described in further detail below. Descriptions of the aspirational improvements are summarized in Table 5, which is located in the Implementation chapter at the end of this document.

B4 – Old Salem Road Shoulder Lanes (Interim Project)

Project B4 would create continuous bicycle access on Old Salem Road from north to south city limits by widening shoulder at spot locations where shoulder is less than two feet.

As seen in Figure 9, Old Salem Road lacks significant shoulder lanes east of the railroad tracks. Ideally, this segment of Old Salem Road would be modernized to an arterial standard (Project S3); however, there are other projects that have a higher priority. Project B4 is a cost-

effective alternative that provides an interim solution to the discontinuous bicycle access on Old Salem Road by expanding the shoulder at locations where bicycles have to share the road with high-speed vehicular travel.

B5 – Conser Road Multi-Use Path

An off-street multi-use path is proposed within a linear park between Conser Road and Transition Parkway. This is intended to be 12 feet wide, designed for pedestrian and bicycle use.

Conser Road (looking east) lacks marked bicycle lanes and the pavement quality is poor/fair.



Figure 9. Bicycle Modal Plan (revised 2023)



MILLERSBURG TSP

Data Sources:

ESRI, ArcGIS Online, World Topography Map. 2015. Linn County, Oregon. 2015.



Figure 9

Bicycle Modal Plan

Pedestrian Projects

Figure 10 illustrates the location of existing pedestrian facilities along with the type and location of future improvements. It identifies all projects that benefit the system, including those described for the bicycle plan. The financially constrained improvements are described in further detail below. Descriptions of the aspirational improvements are summarized in Table 5, which is located in the Implementation chapter at the end of this document.

P1 – Millersburg Park-City Hall Shared Use Path

Millersburg Park and City Hall are the major pedestrian and bicycle activity centers in Millersburg. Project P1 would construct a shared-use path between Millersburg Park and City Hall, providing important inter-neighborhood connectivity and separating pedestrians from the vehicular travel way.



P5 - Conser Road Multi-Use Path

Project P5 would improve pedestrian and bicycle mobility and access between neighborhoods and to local destinations, such as City Hall and the Corner Store (Center Market). The improvement would include a 12' path located within a linear park that separates Conser Road and Transition Parkway.



P6 – Old Salem Road Sidewalks

This project would extend the sidewalk on the west side of Old Salem Road to the intersection with Nygren Road. This would fill a gap in the network, and provide pedestrian connectivity from the Millersburg residential area to Willamette Memorial Park (cemetery) and a major employment center off Nygren Road.



P7 – Alexander Drive Pedestrian Crossing

Project P7 would provide a pedestrian-activated Rapid Old Salem Road (looking west) lacks sidewalk near Nygren Road

Disabilities Act (ADA) ramp pedestrian crossing across Alexander Drive near Millersburg Park. This project would provide improved pedestrian access, safety, and connectivity between neighborhoods and the park.



Alexander Drive (looking east) provides bicycle and pedestrian access to Millersburg City Park but lacks a safe pedestrian crossing

Figure 10. Pedestrian Modal Plan (revised 2023)



MILLERSBURG TSP

Data Sources: ESRI, ArcGIS Online, World Topography Map. 2015. Linn County, Oregon. 2015.



Figure 10

Pedestrian Modal Plan

Conceptual Shared-Use Path and Trail Network

Many of the aspirational (unfunded) bicycle and pedestrian projects would prioritize bicycle and pedestrian traffic on separated or buffered facilities, primarily shared-use paths and trails. Alignments have not been determined, and the lines on Figure 9, Figure 10, and Figure 11 are intended only to indicate the concept and to serve as starting points for planning. The conceptual network focuses on neighborhood shared-use paths, a potential greenway, and a regional trail system connection from Millersburg to parks and trails to the south.

Neighborhood Shared-Use Paths are intended to provide access for non-motorized users that are not or cannot be provided by the multimodal street system.

P2 – The Millersburg Greenway Trail concept would build a greenway trail within the Crooks Creek riparian corridor, linking Millersburg Park and north Millersburg neighborhoods. Because of its proximity to wetlands and floodplains, this trail could be a soft, seasonal trail or a network of boardwalks and shared-use paths.



Modal Plans

Figure 11. Conceptual Shared-Use Path and Trail Network (revised 2023)



MILLERSBURG TSP

Data Sources:

ESRI, ArcGIS Online, World Topography Map. 2015. Linn County, Oregon. 2015.



Figure 11

Conceptual Shared Use Path and Trail Network

Transit

Because no transit system currently exists in the City of Millersburg, this section focuses on transit-supportive improvements. The Albany Area MPO Regional Transportation Plan (AAMPO RTP) and associated Transit Development Plan will identify projected transit service demand and potential coverage plans for the Metropolitan Planning Organization (MPO) area that includes Millersburg. The extension of public transit service from Albany to Millersburg could be provided by, and in coordination with, Millersburg's regional planning partners. The primary purpose of these improvements is to support regional planning efforts to extend public transit service to Millersburg.

The City does not have a transit system in place; however, Albany Call-A-Ride provides public transportation service in Millersburg for seniors and individuals with disabilities. Oregon Cascades West Council of Governments (OCWCOG) Rideline also provides medical transportation services to individuals who are eligible for Medicaid. Both of these services help fill key gaps in the transportation (and transit) systems. Further discussion on the existing public transportation system may be found in *Technical Memorandum #5: Evaluate Existing Conditions* in Volume II of the TSP.

Air Transportation

The City of Millersburg does not have an airport within its UGB but the Albany Municipal Airport is near the study area. The Albany Municipal Airport is located south and east of I-5 between Knox Butte Road and Santiam Highway, southeast of the southern city limits of Millersburg.

Rail Transportation

There are currently two railroads that travel through and serve the Millersburg area: Union Pacific (UP) and Portland & Western Railroad (PNWR). There are two at-grade crossings immediately west of the city limits. The crossing on Millersburg Road is stop-controlled, and the crossing on Conser Road is an active gated crossing.

Freight Rail Service

In the United States, rail lines are classified as Class I, II or III based on operating revenue, from highest to lowest, respectively. Both the UP and PNWR lines operate freight trains through the Millersburg area. UP runs adjacent to I-5

on the east side of Millersburg, while the PNWR line borders the western city limits. In a single day, the UP track serves approximately 25 through freight trains as a Class I railroad. PNWR serves approximately ten freight trains per day as a Class III railroad. Currently, UP serves seven industries and PNWR serves five industries within the study area, although both UP and PNWR have the potential to handle any freight commodity throughout the area.

Just south of the study area are the Albany/Millersburg Rail Yards, where a project funded through the "Connect Oregon II" grant program was completed in 2014. This project will improve the switching operations by shifting some operations from the Albany yard to the Millersburg yard, which is located at the southern end of Millersburg, between the Willamette River and Old Salem Road.

Passenger Rail Service

Passenger rail service is not available in Millersburg itself; however, an Amtrak station is located approximately 4 miles south of the city limits in the City of Albany. Amtrak provides north-south passenger rail service through the Willamette Valley corridor via its trains: the Amtrak Cascades (between Eugene, Oregon, and Vancouver, British Columbia) and the Amtrak Coast Starlight (between Los Angeles, California, and Seattle, Washington). The passenger rail service runs approximately six passenger trains per day on track owned by UP.⁴

Pipeline Transportation

A major pipeline owned by Santa Fe Pacific Pipeline-North travels through Millersburg along the I-5 corridor and carries petroleum products. International Paper Company-Albany operates a natural gas line that travels through the southern edge of Millersburg.⁵ No changes to the pipeline system are planned.

Water Transportation

Millersburg does not have any designated navigable waterways. A navigable waterway should have current use as a necessary mode of transport for people or commerce. The Willamette River could be considered navigable, although currently, the Willamette River does not play a role in the transportation of people or freight. For it to become an active transportation mode, users would be restricted in height and width because of the stationary highway and railroad bridge crossings.

⁴ Albany Area MPO Regional Transportation Plan Existing Transportation Conditions, October 14, 2015.

⁵ National Pipeline Mapping System Public Map Viewer, Pipeline and Hazardous Materials Safety Administration, 2012.

IMPLEMENTATION

The TSP requires not only a list of planned improvements, but also a plan for implementing them. This portion of the TSP identifies funding sources and planned projects. This section reconciles the available funds with the community needs and planned projects to determine and prioritize the listed project to aid in decision-making if needs exceed the available funds.

Funding Sources

Funding sources in the TSP are categorized by federal, state, and local origin. Many Oregon cities are finding that their portion of state and federal gas tax and vehicle registration receipts is largely used to offset street maintenance expense, and that very little of these receipts is available for capital improvements.

The City of Millersburg currently uses two primary revenue sources to fund transportation system expenses: (1) State Highway Fund (gas tax) and (2) transportation system development charges (SDCs) (SDCs are described in the Local Funding Sources section below). In addition to the current funding sources, the Oregon Department of Transportation (ODOT) estimates that Millersburg may receive a total of \$700,000 (a nonbinding estimate) in discretionary funds by the year 2040 planning horizon.

Year 2040 Funding Forecast: \$4.47 million

Assuming that the current trend in Millersburg's SDC receipts and gas tax revenues continues, and assuming revenue from

regular receipts from Oregon's discretionary funds program, Millersburg's transportation revenue could exceed \$194,000 annually (in 2016 dollars) for a total of \$4.47 million by the year 2040. *Technical Memorandum #8: Finance Program* in Volume II of the TSP provides more detailed discussion on Millersburg's historical funding and the potential for future funding.

Federal Grants/Programs

The federal Highway Trust Fund is largely sourced by the federal gas tax and is distributed by formula to individual states through the Surface Transportation Program (STP). ODOT relies on these distributions to fund many of the

safety, highway, and bridge improvement projects identified in the Statewide Transportation Improvement Program, or STIP.

STP Funds – are available through FAST Act legislation, administered through and by ODOT. STP funds are flexible and can be used for different types of capital improvements and transportation programs. STP funds may also be available from the AAMPO if the project has regional significance.

Federal Enhancement Funds – are available to complete capital improvements and programs related to pedestrian, bicycle, and other alternative travel modes to the automobile. This program can also be used for historic preservation of transportation facilities.

State Grants

The State of Oregon provides grant funds to local jurisdictions to conduct transportation studies, improve bicycle and pedestrian facilities, and participate in state-sponsored transportation activities. Millersburg has not financed any capital projects through State of Oregon grant funds in recent years.

Transportation Growth Management (TGM) Grants -The State of Oregon also awards TGM grants on a competitive basis; the TGM program is jointly administered through the DLCD and ODOT. The City of Millersburg may use these funds to conduct planning and transportation studies related to managing growth and reducing reliance on the single-occupant vehicle (SOV). Historically, Millersburg has not funded any local planning studies through TGM grants.

Local Funding Sources

The City of Millersburg adopted its transportation SDC in 2005. The City collects these funds as new development occurs in the City. Charges (fees) are roughly based on trip generation rates by different types of land uses (such as single-family residential, commercial, industrial, etc.). These funds can only be used to fund transportation improvements that are caused through the impacts of new growth and cannot be used to fix existing capacity deficiencies or maintain existing facilities.

Project Priorities

This section provides a prioritized list of improvements that address transportation deficiencies while considering constraints of the existing system. It includes specific information on cost estimates, and groups the improvements into two categories: Financially Constrained and Aspirational. Improvements listed under financially constrained (see Table 4) reflect improvements that are reasonably likely to be funded through the 2040 planning horizon. The aspirational improvements (see Table 5) might also be constructed within the planning horizon; however, although they are desired by the community, these aspirational projects currently do not have an identified funding source.

The improvement list for the TSP was developed in steps:

- Review improvements in existing plans
- Identify additional improvements
- Evaluate proposed improvements:
 - Primary Evaluation: Evaluation criteria were applied to improvements across all modes based on consistency with Millersburg's transportation goals. These criteria provided a means to evaluate very different improvements using the broad criteria for all improvement types.
 - Secondary Evaluation: Evaluation of improvements based on community needs and timeline









Table 4. Summary of Financially Constrained Improvements

				Planning-Level
	Improvement	Description	Durnaca	Cost Opinion
S6	Reconstruct Millersburg Dr	Reconstruct Millersburg Dr west of Woods Rd to city limits; upgrade to arterial cross-section (bike lanes, curb, gutter, sidewalk) with development	Regional multimodal connectivity and safety	\$1.14 mil ²
S7	Reconstruct Morningstar Rd	Reconstruct Morningstar Rd to arterial cross-section (bike lanes, curb, gutter, sidewalk)	Regional multimodal connectivity and safety	\$650,000
S8	Reconstruct Woods Rd	Two Phases: Reconstruct Woods Rd to arterial cross- section (bike lanes, curb, gutter, sidewalk) – <i>Would</i> <i>preclude need for Improvement B3</i> Phase I: North of Alexander Ln Phase II: South of Alexander Ln	Regional multimodal connectivity and safety	l: \$1 mil II: \$500,000
B4	Old Salem Rd Shoulder Lanes (interim project)	Construct continuous bicycle access on Old Salem Rd from north to south city limits by widening shoulder at locations where shoulder is less than 2 feet	Regional bicycle connectivity and safety	\$50,000
В5	Conser Rd Multi- Use Path	Proposed 12' off street path within a linear park separating Conser Road from Transition Parkway	Local bicycle and pedestrian access, active living, safety, and connectivity	\$885,000 ³
P1	Millersburg Park- City Hall Shared- Use Path	Construct shared-use path between Millersburg Park and City Hall, providing important inter-neighborhood connectivity	Multimodal safety and connectivity	\$100,000
Р5	Conser Rd Sidewalks	Extend the north side sidewalk west to city limits; extend south side sidewalk west to city limits as development occurs	Pedestrian access, safety, and connectivity	\$250,000
Р6	Old Salem Rd Sidewalks	Construct new sidewalks along west side of Old Salem Rd, north of Nygren Rd	Pedestrian access, safety, and connectivity	\$200,000
P7	Alexander Dr Pedestrian Crossing	Provide an RRFB and ADA ramp pedestrian crossing across Alexander Dr near city park	Pedestrian access, safety, and connectivity	\$40,000
S11	Transition Parkway	New Arterial street connecting the Woods Road and Conser Road intersection to Old Salem, south of existing Conser Road	Regional multimodal connectivity and safety	\$6.0 mil ³
		T	otal Improvement Costs	\$3,940,000 ⁴
Millersburg Forecasted Funds through Planning Horizon				
		Approximate Funds Available (Pavem	ent Maintenance/Other)	\$530,000

				Planning-Level
				Cost Opinion
ID	Improvement	Description	Purpose	(2016 Dollars) ¹
Notes:				

1. Does not include the cost of right-of-way.

- 2. This improvement is development-driven; cost is expected to be shared with developer.
- 3. This project was added in a 2023 TSP amendment, therefore the dollars shown for this project are 2023 dollars. This project is driven by development of industrial property south of Conser Road and has been planned since 2018. The project will be funded by a combination of development fees and state economic development grants.
- 4. This amount was not updated to reflect the additions made in 2023.

Table 5. Summary of Aspirational Improvements

15		Description1	D	Planning-Level Cost Opinion
ID	Improvement	Description	Purpose	(2016 Dollars) ²
\$1	Zuhlke Ln Extension	Two phases (to be determined by need): (1) extend Zuhlke Ln west to connect to Woods Rd and (2) extend Zuhlke Ln west to connect to Old Salem Rd	Multimodal connectivity, development, and access	l: \$1 mil II: \$400,000
S2	Millersburg gateway treatments	Provide gateway treatments at northern and southern end of Millersburg (Old Salem Rd)	Tourism and livability	\$15,000 each
S3	Reconstruct Old Salem Rd	Reconstruct Old Salem Rd to arterial cross-section (bike lanes, curb, gutter, sidewalk)	Regional multimodal connectivity and safety	\$1.8 mil
S4	New local streets	The TSP will map the general location of new street connectivity within future development areas— construction of new streets will occur with development	Local multimodal connectivity, development, and access	\$10,000
S5	Grade-separated railroad crossing on Conser Rd	Provide safe, multimodal access across Union Pacific Railroad	Multimodal safety and connectivity	\$4.9 mil ²
S9	Realign Conser Rd at Old Salem Rd	Realign the current offset intersection to a standard 4-leg intersection	Regional multimodal connectivity and safety	\$260,000
S10	Future I-5 Interchange Connection	Add a new connection from NE Old Salem Road (south of Conser Road) to a new, fully directional interchange at Millersburg that would replace existing Murder Creek and Viewcrest interchanges	Local multimodal connectivity, development, and access	\$3.3 mil
B1	Old Salem Rd Shared-Use Path	Construct a 10- to 12-foot-wide bicycle and pedestrian path parallel to Old Salem Rd from the north city limit to the south city limit and within existing right-of-way	Regional bicycle and pedestrian connectivity, safety, and active living	\$3.1 mil
B2	East-West Shared-Use Paths	Construct a local pathway system connecting neighborhoods to Millersburg Park and City Hall	Local bicycle and pedestrian access, active living, and connectivity	\$200,000- \$300,000
B3	Woods Rd Shared-Use Path	Construct a 10- to 12-foot-wide bicycle and pedestrian path parallel to Woods Rd and within existing right-of- way	Local bicycle and pedestrian access, active living, safety, and connectivity	\$440,000
P2	Millersburg Greenway	Construct a greenway trail within the Crooks Creek riparian corridor, linking Millersburg Park and north Millersburg neighborhoods	Multimodal safety, connectivity, and active living	\$530,000

				Planning-Level Cost Opinion
ID	Improvement	Description ¹	Purpose	(2016 Dollars) ²
Transportation Programs or Projects – Not Funded by City of Millersburg				
Τ1	Transit Stop	Identify general location of future transit stop(s) and amenities. Note: The RTP and associated Transit Development Plan will identify projected transit service demand and potential coverage plans for the MPO area, including Millersburg. The extension of public transportation service from Albany to Millersburg could be provided by and in coordination with Millersburg's regional planning partners.	Increase travel options t residents	o Millersburg
TSM1	Speed Warning System on Century Dr	Install a speed warning system on Century Dr	Vehicular safety	
TSM2	Install speed limit signs on Woods Rd and Conser Rd	Conduct a speed study to identify appropriate speed limit posting and properly sign the roadways	Multimodal safety	
TDM	Support Transportation Demand Management	Work with OCWCOG to identify TDM programs and potential funding sources (grants or TDM funds)	Increase travel options to Millersburg residents	
SRTS	Support Safe Routes to School	Work with OCWCOG and Albany School District to implement Safe Routes to School (SRTS) program	Increase travel options to Millersburg residents, safety, and regional connectivity	

Note:

 The highway, bike lane, sidewalk, crosswalk, and transit amenity design elements described are identified for the purpose of creating a reasonable cost estimate for planning purposes. The actual design elements for any facility are subject to change, and will ultimately be determined through a preliminary and final design process. If the improvement impacts a state facility, it will be subject to ODOT approval.

2. Does not include the cost of right-of-way.