



#### Department of Land Conservation and Development

635 Capitol Street, Suite 150 Salem, OR 97301-2540 (503) 373-0050 Fax (503) 378-5518 www.lcd.state.or.us



#### NOTICE OF ADOPTED AMENDMENT

12/24/2012

TO: Subscribers to Notice of Adopted Plan

or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: City of Salem Plan Amendment

DLCD File Number 014-11

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A Copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures\*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Friday, January 04, 2013

This amendment was submitted to DLCD for review prior to adoption pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

\*NOTE: The Acknowledgment or Appeal Deadline is based upon the date the decision was mailed by local government. A decision may have been mailed to you on a different date than it was mailed to

DLCD. As a result, your appeal deadline may be earlier than the above date specified. No LUBA Notification to the jurisdiction of an appeal by the deadline, this Plan Amendment is acknowledged.

Cc: Juile Warncke, City of Salem

Gordon Howard, DLCD Urban Planning Specialist

Gary Fish, DLCD Transportation Planner



# **£2** DLCD Notice of Adoption

This Form 2 must be mailed to DLCD within <u>5-Working Days after the Final</u>

Ordinance is signed by the public Official Designated by the jurisdiction and all other requirements of ORS 197.615 and OAR 660-018-000

	In person electronic mailed
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W 55	DEC 1 7 2012
T A	LAND CONSERVATION AND DEVELOPMENT
PA PA	For Office Use Only

Jurisdiction: City Of Salem	Local file number:	
Date of Adoption: 12/10/2012	Date Mailed: 12/11/2012	
Was a Notice of Proposed Amendment (Form 1)	mailed to DLCD? X Yes No Date: 9/16/201	
☐ Comprehensive Plan Text Amendment	Comprehensive Plan Map Amendment	
☐ Land Use Regulation Amendment	<ul><li>☐ Zoning Map Amendment</li><li>☐ Other: TSP Amendment</li></ul>	
☐ New Land Use Regulation		
Summarize the adopted amendment. Do not	use technical terms. Do not write "See Attached".	
Ordinance Bill No. 20-12 amending the Salem Train	dinance Bill No. 20-12 at its December 10, 2012 meeting insportation System Plan provides a comprehensive update implementation programs for non-motorized transportation or that encourages more trips by non-motorized	
Does the Adoption differ from proposal? Yes, I Changes were made to the initial draft document su and the adoption process. Ordinance Bill No. 20-12	abmitted to DLCD on 9/16/2011 as a result of public hear	
Plan Map Changed from:	to:	
Zone Map Changed from:	to:	
Location:	Acres Involved:	
Specify Density: Previous:	New:	
Applicable statewide planning goals:		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Did DLCD receive a Notice of Proposed Amend		
35-days prior to first evidentiary hearing?	⊠ Yes □ No	
If no, do the statewide planning goals apply?	☐ Yes ☐ No	

Yes No

DLCD file No. 014-11 (18976) [17284]

Please list all affected State or Federal Agencies, Local Governments or Special Districts:

Salem-Keizer Transit District, Salem-Keizer School District, Capitol Planning Commission, Marion County Commissioners, Polk County Commissioners, Oregon Parks and Recreation Department

Local Contact: Julie Warncke

Phone: (503) 588-6211

Extension:

Address: 555 Liberty Street SE

Fax Number:

City: Salem, Oregon

Zip: 97301-

E-mail Address: jwarncke@cityofsalem.net

# ADOPTION SUBMITTAL REQUIREMENTS

This Form 2 must be received by DLCD no later than 5 working days after the ordinance has been signed by the public official designated by the jurisdiction to sign the approved ordinance(s)

per ORS 197.615 and OAR Chapter 660, Division 18

- 1. This Form 2 must be submitted by local jurisdictions only (not by applicant).
- 2. When submitting the adopted amendment, please print a completed copy of Form 2 on light green paper if available.
- 3. Send this Form 2 and one complete paper copy (documents and maps) of the adopted amendment to the address below.
- 4. Submittal of this Notice of Adoption must include the final signed ordinance(s), all supporting finding(s), exhibit(s) and any other supplementary information (ORS 197.615).
- 5. Deadline to appeals to LUBA is calculated **twenty-one (21) days** from the receipt (postmark date) by DLCD of the adoption (ORS 197.830 to 197.845).
- 6. In addition to sending the Form 2 Notice of Adoption to DLCD, please also remember to notify persons who participated in the local hearing and requested notice of the final decision. (ORS 197.615).
- 7. Submit **one complete paper copy** via United States Postal Service, Common Carrier or Hand Carried to the DLCD Salem Office and stamped with the incoming date stamp.
- 8. Please mail the adopted amendment packet to:

ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540

9. Need More Copies? Please print forms on 8½-1/2x11 green paper only if available. If you have any questions or would like assistance, please contact your DLCD regional representative or contact the DLCD Salem Office at (503) 373-0050 x238 or e-mail plan.amendments@state.or.us.

- 2 AN ORDINANCE RELATING TO THE BICYCLE ELEMENT AND THE PEDESTRIAN
- 3 ELEMENT OF THE SALEM TRANSPORTATION SYSTEM PLAN; AMENDING THE
- 4 SALEM AREA COMPREHENSIVE PLAN
- 5 The City of Salem ordains as follows:
- 6 Section 1. Findings.

- a. Statewide Planning Goals
  - (1) Goal 1: Citizen Involvement. To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.

The City conducted substantial public outreach for over a year prior to conducting any hearings on proposals, including citizen forums and the creation of a Stakeholder Advisory Group to obtain public input throughout the planning process and ensure that citizens would be involved in the development of the Bicycle and Pedestian Elements. In addition, to provide additional opportunites for public involvement, the City conducted a public hearing before the Salem Planning Commission, which is the City's committee for citizen involvement under Goal 1, and a public hearing before the City Council. The public outreach, public involvement in the planning process, and hearings before both the Planning Commission and City Council resulted in substantial citizen involvement in the planning process, and comply with, and therefore satisfy, Goal 1.

(2) Goal 2: Land Use Planning. To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

The Salem Transportation System Plan (TSP) is adopted as a Detailed Plan of the Salem Revised Code. The Salem TSP contains Comprehensive Transportation Policies. These policies, together with the goals, objectives, policies, maps, and projects found in each of the individual Salem TSP elements, constitute the basis for transportation planning within the Salem Urban Area. The proposed amendments comply with Goal 2 because, as set forth in these findings, they are consistent with the policies contained in the Salem Area Comprehensive Plan through their support of a multimodal transportation system that connects residential and employment land uses as designated in the Salem Area Comprehensive Plan.

(3) Goal 3: Agricultural Lands. To preserve and maintain agricultural lands.

The proposed amendments are consistent with the land use designations contained in the Salem Area Comprehensive Plan. Neither new projects, nor any of the other proposed amendments, will convert land designated for Exclusive Farm Use by the Zoning Ordinance to non-agricultural uses beyond what is anticipated in the Salem Area Comprehensive Plan, and therefore, the proposal complies with Goal 3.

(4) Goal 4: Forest Lands. To conserve forest lands by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use of forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture.

The proposed amendments are limited to the lands contained within the Salem Urban Growth Boundary (UGB). Because there are no forest lands within the Salem UGB, the proposed amendments will have no impact on forest lands, and therefore, the proposal complies with Goal 4.

(5) Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces. To protect natural resources and conserve scenic and historical areas and open spaces.

The proposed amendments expand bicycle and pedestrian access to natural resources, scenic and historic areas, and open space within the Salem UGB. The proposed amendments encourage non-motorized travel to these sensitive areas. Bicycle and pedestrian travel creates less noise, uses less energy, and is less disruptive to the natural resources than automobile travel and associated parking facilities. As individual projects move forward, they will be designed in a manner that is consistent with the design standards adopted by the City of Salem and will have the least impact on the environment as possible. As Goal 5 relates to the proposed pedestrian trail in the area between Rural Ave. and Hoyt Ave., the proposal provides only that such a trail be studied for the general area, and does not require that a trail be located within the cemeteries located between the two streets. If further study concludes that a trail should be located in the study area, then a minor amendment to the TSP will be necessary, in which case an Economic, Social, Environmental, and Energy (ESEE) consequences analysis will be conducted, if required by Oregon law. An ESEE analysis is not necessary or required at the time of adoption of this

proposal, because the need for a connection between the two streets is subject to further study, and therefore it is not possible to determine whether there will be any impacts to the study area, the presence of any conflicting uses, and the consequences of a trail.

(6) Goal 6: Air, Water, and Land Resources Quality. To maintain and improve the quality of air, water, and land resources of the state.

The proposed amendments expand transportation options and specifically encourage non-motorized travel. The proposed amendments are consistent with Goal 6 because they encourage non-motorized travel and decrease reliance on motorized transportation, which will reduce impacts that motorized transportation has to the air, water, and land resources of the state. The development of projects proposed in this amendment will be undertaken consistent with Oregon and local regulations related to the protection of air, water, and land resources. The Salem TSP directs the provision of transportation facilities and services, including bicycle and pedestrian facilities and services, in a manner that has the least impact on the environment as possible, given the City's urban character. Therefore, the proposal is consistent with Goal 6.

(7) Goal 7: Areas Subject to Natural Disasters and Hazards. To protect people and property from natural hazards.

The Salem TSP seeks to limit transportation facilities in areas that are known to be prone to damage or destruction due to disasters or hazards. Where this is not possible, transportation facilities incorporate proper mitigation and design elements. The overall transportation system is designed to provide multiple routes to most areas of the city via multiple travel modes. The proposed amendments require individual projects to be designed in a manner that is consistent with the design standards adopted by the City of Salem, including the avoidance of an area prone to natural hazards, and if necessary, the mitigation of the risks of hazard, and therefore the proposal is consistent with Goal 7.

(8) Goal 8: Recreational Needs. To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

The proposed amendments have been planned in coordination with the current update to the Comprehensive Parks System Master Plan. The proposed amendments to the Pedestrian and Bicycle Elements are consistent with Goal 8 because they expand connections to existing and

 proposed trails within the City's Park system, and provide for increased pedestrian and bicycle access to parks and recreational facilities.

(9) Goal 9: Economic Development. To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

The proposed amendments are consistent with Goal 9 because they support the City's economic development efforts by offering alternative transportation options to residents and increased access from residential areas to goods, services, cultural resources, and employment centers. Increasing bicycle and pedestrian access also reduces the need for off-street parking.

(10) Goal 10: Housing. To provide for the housing needs of citizens of the state.

The proposed amendments are consistent with Goal 10 because they support the land uses designated in the Salem Area Comprehensive Plan through the provision of an integrated network of facilities and additional transportation options for residents, which increases access from residential areas to goods, services, cultural resources, and employment centers, and encourages higher density housing development and non-motorized travel.

(11) Goal 11: Public Facilities and Services. To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

The Salem TSP constitutes the transportation component of the City's Public Facilities Plan. The Salem TSP matches the provision of transportation services and facilities to the overall travel needs of the community, and strives to provide the most efficient and timely comprehensive transportation system possible. The proposal is consistent with Goal 11 because it supports timely, orderly, and efficient provision of public facilities and services through the creation of an enhanced pedestrian and bicycle transportation plan, and prioritizes projects based on need and feasibility.

 (12) Goal 12: Transportation. To provide and encourage a safe, convenient, and economic transportation system.

The Salem TSP establishes a comprehensive transportation plan that provides increased services and facilities for all modes of travel, increasing overall mobility for the community.

The proposed amendments to the Pedestrian and Bicycle Elements of the Salem TSP are

consistent with Goal 12 because they will benefit modal connectivity, access, safety, convenience, and the increased use of non-motorized transportation.

(13) Goal 13: Energy and Conservation. To conserve energy.

The proposal expands transportation options and specifically encourages non-motorized travel which does not require the use of non-renewable energy sources, thereby conserving such energy resources for future needs. The proposal is consistent with Goal 13 because it aims to reduce energy consumption by increasing the overall number of trips by non-motorized travel.

(14) Goal 14: Urbanization. To provide an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

The proposal is consistent with Goal 14 because it accommodates the needs of a diverse urban population for bicycle and pedestrian travel as alternative modes of transportation within the Salem UGB, and encourages more dense development within the Salem Urban Area by providing additional and more convenient travel options for residents, thereby encouraging patterns of development that have more efficient connections to urban uses, and therby reducing the need to expand the UGB. The location and type of improvements proposed complement and connect with existing and planned improvements in adjacent urban and rural jurisdictions, thereby providing for an orderly and efficient transition among the jurisdiction's transportation systems. The amendments expand travel options for pedestrians and cyclists that help create more vibrant and livable communities, reduce congestion, improve health, increase safety, and provide lower-cost travel choices. Therefore, the proposal is consistent with Goal 14.

(15) Goal 15: Willamette River Greenway. To protect, conserve, enhance, and maintain the natural, scenic, historical, agricultural, economic, and recreational qualities of land along the Willamette River as the Willamette Greenway.

These amendments are consistent with Goal 15 because any bicycle or pedestrian facilities proposed within the Willamette River Greenway must continue to comply with the City's Greenway Plan and with SRC Chapter 141, Willamette Greenway. At the time of development of any project in the Willamette River Greenway, each project shall be required to comply with Goal 15. Projects that are proposed to be located within the Willamette Greenway

Boundary will provide recreational bicycle and pedestrian access to the natural resources within the area in a manner that is least impactful, and most consistent with the importance of the Willamette Greenway as a natural, scenic, historical, agricultural, economic, and recreational resource to the public.

(16) Goals 16, 17, 18, and 19: Coastal Resource Goals.

These Goals do not apply to the Salem TSP.

#### b. Transportation Planning Rule

The State Transportation Planning Rule is the implementing rule for Statewide Planning Goal 12 (Transportation). The State Transportation Planning Rule requires refinement plans to comply with the applicable Statewide Planning Goals, and acknowledged comprehensive plan policies. One of the primary reasons for developing the Salem TSP was to satisfy requirements found in the State Transportation Planning Rule. All of the proposed amendments recommended for adoption are supportive of the goals and requirements of the State Transportation Planning Rule because they support efforts to create a multi-modal transportation network and reduce reliance on motorized vehicles. Therefore, adoption of the proposal complies with the requirements of the State Transporation Planning Rule, and does not require the City to invoke or comply with OAR 660-012-0025(3).

# Salem-Keizer Metropolitan Region: Salem-Keizer Area Transportation Study 2011 2035 Regional Transportation Systems Plan

Salem-Keizer Area Transportation Study (SKATS) is the regional metropolitan planning organization for the Salem-Keizer area. Housed within the Mid-Willamette Valley Council of Governments, SKATS is charged with developing the regional transportation system plan. The State Transportation Planning Rule requires that the Salem TSP and SKATS Regional Transportation System Plan be consistent with each other.

A SKATS staff member was on the Stakeholder Advisory Committee throughout the planning process that led to these proposed amendments. Staff coordinated with SKATS throughout the process to make sure that the proposed amendments are consistent with the Regional Transportation System Plan.

The goals, objectives, and policies of the Salem TSP and the proposed amendments are consistent with the goal of the SKATS Regional Transportation Systems Plan because they

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The Salem TSP complies with all of the goals, objectives, and policies found in the Salem Area Comprehensive Plan. The proposed amendments are consistent with and supportive of the goals, objectives, and policies found in the Salem Area Comprehensive Plan, as described below:

 B. General Development Policy 4, Energy: The City and Counties shall consider and foster the efficient use of energy in land use and transportation planning.

The provision and enhancement of bicycle and pedestrian facilities offer individuals additional options to use energy-efficient modes of transportation, and therefore the proposal is consistent with this Policy.

(2) E. Residential Development Policy 2(a), Facilities and Services Location: Residential uses and neighborhood facilities and services shall be located to accommodate pedestrian, bicycle, and vehicle access.

The proposed amendments identify pedestrian and bicycle facilities necessary to support residential uses and neighborhood facilities, and provide alternative, non-motorized travel options for residential areas to access commercial, retail, and industrial uses, and therefore the proposal is consistent with this Policy.

(3) E. Residential Development Policy 8(a), Circulation System and Through Traffic: Residential neighborhoods shall be served by a transportation system that provides access for pedestrian, bicycles, and vehicles while recognizing the neighborhood's

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29 30 physical constraints and transportation service needs: (a) The transportation system shall promote all modes of transportation and dispersal rather than concentration of through traffic.

The proposal include bicycle and pedestrian facilities that provide access to residential neighborhoods and promotes non-motorized modes of transportation. Proposed projects encourage dedicated routes for non-motorized modes of transportation that will project a safer transportation system and dispersal of traffic. Therefore the proposal complies with this Policy.

(4) J. Transportation Goal: To provide a balanced, multimodal transportation system for the Salem Urban Area that supports the safe and efficient movement of goods and people.

The proposed amendments support the safe movement of people in the Salem Urban Area by foot and on bicycle, by providing additional and dedicated routes for non-motorized modes of transportation. Therefore the proposal complies with this Goal.

(5) J. Transportation Policy 4, Multimodal Transportation System: The transportation system for the Salem Urban Area shall consist of an integrated network of facilities and services for a variety of motorized and non-motorized travel modes.

The proposal expands the planned network of facilities to support walking and bicycling in the Salem Urban Area, and integrates new projects with existing transporation facilities both within Salem and adjacent jurisdictions. Therefore the proposal complies with this Policy.

(6) J. Transportation Policy 11, Decreased Reliance on the Single Occupant Vehicle: Local governments within the Salem Urban Area shall develop multimodal plans, services, and programs that decrease reliance on the Single Occupant Vehicle as the dominant means of travel,

The proposed amendments support a decreased reliance on the Single Occupant Vehicle by planning for an expanded network of bicycle and pedestrian facilities, and encouraging alternative non-motorized modes of transportation through safer and expanded routes. Therefore the proposal complies with this Policy.

(7) J. Transportation Policy 16, Accessibility for People with Disabilities: "The transportation system shall be designed with consideration of the needs of people with disabilities by meeting the requirements set forth in the Americans with Disabilities Act."

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The proposal enhances and increases bicycle and pedestrian transporation facilities in the Salem Urban Area. The planned facilities will be developed consistent with the requirements of the Americans with Disabilities Act, and will provide a safer, more extensive, and more integrated transportation system that will help meet the needs of people with disabilities. Therefore the proposal complies with this Policy.

(8) J. Transportation Policy 19, Neighborhood Livability: "Transportation facilities shall be designed and constructed to: minimize noise; energy consumption; neighborhood disruption; economic losses to the private or public economy, and social, environmental, and institutional disruptions; and to encourage the use of public transit, bikeways, and walkways."

The proposal supports the development and maintenance of bikeways, walkways, and access to public transit through policy and identification of new facilities, which will encourage alternative non-motorized modes of transportation. Increasing bicycle and pedestrian transportation will meet the objectives of this Policy, and therefore the proposal complies with this Policy.

- Section 2. The Bicycle System Element of the Salem Transportation System Plan, adopted June 28, 1998, and amended February 14, 2000, May 14, 2001, January 24, 2005, March 28, 2005,
- 18 April 23, 2007, and April 26, 2010, is hereby deleted in its entirety and replaced with "The
- 19 Bicycle System Element," as set forth in "Exhibit 1," which is attached hereto and incorporated
- 20 herein by reference.
  - Section 3. The Pedestrian System Element of the Salem Transportation System Plan, adopted
- 22 June 28, 1998, and amended February 14, 2000, May 14, 2001, January 24, 2005, March 28,
- 23 2005, April 23, 2007, and April 26, 2010, is hereby deleted in its entirety and replaced with
- 24 "The Pedestrian System Element," as set forth in "Exhibit 2," which is attached hereto and
- 25 incorporated herein by reference.
  - Section 4. The Street System Element, Objective 2, Policy 2.1 Multimodal Street Design is hereby amended as follows:

"The City of Salem shall design its streets to safely accommodate pedestrian, bieyele, and motor vehicle-travel, motorized and non-motorized transportation, including transit service."

1	Section 5. The Transit System Element, Policy 1.6 - Intermodal Connectivity is hereby amended		
2	as follows:		
3	"The City of Salem shall encourage connectivity between different travel modes.		
4	Transit stops, transfer centers, and park-and-ride facilities should be accessible by		
5	pedestrian, bicycle, bus, and automobile travel modes. Priority should be given to		
6	completing the sidewalk network within a quarter-mile of transit stops. Intercity		
7	passenger bus, aviation, and rail terminals should be accessible by transit		
8	services."		
9	Section 6. The Bicycle System Element adopted by Section 2 of this ordinance and the		
10	Pedestrian System Element adopted by Section 3 of this ordinance are hereby made a part of the		
11	Salem Area Comprehensive Plan.		
12	Section 7. Severability. Each section of this ordinance, and any part thereof, is severable, and		
13	if any part of this ordinance is held invalid by a court of competent jurisdiction, the remainder of		
14	this ordinance shall remain in full force and effect.		
15	PASSED by the City Council this 10 day of 1500 feet 2012.		
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19	City Recorder  Approved by City Attorney:		
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COUNCIL OF THE CITY OF SALEM, OREGON

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# **BICYCLE SYSTEM ELEMENT**

Bicycles offer a viable and economical mode of transportation with fewer negative impacts on air quality and finite land resources than those associated with automobiles. To increase the role of the bicycle as a viable mode of transportation in the city, it is important to provide a safe, convenient, well connected, comprehensive system of bicycle facilities that accommodates a range of bicyclists with varying skill levels.

In addition to creating facilities for bicycles, the community must develop an awareness that bicycles and motor vehicles are equal partners on the roadway. The bicycle is considered a vehicle in the State of Oregon Motor Vehicle Code and must adhere to the same rules of the road. Likewise, motorists must respect the presence and vulnerability of bicyclists.

Originally developed in the mid 1990s, the Bicycle System Element was updated through the Bike and Walk Salem project, initiated in 2010. The Bicycle System Element establishes a "roadmap" for a safe and convenient bicycle system in Salem and the surrounding Urban Growth Area. The Bicycle Network presented on Maps 7-1 through 7-5 is intended to guide completion of a comprehensive, safe, and convenient bicycle system. This network incorporates a variety of bicycle facility types and citywide strategies described later in this Element.

It is important to note that some of the bicycle connections shown require additional refinement to determine how the desired connection can be accomplished. This is particularly true of proposed shared-use paths that would appear to cross over private property or through other sensitive areas (e.g., historic resource, natural resource, etc.). What is shown on the Bicycle Network reflects only a conceptual alignment based on the need for connectivity. Any publicly-funded project to pursue creation of a shared-use path will require that a feasibility study be conducted to identify and address the full range of issues associated with the proposed connection.

# What is the bicycle network today?

Existing conditions for bicycling in Salem were evaluated as a basis for creating recommendations for future improvement strategies and projects. The following tasks were undertaken to understand what Salem's bicycle network looks like today:

- · Conducted field work.
- Used information from the City's Geographic Information System (GIS), planning, and public works departments.
- Analyzed crash data from the Oregon Department of Transportation (ODOT).
- Examined existing local, regional, and state plans and policies.
- Collected extensive public input through the project website, questionnaires, an online interactive comment map, listening stations, project meetings, and public open houses.

Existing condition highlights are described in the following section.

#### NETWORK COVERAGE

Salem's existing bicycle network generally consists of bike lanes, paved and unpaved path corridors, and a small network of streets with recently-installed shared lane markings. Most bike lanes exist on arterial and collector



streets, which provide direct and efficient routes to major destinations. The distribution of Salem's bike lane network generally reflects the distribution of major streets across the city.

However, while several streets radiating from Downtown include bike lanes, fewer options exist for cross-town travel.

#### SYSTEM CONNECTIVITY

Connectivity is also an issue, as the bike lane network includes gaps in several locations. The City has recently expanded the on-street bikeway system with more diverse facility types, namely the recent installation of shared lane markings on Chemeketa Street NE and Commercial Street NE in Downtown and on Rosemont Avenue NW in West Salem. Implementation of these recent projects contributes to a more well-connected on-street system in these areas.

#### **BICYCLE PARKING**

The availability and type of bicycle parking in Salem varies by location. Downtown Salem provides the greatest availability of short- and long-term parking options, including an expanding inventory of bicycle racks. Bicycle lockers, available for rent on a quarterly or semi-annual basis, exist in the Liberty Square and Chemeketa parkades, YMCA, City Hall, and at the 12th Street SE Amtrak Station.

#### BICYCLE WAYFINDING SIGNAGE

The City of Salem has achieved significant progress in developing its bicycle wayfinding signage, particularly in the downtown core and surrounding neighborhoods, and in inner West Salem. The City plans to install additional signage in these areas to simplify bicyclist connections to bridges and other key destinations and routes.

#### OFF-STREET PATH NETWORK

Salem currently lacks a comprehensive and interconnected path network, with existing paths concentrated primarily in the city's central neighborhoods. The existing paved path system includes longer path segments along Salem Parkway, River Road S, State Street, 12th Street (NE and SE), and on the Center and Union Street bridges; while shorter segments exist within Riverfront Park, Bush's Pasture Park, and State Lands Ballfields City Park. Informal unpaved paths also exist along some undeveloped public rights-of-way. Despite the presence of short segments, paths are generally lacking in most of West Salem and in neighborhoods east of Interstate 5.

#### **BICYCLE ACCESS TO TRANSIT**

Bicycle access to transit is essential to establishing seamless multi-modal transportation connections. Bicycling and transit are mutually beneficial, and increasing bicycle access is recognized as an efficient and effective way to improve transit ridership, as bicycles effectively extend transit's reach.

The availability of transit service can also help meet the needs of bicycle users. For example, bicyclists who may not be comfortable riding at night or in inclement weather may be more inclined to make a bicycle trip knowing that transit exists as an alternative option for their return trip should conditions change during an outing. Transit can



also help bicyclists overcome steep hills and provides a convenient safety net when bicyclists encounter a flat tire, equipment breakdown, or other unforeseen event.

Transit stop passenger infrastructure, such as short- and long-term bicycle parking near transit stops, can help to improve multi-modal transportation connections. Some of the major transit stops in Salem provide bicycle parking, though most do not. Currently, Cherriots buses include bike racks with a capacity for two bicycles.

#### **NEEDS ASSESSMENT**

The technical bicycle system needs assessment included field work and the review of background data and information to determine items such as key bicyclist destinations and existing access, high crash corridors and intersections, and the location of transportation disadvantaged populations.

Supplementing field work and the review of background information, the project team identified bicycle system needs based on feedback received during the public involvement process. Bicycle system need highlights are provided below:

- There is a desire for improved bicycle system connectivity.
- More formalized bicycle facilities are desired along major streets (e.g., 25th Street SE, Reed Road SE, Skyline Road S, Turner Road SE, Brown Road NE).
- Enhanced visual cues (e.g., shared lane markings or physical separation) are needed to increase motorists' awareness of bicyclists on the roadway.

#### **BICYCLE USER TYPES**

Bicyclists vary substantially in their experience, confidence levels, and preferences for bicycle facility types. Since this Plan aims to enhance user safety and comfort for all potential bicyclists, it is important to understand the various types of bicyclists that may want to use the system.

The overall population can be divided into four general groups according to their abilities and inclination toward bicycling for transportation. The following sections briefly describe the four primary bicycle user types.

- "Strong and fearless" These bicyclists make up the smallest portion of the bicycling population, and are comfortable bicycling on almost any road (regardless of roadway condition and presence of bicycle facilities).
- "Enthused and confident" These bicyclists represent the majority of people who bike regularly. These cyclists
  typically prefer to ride on streets designed with bicyclists in mind (e.g., streets with bike lanes).
- "Interested but concerned" These bicyclists represent the majority of the general population. They likely rode a bike during childhood and may ride for recreation, but they hold concerns about riding on major streets with higher vehicle speeds and volumes. Riding on residential streets is a possibility, but these riders typically wouldn't ride on or across major streets without bicycle infrastructure.



 "Not Interested in Bicycling ('No Way, No How')" This population is either unable to ride a bicycle or is simply not interested in bicycling regardless of the existence of a bikeway network.

This plan aims to serve the first three categories, with an emphasis on the "Interested but concerned" category because these bicyclists represent the majority of the general population. The breakdown of the population represented by each of these four groups is represented by the relative size of the bars in the figure below. This typology is helpful for framing the discussion about how and where people may choose to bicycle.

This Plan is targeted at increasing the user comfort and safety of the first three categories of bicyclists (those who are interested in bicycling) on Salem's bicycle network.



# **Policy Framework**

The Bicycle System Element of the Salem TSP establishes goals, objectives, and policies that will guide how improvements are made to the bicycle network over the next 25 years. Salem's previous Bicycle Plan placed a major focus on building new bike lanes, which typically accommodate more confident and commuter cyclists. Research in recent years has shed light on a much broader user base whose preferences and demands may differ from one another. Considering a wider range of potential bicycle facilities (such as shared lane markings, family-friendly bikeways, colored bicycle lanes, cycle tracks, and buffered bicycle lanes in addition to the bike lanes and trail network recommended in the previous Bicycle Plan) increases the potential to accommodate a greater number of users. Considering a wider range of potential bicycle facilities also increase the likelihood of providing a complete bicycle network balanced with other modes, such as transit and automobiles.

This updated Bicycle Plan goes beyond an emphasis on bicycle lanes by focusing on the following areas:

- Serving a broad range of existing and potential cyclists (including users of various ages, experience and confidence levels, and trip types).
- Building upon investments in the existing and planned system and enhancing the existing system to better serve users.
- Expanding the system to streamline bicycle connections and develop new routes to better serve existing and future destinations.
- Establishing seamless links with surrounding communities including Keizer, and Marion and Polk counties.
- Enhancing user safety and comfort.



# Goals, Objectives, and Policies

The City of Salem has the following goals and policies for the planning, development, and operation of its bicycle system:

GOAL: To provide a comprehensive system that accommodates a range of bicyclists with varying skill levels by providing a well-connected system of bicycle facilities that will encourage increased ridership, safe bicycle travel, active transportation, and support public health.

#### **OBJECTIVE NO. 1**

The City of Salem will create a comprehensive system of bicycle facilities.

#### Policy 1.1 Provide Bicycle Facilities on Arterial and Collector Streets

Bicycle lanes shall be provided on all newly constructed Arterial and Collector streets. Arterial and Collector streets undergoing overlays or reconstruction will be re-striped with bicycle lanes, as designated on Maps 7-1 through 7-5. Every effort will be made to retrofit existing Arterials and Collectors with bicycle lanes, as designated on the Maps. Where bicycle lanes are difficult to accommodate on existing Arterials and Collectors due to limited right-of-way or other environmental constraints, alternate bicycle facilities may be provided on a parallel street within the vicinity of an existing Arterial or Collector.

#### Policy 1.2 Mitigation of On-street Parking Loss Due to Future Bicycle Facility Projects

Where new, City-sponsored bicycle facilities require the removal of on-street parking spaces on existing roadways, the City shall provide parking facilities that mitigate, at a minimum, the existing parking demand with nearby on-street parking. This policy does not apply to street widening or major reconstruction projects.

#### Policy 1.3 Connecting Trail Network

To enhance the system of on-street bicycle lanes, the City shall encourage the development of a connecting, multiuse trail network using linear corridors such as: rivers, creeks, utility easements, and abandoned rail lines using such programs as rail-banking that complements the on-street bicycle system.

#### Policy 1.4 Eliminate Barriers to Bicycle Travel

The City shall actively pursue a comprehensive system of bicycle facilities through designing and constructing projects, as resources are available, and implementing standards and regulations designed to eliminate barriers to bicycle travel.

As a result of this policy, new developments or major transportation projects will neither create new, nor maintain existing, barriers to bicycle travel. Through the implementation of development Codes and standards, the City will require the creation of pathways and connections for bicyclists to schools, neighborhood shopping, and other activity centers. The City will adopt, include, and use bicycle supportive design and signage standards as part of roadway design standards, zoning and subdivision regulations, parking code requirements, railroad crossing standards, and other appropriate documents. As resources are available, the City will support projects designed to eliminate identified barriers relating to bicycle travel, either as stand-alone projects or as part of a major capital improvement project.



#### Policy 1.5 Bicycle System Identification and Signage

As resources are available, the City shall, in consultation with local bicyclists, review existing and proposed bicycle lanes, family-friendly bikeways, cycle tracks, buffered bicycle lanes, crossing treatments, other bicycle facilities, and other streets, to identify a preferred bicycle system, and make improvements as necessary for these routes to function better for bicyclists. The system shall be identified using wayfinding signage on facilities, and shown on updates of the bicycle route map.

Wayfinding signage shall be prioritized to aid cyclists' ability to navigate from arterials or collectors to nearby, parallel family-friendly bikeways, especially in areas with a high number of destinations such as shopping areas.

#### **OBJECTIVE NO. 2**

Increase citywide journey to work (U.S. Census) bicycling mode share to 3 percent by 2020 and 5 percent by 2030 (2008 baseline is 1.6 percent based on 2006-2008 American Community Service data).

#### Policy 2.1 Establish a Baseline of Bicycle Use

Upon adoption of the Plan, the City will conduct the necessary research to establish a baseline of bicycle use for all trips. Necessary facility inventories and usage surveys will be performed every five years to determine the success or failure of the Plan's bicycle goal, objectives, and policies.

#### Policy 2.2 Complete the Bicycle System

Recognizing that a completed system of bicycle facilities is one of the most important factors in encouraging bicycle travel, the City will construct 70 percent of the bicycle network by 2030. The "bicycle network" is defined as shared lane markings, family-friendly bikeways, bike lanes (buffered, raised, and colored included), off-street paths, and cycle tracks, with priority given to projects that fill a missing link in the bicycle system or address an identified safety hazard.

#### Policy 2.3 Establish Minimum Standards for Bicycle Facility Maintenance

The City shall develop minimum standards that will maintain bicycle facilities clean of debris, properly striped, and clearly marked and signed.

#### Policy 2.4 Develop a Maintenance Reporting Program

To assist the City in achieving a high standard of maintenance on existing bicycle facilities, a program shall be developed that allows the public to identify repair, sweeping, and other maintenance needs.

# Policy 2.5 Require Relevant Bicycle Accommodations During All Transportation Construction Projects

The City shall require each urban street construction project within the city to include consideration of bicyclists in the traffic control plan; including placement of signs, routing, and lane width. High standards for resurfacing and sweeping shall be required of all construction projects in the roadway right-of-way.



#### Policy 2.6 City Code Requirements for Bicycle Parking

The City of Salem Revised Code will contain bicycle parking supply requirements and standards that require new developments to provide a minimum amount of bicycle parking, based on the needs of the specific zone or land use type.

#### Policy 2.7 Develop a Bicycle Parking Program for Businesses

To assist businesses desiring to install bicycle parking, standards and placement criteria will be developed for acceptable short- and long-term bicycle parking facilities, including bicycle parking corrals. Annually, the City will provide a limited number of installed bicycle racks to existing businesses and agencies in commercial districts that were developed prior to bicycle parking requirements, by request, on a first come, first served basis, as resources are available.

#### Policy 2.8 Bicycle Parking at Transit and Intermodal Facilities

The City shall encourage the installation of secure, public bicycle parking facilities for both short- and long-term parking needs at park and ride facilities, transit stations, bus terminals, train stations, airports, and other intermodal facilities. The City shall encourage the continuation of bicycle racks on transit vehicles.

#### Policy 2.9 Promote Bicycle Use

The City shall encourage bicycling by sponsoring or participating in activities that promote bicycle transportation and recreation.

#### Policy 2.10 Enhance Bicycle Access to All City Offices

Where practicable, the City shall provide secure bicycle parking and lockers for employees and visitors at all City offices and provide showers and lockers for employees.

#### Policy 2.11 Travel by Skateboard

The City encourages all forms of active transportation, including the use of skateboard and similar devices, in a manner that protects the safety of all roadway users.

#### **OBJECTIVE NO. 3**

The City of Salem shall encourage education services and promote safe bicycle travel in order to reduce the number of accidents involving bicyclists by 50 percent and aim for zero fatalities by the year 2030 (note: 60 reported bicycle crashes in 2008).

#### Policy 3.1 Target and Eliminate Key Behaviors that Lead to Bicycle Accidents

The City shall encourage schools, safety organizations, and law enforcement agencies to provide information and instruction on bicycle safety issues that focus on the most important accident problems.



#### Policy 3.2 Bicycle Safety Awareness Programs

The City shall develop training and awareness programs that encourage the public to ride safely and use bicycle safety equipment when bicycling. These programs shall encourage all roadway users to courteously share the road and be aware of their privileges and responsibilities when driving, bicycling, and walking.

#### Policy 3.3 Safe Access to Schools

The City shall work with the Salem-Keizer School District and neighborhood associations to maintain and improve its programs to evaluate the existing bicycle access to local schools and supporting infrastructure at schools (bicycle racks, lockers, etc.), estimate the current and potential use of bicycling as a travel mode, evaluate safety needs, and propose changes to increase the percentage of children and young adults safely using this mode.

#### **Performance Measures**

Evaluating progress towards the implementation of bicycle goals can help the City and community understand what has been achieved through project implementation. This information can inform plan updates and future plans. The performance measures and targets in Table 7-1 rely on readily available data, specifically network implementation and journey to work mode share data collected by the US Census, to help ensure periodic evaluation.

TABLE 7-1
Bicycle System Performance Measures

Performance Measure	Target
Bicycle Commute Mode Share*	Increase citywide journey to work (US Census) bicycling mode share to 3 percent by 2020, and 5 percent by 2030.
Bicycle Network Construction	Construct 70 percent of the bicycle network by 2030. The "bicycle network" is defined as shared lane markings, family-friendly bikeways, bike lanes (buffered, raised, and colored included), off-street paths**, and cycle tracks.

<sup>\*</sup>According to the American Community Survey (ACS), bicycle Journey to Work mode share was 1.6% for t2006-2008.

<sup>\*\*</sup>Note that shared-use paths should be counted only toward bicycle network construction evaluation and not pedestrian network construction so as not to double count shared-use path construction.



# **Bicycle Facility Types**

The recommended bicycle projects refer to several different bicycle facility types. A brief description of each facility type and purpose is provided below for reference.

TABLE 7-2
Bicycle Facility Types and Treatments

# Facility Type



Bike Lanes: Designated exclusively for bicycle travel; separated from vehicle travel lanes with striping and also include pavement stencils; typically most appropriate on major streets where higher traffic volumes and speeds create a greater need for separation between cyclists and motorists. This is an FHWA approved treatment.

Shared Lane Markings: High-visibility pavement markings that heighten the awareness of cyclists sharing the road with motorists; often used on streets where bike lanes are desirable but not possible due to physical or other constraints; positioned strategically in the travel lane to encourage cyclists to ride in a straight line so their movements are predictable to motorists, while also riding at an appropriate distance from the "door zone" of adjacent parked cars; may not be used on streets with posted speeds greater than 35 M.P.H. This is an FHWA approved treatment.

Family-Friendly Bikeways: Also known as bicycle boulevards, these are lower-volume, lower-speed streets optimized for bicycle travel through treatments such as traffic calming, bicycle wayfinding signs, pavement markings, and intersection crossing treatments; intended to prioritize bicycle circulation while discouraging non-local cut-through traffic; intended for the "interested, but concerned" bicycle user types, appropriate treatments should be determined on a case-by-case basis through engineering analysis and coordination with agencies including Public Works and emergency services. Note that standards/guidelines vary depending on the specific treatment under focus.



Shared-Use Paths: Physically separated from motor vehicle traffic; serve one or more nonmotorized user including bicyclists, pedestrians, in-line skaters, skateboarders, or wheelchairs; typically serve bi-directional traffic. Design guidance is provided by FHWA and ODOT. Design should be tailored to the particular project location.



Colored Bike Lanes: Similar to conventional bike lanes, with an added coloring treatment to heighten the facility's visibility; particularly effective on bike lanes with frequent vehicle/cyclist conflict points; coloring may take the form of an asphalt mix, pavement dye or skid-resistant application material. The focus of colored bike lanes should be conflict areas. FHWA has issued interim approval for green bike lanes.



TABLE 7-2
Bicycle Facility Types and Treatments

#### Facility Type



Buffered Bike Lanes: Conventional bike lanes paired with a delineated buffer space (typically through pavement striping) further separating the bike lane from the adjacent motor vehicle travel lane and/or parking lane; provide greater shy distance between motor vehicles and bicyclists; typically used on streets with excess width (either in the number of lanes or lane width). This is an FHWA-approved treatment, provided MUTCD-compliant markings are used.



Contra-Flow Bike Lanes: Enable bicyclists to safely ride in the opposite direction of vehicle traffic on one-way streets; placed on the opposite side of vehicle travel lanes (to the motorists' left), and typically separated from traffic with a double yellow line; signs should be posted at intersecting streets, alleys and driveways, informing motorists to expect two-way traffic; intersection traffic controls along the street should also be installed and oriented toward the contra-flow lane; on-street parking prohibited between the contra-flow lane and the curb. This is an FHWA-approved treatment, provided MUTCD-compliant signs and markings are used.



Cycle Tracks: Exclusive bicycle facility combining the user experience of a shared-use path with the on-street infrastructure of a conventional bike lane; separated from vehicle travel lanes, parking lanes and sidewalks; can be either one-way or two-way, on one or both sides of a street; careful design attention is necessary at intersections, driveways and other bicycle/vehicle conflict points. Design guidance is provided by FHWA and ODOT.



**Bicycle Detection (Signalized Intersections):** Enables cyclists to trigger a green signal phase through the use of a push-button, loop detector or video detector. This is an FHWA-approved treatment



Advanced Stop Bars ("Bike Boxes"): Designated area at the head of a traffic lane at a signalized intersection providing bicyclists a safe and visible means to maneuver ahead of queuing traffic during a red signal phase; helps prevent "right hook" collisions with turning vehicles at the start of the "green" signal indication by positioning cyclists in front of the leading vehicle; additional treatments include a right-turn-on-red prohibition, supplemental warning signs, and may also include pavement coloring to heighten visibility of the bike box. This is currently designated by FHWA as an "experimental" treatment.



TABLE 7-2
Bicycle Facility Types and Treatments

#### Facility Type



Bicycle-Only Signals: Traffic signal device used in conjunction with conventional signals; applied at signalized intersections to indicate bicycle-only signal phases or other bicycle-specific timing strategies; typically used to separate bicycle movements from conflicting motor vehicle movements (e.g., separating through bicycle movements from vehicle turning movements). Bicycle symbols on traffic signals are currently designated by FHWA as an "experimental" treatment.



Bicycle Wayfinding Signs: Wayfinding signs specifically intended for bicyclists; placed at key locations leading to and along bicycle routes, at junctions of multiple routes, and at user "decision points;" may display destinations, distances and "riding time." This is an FHWA-approved treatment, though more limited compared with Salem's current signs. ODOT prescribes additional standards for signs within ODOT right-of-way.

# Citywide Recommendations

The following section describes recommendations to enhance Salem's bicycle environment on a citywide scale.

#### INTERSECTION UPGRADES

Facilitate convenient, safe, comfortable and intuitive bicycle movements through intersections using intersection crossing treatments. Several potential intersection crossing treatments for bicycles are described in Table 7-2. Additional potential treatments include the optimization of traffic signal timing for bicycle speeds, and the reduction of multiple vehicle turning lanes (to reduce the number of potential conflict points).

Appropriate treatments will vary based on site-specific conditions and issues. A detailed engineering analysis should be conducted prior to implementation to identify the appropriate treatment(s) at each intersection.

#### RAILROAD CROSSING IMPROVEMENTS

Though most at-grade street/railroad crossings in Salem intersect perpendicularly (the ideal crossing angle for bicyclists, pedestrians, and wheelchair users), the crossing angle at some locations may present difficulties for safe bicycle maneuvers. Additionally, railroad tracks imbedded in the street parallel to bicycle travel (e.g., along Front Street NE north of Downtown) may complicate travel. Where a 90-degree railroad/street crossing is not possible, additional shoulder widths are to be provided to enable a cyclist to cross at a safe angle. If a safe crossing angle cannot be provided (due to physical constraints or other factors) and where train speeds are low, commercially-available compressible flangeway fillers should be considered.

#### TRANSIT ACCESS ENHANCEMENTS



The City of Salem and Salem Area Mass Transit District will need to work jointly to enhance pedestrian and bicycle access to transit stops. Key recommendations include providing:

- · Convenient and direct bicycle links to transit stops.
- · Paved landing pads to safely accommodate wheeled users.
- · Covered passenger shelters.
- · Seating areas.
- Posted system map, route map, and schedule (additional options include real-time information display of upcoming bus arrivals).
- · Adequate lighting.
- Trash receptacles.
- · Short- and long-term bicycle parking.

#### **BICYCLE PARKING**

Destinations in Downtown and throughout Salem could benefit from improved bicycle parking facilities. Based on international best practices for cost, simplicity of design and theft-resistance, the recommended single-rack design is the inverted-U style rack mounted parallel to the curb.

For higher capacity bicycle parking, "bike corrals" provide increased bicycle storage options. Bike corrals involve converting a specific number of on-street vehicle parking spaces into bicycle parking (one on-street parking space typically has the capacity for up to ten bicycles). In addition to providing greater capacity (compared with a single sidewalk rack), on-street bicycle parking can derive numerous benefits, including:

- · Maximizing space for sidewalk café tables and seating.
- Improving the pedestrian experience and mobility by reducing congestion from parked bicycles on the sidewalk.
- Improving visibility for merchants and storefronts by opening sightlines from the street and passing traffic.
- Creating additional activity nodes and drawing attention to storefronts.

This Plan supports efforts to diversify Salem's bicycle parking options, including the Downtown Vision 2020 Bicycle/Pedestrian Working Group's concepts for Downtown bike corrals. It is recommended that the City establish criteria for determining appropriate locations for bike corrals or other high-capacity facilities throughout the community (e.g., locations where parking demand exceeds capacity, locations with limited sidewalk space, and locations with clusters of cyclist destinations). Additional options include creating a bicycle rack request system whereby the City works with merchants who express interest in expanding bicycle parking within the public right-of-way. Opportunities also exist to leverage improved bicycle storage in tandem with private development.



#### TRIP-END FACILITIES

The presence and quality of trip-end facilities (e.g., showers, lockers, and changing facilities) can greatly influence a person's decision to complete a trip via bicycle. These facilities enable cyclists to change into work attire (especially after riding in wet or hot conditions). The City of Salem will work with and encourage major employers to improve existing trip-end facilities and/or develop new facilities, as well as encourage developers to include trip-end facilities with new development.

The City will first work with major employers to inventory and assess existing trip-end facilities, followed by identification of locations where new or upgraded facilities are needed. New facilities could be sited at major employment sites, at gyms, and other centrally-located areas.

#### WAYFINDING SIGNAGE

Placing signs along the bikeway network indicating to bicyclists their direction of travel, location of destinations, and the riding time/distance to those destinations will increase users' comfort and accessibility to the bicycle system. Wayfinding signs also visually cue motorists that they are driving along a bicycle route and should use caution.

Salem will build upon the existing and planned signage system by expanding on this concept to cover bikeways throughout the community. Developing a Bicycle Wayfinding Signage Plan would establish guidance for the orderly expansion of the network along existing, planned and proposed bikeways.

#### WILLAMETTE VALLEY SCENIC BIKEWAY

Stretching from Champoeg Park to Eugene and passing directly through Salem, the Willamette Valley Scenic Bikeway represents one of Oregon's most popular and well-known recreational cycling routes, and is credited with boosting bicycle tourism in the Willamette Valley. The route includes wayfinding signage created by the Oregon Parks and Recreation Department (OPRD) to help navigate bicyclists through communities in which the Bikeway passes. As Salem's bicycle network expands to provide additional route options, the City and OPRD should periodically revisit the designated Scenic Bikeway route to explore opportunities for adjustment in order to provide a premier riding experience. For example, completion of a bicycle/pedestrian bridge linking Riverfront and Minto-Brown Island parks presents an excellent opportunity to shift the Scenic Bikeway to a pleasant park-like environment (and away from heavy traffic on the Commercial Street SE/Liberty Street SE/River Road S corridors). The Bikeway's wayfinding signage will accordingly be updated in tandem with route modifications.

#### SYSTEM MAINTENANCE

System maintenance can increase user safety and comfort and encourage the use of the bicycle network. Recommended maintenance activities include the continuation of sweeping, debris removal, sign replacement, trimming overgrown vegetation; graffiti removal, and pavement and signal repair as needed.

#### PROGRAMMATIC STRATEGIES

Becoming a truly bicycle-friendly community requires a multi-faceted approach including encouragement, education, enforcement, and evaluation programs to support on-the-ground infrastructure improvements. Bicycle education and promotional programs can:



- · Promote safety.
- Raise awareness of bicycling as a legitimate transportation mode.
- · Connect current and potential riders to existing resources.
- Educate current and potential bicyclists about their rights and responsibilities.
- Encourage residents to bicycle more often.

These efforts should provide measurable results in the bicycling mode share, increase safe rider behavior (and correspondingly reduce crashes), and raise cultural awareness of cycling.

# Recommended Bicycle Projects

Recommendations for bicycle facilities were developed based on:

- · Project goals, policies, and evaluation criteria.
- · Field work.
- · Findings from the bicycle needs assessment.
- · A review of background documents, plans, studies, and available data.
- Input from the Project Stakeholder Advisory Committee; and input from the public involvement process.

The existing, planned, and proposed bicycle network is shown on Maps 7-1 through 7-5 and individual bicycle projects are listed in Tables 7-5 through 7-7.

Brief descriptions of the types of proposed projects are provided below.

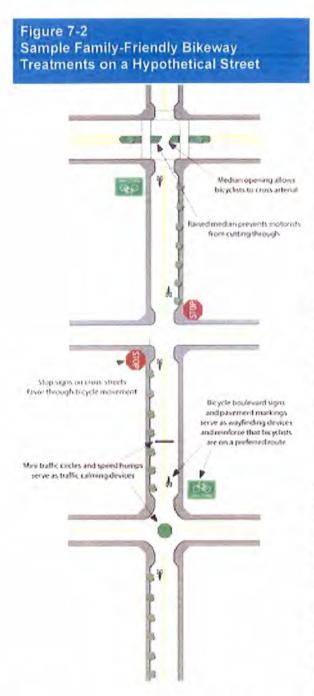
#### **BIKE LANES**

The recommended expansion of Salem's bike lane network is illustrated on Maps 7-1 through 7-5. The expansion is envisioned to occur through new street construction, gap closures on existing streets, and as part of major reconstruction projects on existing roadways.

#### SHARED LANE MARKINGS

Described in Table 7-2, shared lane markings are recommended as an interim measure when physical or other constraints preclude the installation of bike lanes. A combination of bike lanes and shared lane markings can also be used, particularly on streets traversing hills. However, despite the presence of shared lane markings, some riders may still feel uncomfortable sharing the road with motorists on higher-volume roadways. Therefore, this treatment may have limited effectiveness in attracting a broad range of users.

#### FAMILY-FRIENDLY BIKEWAYS



Described in Table 7-2 and illustrated in Figure 7-2, family-friendly bikeway treatments are intended to prioritize bicycle circulation while discouraging non-local, cut-through traffic. Family-friendly bikeways (also known as "bicycle boulevards") go beyond signed bike routes to create a safe and attractive riding environment for cyclists of all ages, abilities, and comfort levels.

Many local streets in Salem exhibit family-friendly bikeway characteristics, including lower traffic volumes and speeds, traffic calming measures, and proximity to schools and other bicyclist destinations. The proposed network takes advantage of these attractive corridors, particularly those needing minimal and cost-effective treatments (e.g., wayfinding signage) that could be implemented in the near-term.

Appropriate treatments for each family-friendly bikeway should be determined on a case-by-case basis. As the City moves forward with project implementation, extensive outreach should also be conducted with the bicycling community and affected neighborhood groups. As a result of outreach prior to implementation of a family-friendly bikeway, minor route modifications that do not result in a change to the street cross section may be made and later incorporated into updates of this plan.

#### SHARED-USE PATHS

Significant opportunities exist to develop an expanded shared-use path network in Salem that serves a variety of users. The proposed bicycle network, as shown in Maps 7-1 through 7-5, includes a diverse shared-use path system. Some proposed path corridors would involve upgrading existing sidewalks passing through parks, widening existing narrow paths to minimize bicyclist/pedestrian conflicts, or upgrading existing unpaved paths to accommodate a broader range of users. Most off-street paths are intended for use by pedestrians, bicyclists, skateboarders, and other non-motorized users. In some cases, one or more non-motorized uses may be prohibited based on the width of the facility, adjacent land uses, topography, location relative to

the Bicycle Network, or other considerations. The network of shared-use paths is not intended to be all-inclusive. Additional shared-use paths may be identified through the subdivision or other development process to address neighborhood connectivity.



Where a proposed shared-use path is shown over private property, the desired connection may be provided with sidewalks and local streets that connect to the existing street and sidewalk network in a relatively direct manner. Many of the proposed shared-use path projects will require "path feasibility studies" before a specific alignment can be determined. These studies, which would only occur for paths to be constructed with public funds, will examine issues related to potential environmental impacts, route directness, land availability, property ownership, and estimated costs.

#### **ENHANCED BIKEWAY TREATMENTS**

Although bike lanes may be appropriate along many routes, stakeholders and residents acknowledged that bike lanes alone may not always be enough to attract new riders. Therefore, stakeholders and residents throughout the planning process identified several corridors where more innovative treatments are desired to enhance user safety and comfort. These corridors primarily encompass Salem's major street network.

Maps 7-1 through 7-10 identify several roadway corridors as "potential enhanced bikeways," where enhanced bikeway treatments should be considered. Enhanced bikeway treatments could include:

- Colored bike lanes.
- · Buffered bike lanes.
- Cycle tracks.

These treatments are described briefly in Table 7-2. For each corridor under focus, further analysis will be necessary to identify and address site-specific issues, assess the benefits and trade-offs of an enhanced bikeway treatment, and to identify appropriate treatments.

#### SAFE ROUTES TO SCHOOL IMPROVEMENTS

Projects identified as part of the proposed bicycle network also incorporate relevant bicycle improvements identified Safe Routes to School Solutions. These projects generally consist of on- and off-street bikeway enhancements and intersection improvements near schools.

# **Project Prioritization**

The Bicycle Network, illustrated on Maps 7-1 through 7-5 identifies bicycle capital improvement projects that once constructed will encourage bicycling. The order in which projects in this Element are constructed will depend on many factors, including budget and grant availability, community support, and City priorities. The City does not anticipate that all of these projects will be constructed within the 20-year life of this plan. To prioritize projects included in the proposed Bicycle Network, a network of critical links was developed with an emphasis on family-friendly bikeways in order to create cost-effective facilities that are appealing to the widest range of potential users. These projects were then evaluated using the following eight criteria established for the Bike and Walk Salem Project: system connectivity, multi-modal connections, user safety and comfort, community support, cost, accommodating a broad range of users, environmental justice, and land use connections. The resulting priorities were reviewed by the Bike and Walk Salem Stakeholder Advisory Committee and members of the public.



The evaluation exercise resulted in a three-tiered priority list illustrated on Maps 7-6 through 7-10. The three tiers represent a general implementation timeline:

- · Tier 1, Near-term Priority Network (approximately 0-10 years).
- Tier 2, Medium-term (approximately 10-15 years).
- · Tier 3, Longer-term (approximately 15-20 years or longer).

The Tier I projects are designed to complete a priority network of bicycle facilities serving high-priority destinations, including employment centers, parks, and schools. While the tier system helps identify high-priority projects for available funding, it should be noted that medium- and longer-term projects may be implemented at any point in time as part of a development or public works project, or as additional funding becomes available. Additionally the tiers should be reviewed frequently to ensure that they continue to reflect current priorities. Some of the factors that can and should affect project implementation include:

- · Project cost relative to funding availability.
- Change to existing grant programs, or creation of new grant or funding programs that affect the type or number
  of large-budget projects that can be implemented.
- Changes in City policy that could affect how local or state funds can be spent.
- Changes to zoning and land use that will affect where and how development occurs in Salem.
- The pace of development, which will affect which projects are implemented through development requirements and impact prioritization by changing existing land use.
- Changes to City staff capacity to manage bicycle projects.
- · Community input (e.g., through neighborhood associations or other).
- · Directives (policy or otherwise) from elected officials and other governing bodies.
- Interest from partners (such as counties and ODOT) in implementing projects that are partially or entirely within their jurisdiction.

### **Bicycle Project Cost Estimates**

Tables 7-3 and 7-4 summarize total planning-level cost opinions for Salem's proposed bikeway network. Table 7-3 summarizes estimated costs by "tier" while Table 7-4 presents aggregated costs by facility type. It should be noted that estimated costs for shared-use paths and intersection improvements are shown in the Pedestrian Element Chapter, as these facilities benefit both pedestrians and cyclists alike.

TABLE 7-3
Estimated Planning-Level Costs by Tier

Tier	Estimated Cost
Tier 1	\$4,410,000



# TABLE 7-3

Estimated Planning-Level Costs by Tier

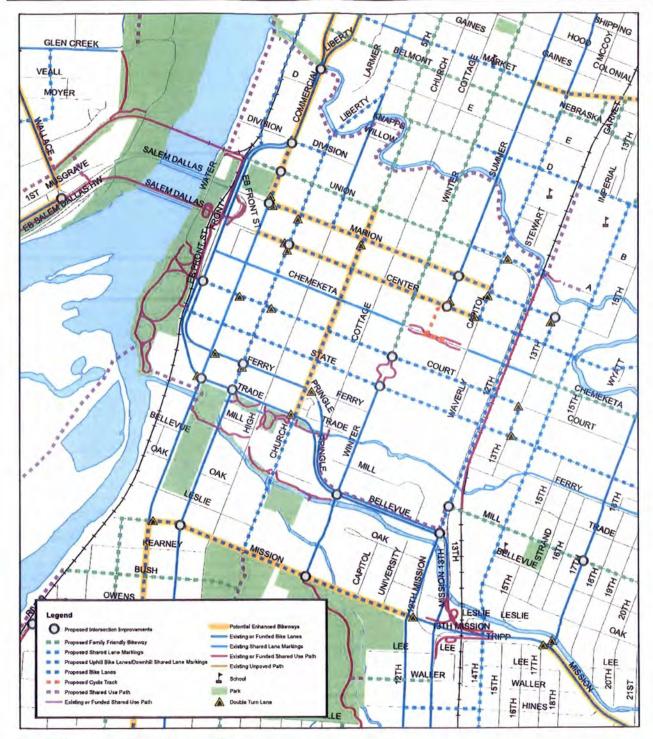
Tier	Estimated Cost
Tier 2	\$4,712,000
Tier 3	\$28,056,000

Note: Estimated Cost totals do not include estimates for projects already accounted for in Tables 3-4, 3-5, 3-6, and 3-7 of the Street System Element. Cost estimates for shared-use paths and intersection improvement projects are included in the Pedestrian Plan Element.

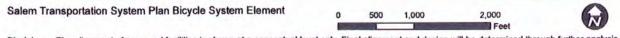
TABLE 7-4
Estimated Planning-Level Costs by Facility Type

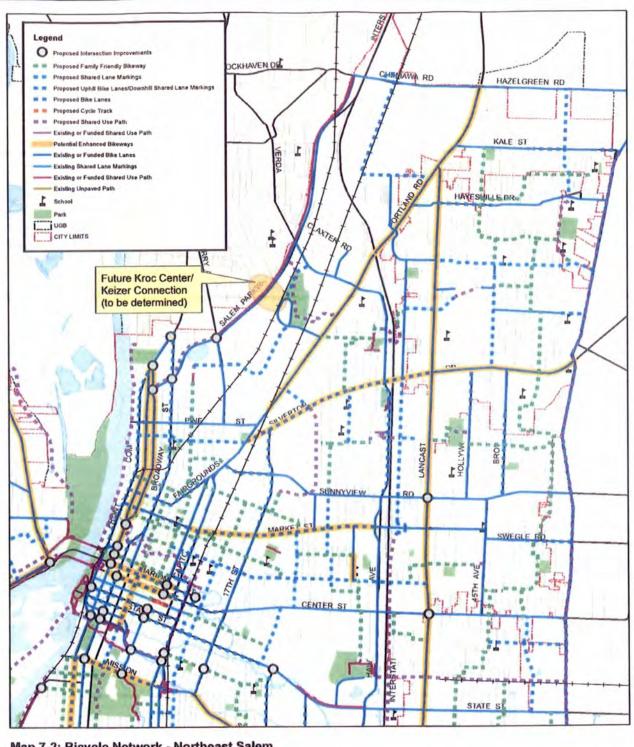
Facility Type	Estimated Cost (all Tiers)
Cycle Track	\$145,000
Bike Lanes*	\$27,323,000
Shared Lane Markings	\$2,175,000
Uphill Bike Lanes/Downhill Shared Lane Markings	\$1,067,000
Family-Friendly Bikeway	\$6,468,000

Note: Estimated Cost totals do not include estimates for projects already accounted for in Tables 3-4, 3-5, 3-6, and 3-7 of the Street System Element. Cost estimates for shared-use paths and intersection improvement projects are included in the Pedestrian Plan Element.



Map 7-1: Bicycle Network - Downtown Salem



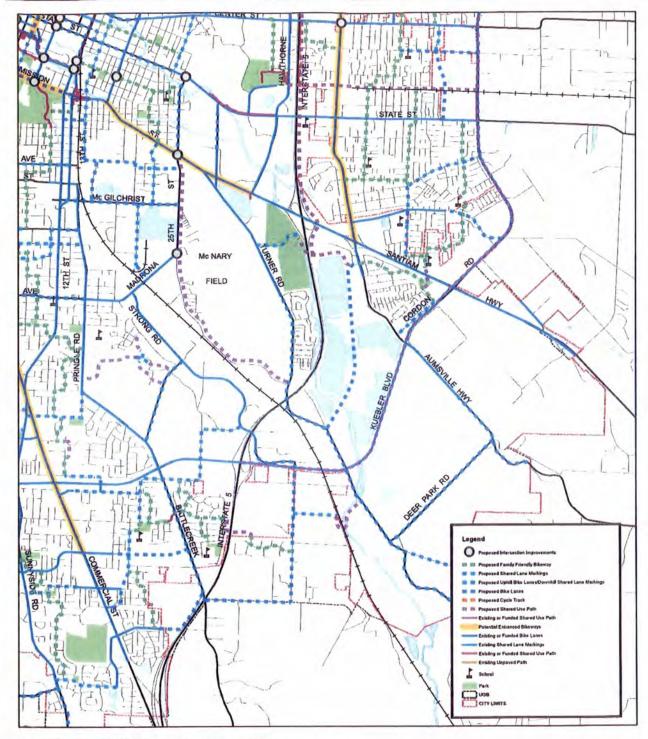


Map 7-2: Bicycle Network - Northeast Salem

Salem Transportation System Plan Bicycle System Element

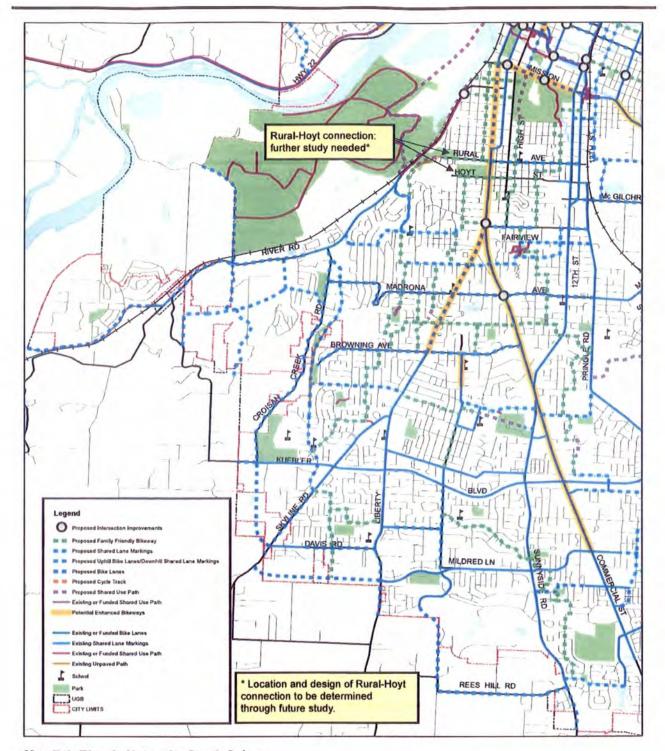
0.25 0.5





Map 7-3: Bicycle Network - Southeast Salem

Salem Transportation System Plan Bicycle System Element 0 0.25 0.5 1 Miles

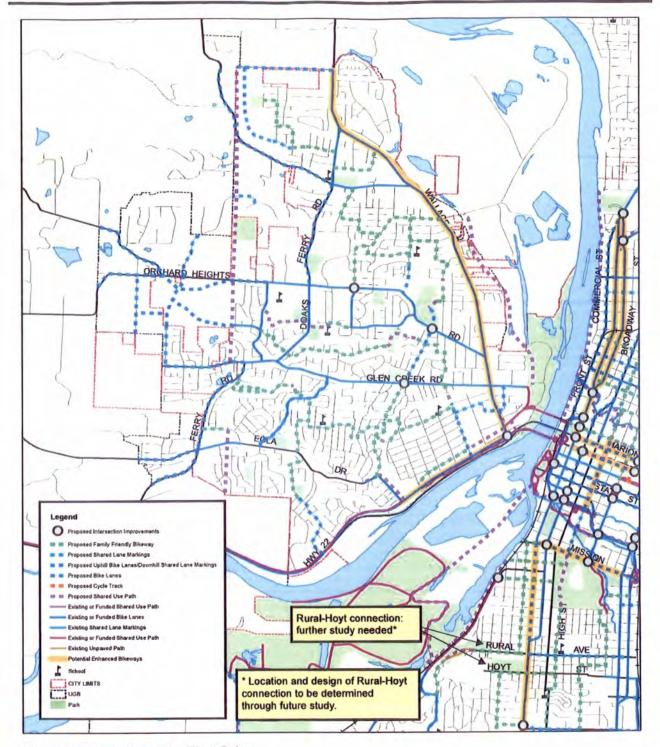


Map 7-4: Bicycle Network - South Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1

Miles



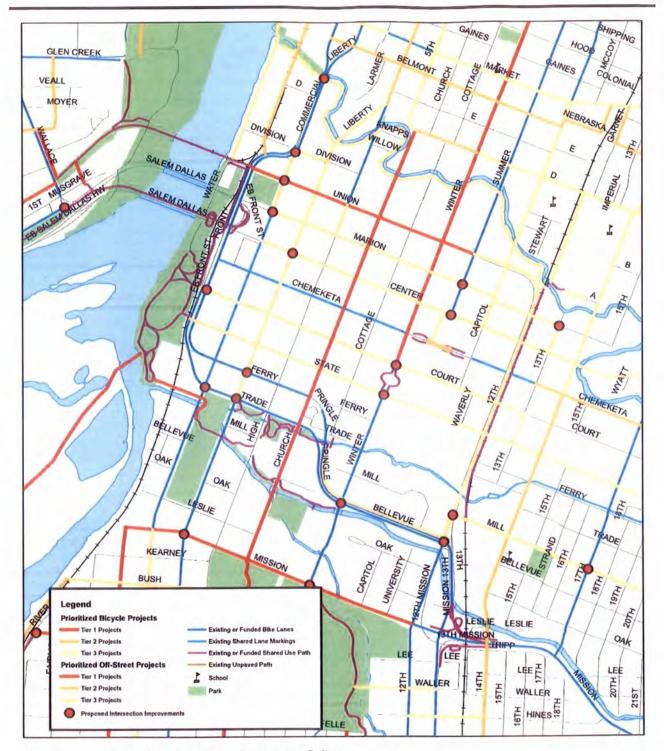
Map 7-5: Bicycle Network - West Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1

Miles

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.

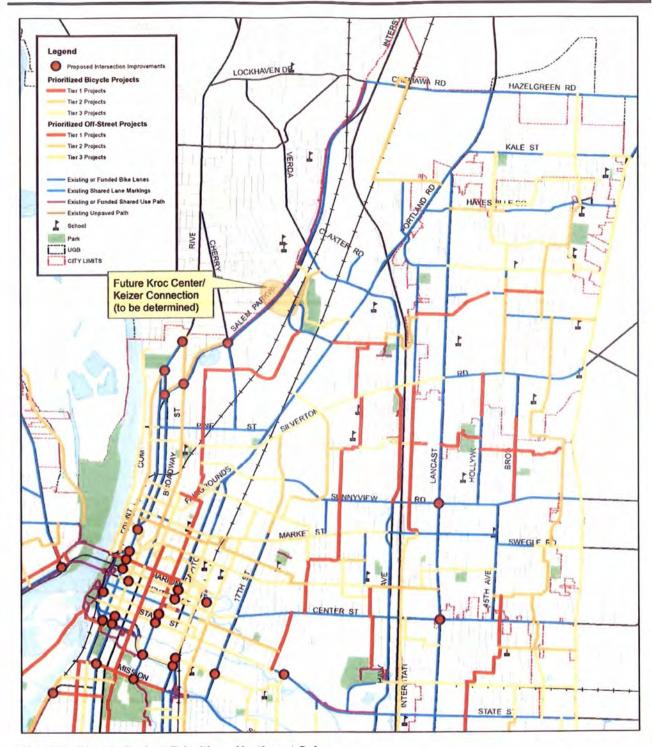


Map 7-6: Bicycle Project Priorities - Downtown Salem

Salem Transportation System Plan Bicycle System Element

0 500 1,000 2,000

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



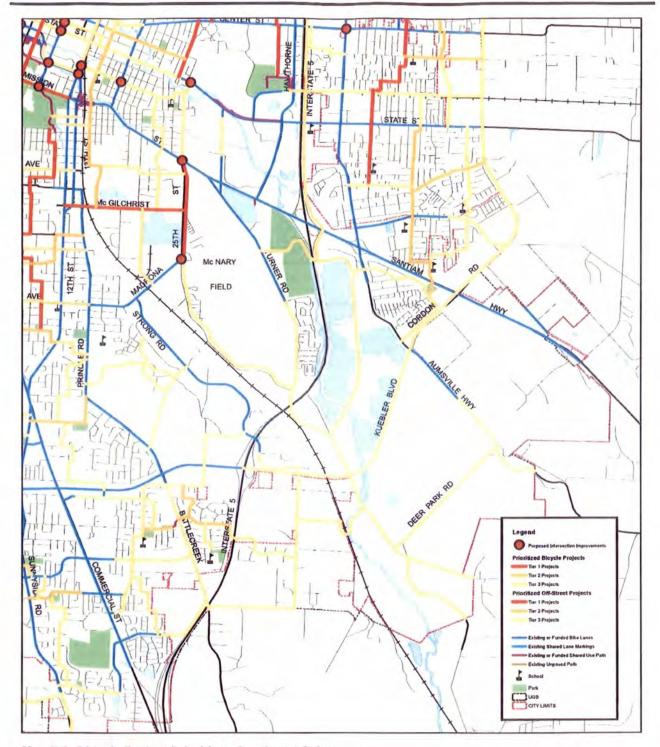
Map 7-7: Bicycle Project Priorities - Northeast Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1

Miles

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



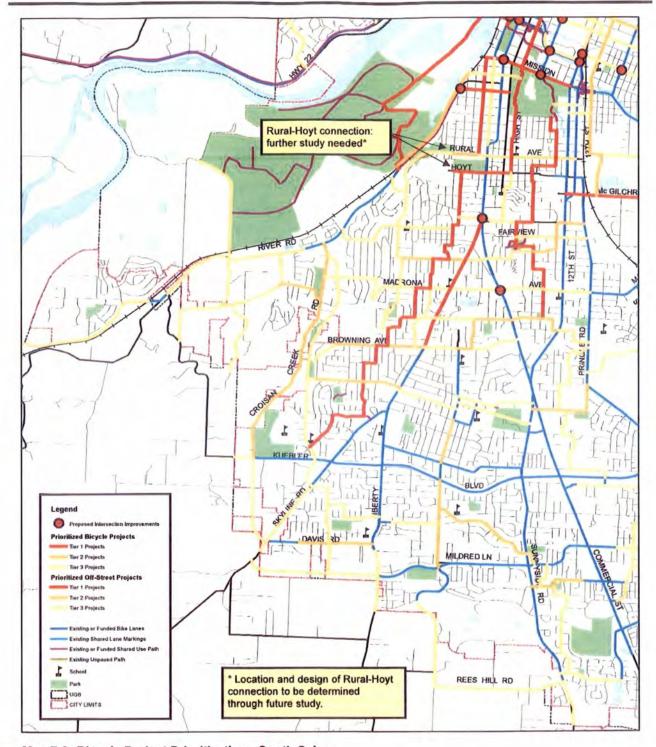
Map 7-8: Bicycle Project Priorities - Southeast Salem

Salem Transportation System Plan Bicycle System Element





Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



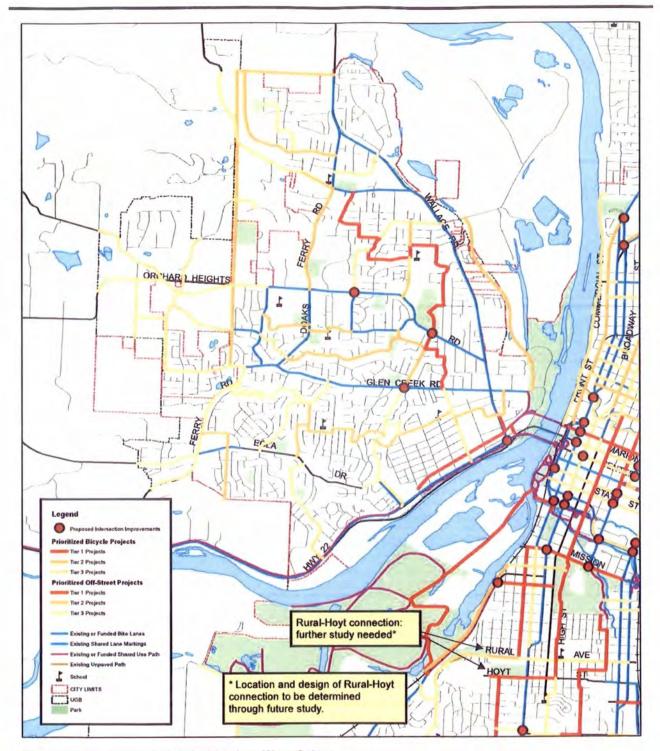
Map 7-9: Bicycle Project Prioritization - South Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1

Miles

Disclaimer. The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



Map 7-10: Bicycle Project Prioritization- West Salem

Salem Transportation System Plan Bicycle System Element 0 0.25 0.5 1 Miles

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.

TABLE 7-5

Recommended Tier 1 Bicycle Projects (not in priority order)



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



<sup>\*\*</sup> The estimated cost for these projects is included in the Pedestrian System Element.

**TABLE 7-5** Recommended Tier 1 Bicycle Projects (not in priority order)

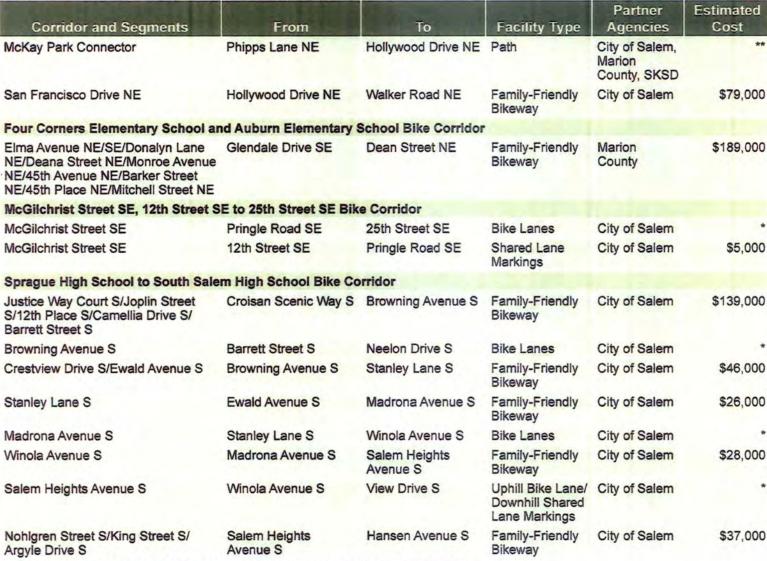
Corridor and Segments	From	То	Facility Type	Partner Agencies	Estimated Cost
Park Avenue NE	Ellis Avenue NE	Market Street NE	Shared Lane Markings	City of Salem	\$8,000
Park Avenue NE	Market Street NE	Sunnyview Road NE	Bike Lanes	City of Salem	\$337,000
Park Avenue NE	Sunnyview Road NE	Florence Avenue NE	Family-Friendly Bikeway	City of Salem	\$46,000
Florence Avenue NE/Chester Avenue NE	Park Avenue NE	Lansing Avenue NE	Family-Friendly Bikeway	City of Salem	\$18,000
Lansing Avenue NE	Chester Avenue NE	Silverton Road NE	Bike Lanes	City of Salem	\$525,000
Williams Avenue NE/Edgewood Avenue NE/30th Avenue NE	Silverton Road NE	Northgate Avenue NE	Family-Friendly Bikeway	City of Salem	\$57,000
Northgate Avenue NE	Portland Road NE	Eastern Terminus	Family-Friendly Bikeway	City of Salem	\$47,000
Geer Community Park to Hoover El	ementary School Bike	Corridor			
Illinois Avenue NE/Vinyard Avenue NE	Monroe Avenue NE	D Street NE	Family-Friendly Bikeway	City of Salem	\$72,000
Chemeketa Community College Ea	st/West Bike Corridor				
Cooley Drive NE	Fisher Road NE	Chemeketa CC West Transit Station	Shared Lane Markings	City of Salem, CCC, Marion County	\$15,000
Chemeketa Cross Campus Path	Cooley Drive NE	Satter Drive NE	Path	City of Salem, CCC, Marion County	**
Satter Drive NE	45 <sup>th</sup> Avenue NE	47 <sup>th</sup> Avenue NE	Family-Friendly Bikeway	Marion County	\$33,000
McKay Park East/West Bike Corrido	or				
Beverly Avenue NE	Fisher Road NE	Coral Avenue NE	Shared Lane Markings	City of Salem	\$4,000
Beverly Avenue NE/Phipps Lane NE/ Carolina Avenue NE	Lancaster Drive NE	Eastern Terminus of Carolina Avenue NE	Family-Friendly Bikeway	Marion County	\$33,000
• Th					

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.
\*\* The estimated cost for these projects is included in the Pedestrian System Element.



TABLE 7-5

Recommended Tier 1 Bicycle Projects (not in priority order)



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



<sup>\*\*</sup> The estimated cost for these projects is included in the Pedestrian System Element.

TABLE 7-5 Recommended Tier 1 Bicycle Projects (not in priority order)

Corridor and Segments	From	То	Facility Type	Partner Agencies	Estimated Cost
Hansen Avenue S	Argyle Drive S	Mountain View Drive S	Shared Lane Markings	City of Salem	\$2,000
Mountain View Drive S	Hansen Avenue S	Hoyt Street S	Family-Friendly Bikeway	City of Salem	\$47,000
Hoyt Street S	Skopil Avenue S	Church Street SE	Family-Friendly Bikeway	City of Salem	\$51,000
<b>Bush's Pasture Park to River Road</b>	Bike Corridor				
Miller Street S/SE	River Road S	High Street SE	Family-Friendly Bikeway	City of Salem	\$43,000
Saginaw Street S Bike Corridor					
Saginaw Street S/Mission Street S	Rural Avenue S	Commercial Street SE	Family-Friendly Bikeway	City of Salem	\$93,000
Lower Leffelle/Clark Creek Park/So	uth Village Park Bike C	orridor			
Yew Street SE/Berry Street SE/ Electric Street SE/Summer Street SE	Leffelle Street SE	Vista Avenue SE	Family-Friendly Bikeway	City of Salem	\$121,000
Clark Creek Park Connector	Vista Avenue SE	Norwood Street SE	Path	City of Salem	**
Norwood Street SE/Hulsey Avenue SE/Morningside Street SE/Peck Avenue SE	Clark Creek Park	Harris Avenue SE	Family-Friendly Bikeway	City of Salem	\$79,000
South Village Park Connector	Harris Avenue SE	Ewald Avenue SE	Path	City of Salem	**
Pringle Creek to Minto-Brown Islan	d Park Corridor				
Pringle Creek Path	Riverfront Park	Civic Center	Path	City of Salem	**
Minto-Brown Island Path	River Road S	Riverfront Park	Path	City of Salem	**
Orchard Heights Park/Brush College	e Park Bike Corridor				
Lupin Lane NW/Larkspur Lane NW/ Karen Way NW	Parkway Drive NW	Glen Creek Road NW	Family-Friendly Bikeway	City of Salem	\$49,000
Parkway Drive NW	Lupin Lane NW	Orchard Heights Road NW	Bike Lanes	City of Salem	*
Orchard Heights Park Access Road	Orchard Heights Road NW	Northern Terminus	Shared Lane Markings	City of Salem	\$6,000
* The estimated cost for these projects are	almostic instituted in the Ote	and Contain Flament			

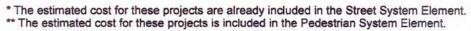
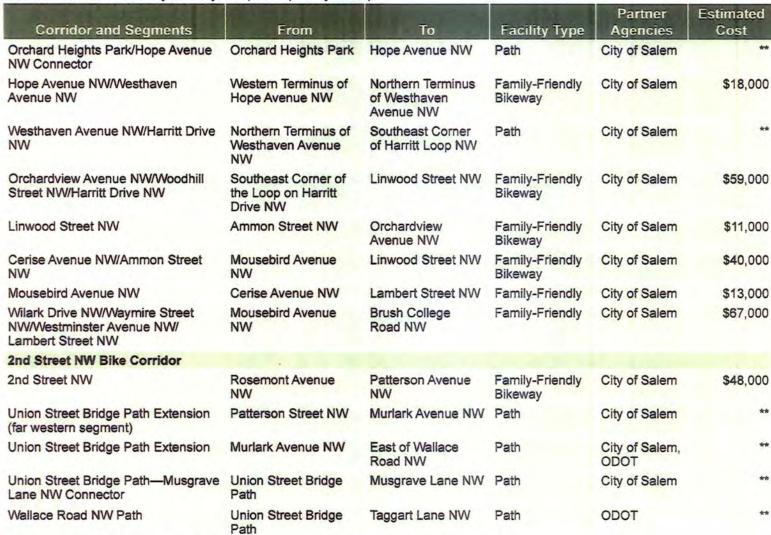




TABLE 7-5
Recommended Tier 1 Bicycle Projects (not in priority order)



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



<sup>\*\*</sup> The estimated cost for these projects is included in the Pedestrian System Element.

**TABLE 7-5** Recommended Tier 1 Bicycle Projects (not in priority order)

Corridor and Segments	From	То	Facility Type	Partner Agencies	Estimated Cost
25th Street SE South of Mission	Street SE Bike Corridor	The second			
25th Street SE	Madrona Avenue SE	Mission Street SE	Path	City of Salem	**
Liberty Road S Bike Lanes					
Liberty Road S	Browning Avenue S	Commercial Street S	Enhanced Bike Lanes	City of Salem	*
Mission Street SE, Commercial S	Street SE to 12th Street SE	, Bike Corridor			
Mission Street SE	Commercial Street SE	12th Street SE	Enhanced Bike Lanes	City of Salem	\$146,000
Hawthorne Avenue NE Bike Lane	es				
Hawthorne Avenue NE	Sunnyview Road NE	Silverton Road NE	Bike Lanes	City of Salem	*
Fisher Road NE Bike Lanes					
Fisher Road NE	Existing Southern Terminus	Silverton Road NE	Bike Lanes	City of Salem	*
Fisher Road NE	Market Street NE	Existing Southern Terminus	Bike Lanes	City of Salem	*
Hollywood Drive NE Bike Lanes					
Hollywood Drive NE	Hollyridge Loop NE	Silverton Road NE	Bike Lanes	Marion County	*
Brown Road NE Bike Lanes					
Brown Road NE	Sunnyview Road NE	Glendale Avenue NE	Bike Lanes	City of Salem	*

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element. \*\* The estimated cost for these projects is included in the Pedestrian System Element.



TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost
Downtown	Capitol Mall Cycle Track (one-way eastbound)	East of Winter Street NE	West of Capitol Street NE	Cycle Track	City of Salem	\$40,000
Downtown	Capitol Mall Cycle Track (one-way westbound)	West of Capitol Street NE	East of Winter Street NE	Cycle Track	City of Salem	\$40,000
Northeast	D Street NE	22 <sup>nd</sup> Street NE	23rd Street NE	Bike Lanes	City of Salem	\$160,000
Northeast	D Street NE	Vinyard Avenue NE	Lancaster Drive NE	Bike Lanes	City of Salem	\$687,000
Northeast	D Street NE	5th Street NE	Winter Street NE	Family-Friendly Bikeway	City of Salem	\$18,000
Northeast	17th Street NE	Pearl Street NE	Silverton Road NE	Bike Lanes	City of Salem	
Northeast	32 <sup>nd</sup> Place NE/ Rockingham Court NE	Wooddale Avenue NE	Eastern Terminus of Rockingham Court NE	Family-Friendly Bikeway	City of Salem	\$12,000
Northeast	35th Place NE	Southern Terminus	Fisher Road NE	Family-Friendly Bikeway	Marion County	\$18,000
Northeast	45 <sup>th</sup> Avenue NE	Silverton Road NE	Letteken Way NE	Bike Lanes	Marion County	•
Northeast	47 <sup>th</sup> Avenue NE	Herrin Road NE	Ward Drive NE	Family-Friendly Bikeway	Marion County	\$65,000
Northeast	Auburn Road NE	45th Place NE	UGB	Bike Lanes	Marion County	*
Northeast	Belmont Street NE/ Nebraska Street NE/ 12th Street SE	Commercial Street NE	Market Street NE	Family-Friendly Bikeway	City of Salem	\$84,000
Northeast	Bill Frey Extension	Kroc Center	Hyacinth Street NE	Bike Lanes	City of Salem	
Northeast	Blossom Drive NE/Indian School Road NE	Portland Road NE	Chemawa Road NE	Bike Lanes	City of Salem, Marion County	*
Northeast	Broadway Street NE	Pine Street NE	Salem Parkway NE	Bike Lanes	City of Salem	\$79,000
Northeast	Broadway Street NE	Salem Parkway NE	River Road N	Bike Lanes	City of Salem	\$83,000
Northeast	Broadway Street NE	E Street NE	Pine Street NE	Bike Lanes	City of Salem	\$201,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.

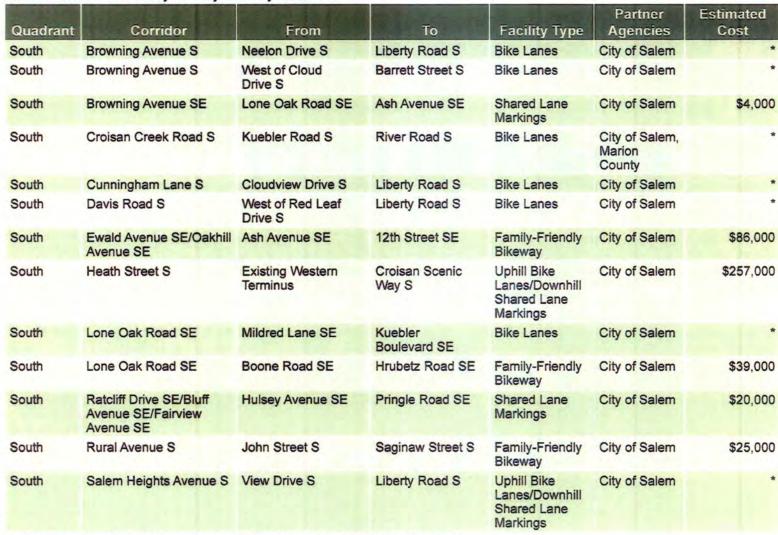
TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost
Northeast	Chemeketa Street NE	13th Street NE	24th Street NE	Family-Friendly Bikeway	City of Salem	\$76,000
Northeast	Dean Street NE	45th Avenue NE	Eastern Terminus	Family-Friendly Bikeway	City of Salem	\$12,000
Northeast	Ellis Avenue NE	Park Avenue NE	Savage Road NE	Family-Friendly Bikeway	City of Salem	\$24,000
Northeast	Florence Avenue NE/ Chester Avenue NE	West of Evergreen Street NE	Lansing Avenue NE	Family-Friendly Bikeway	City of Salem	\$8,000
Northeast	Front Street NE	South of Division Street NE	Riviera Drive NE	Bike Lanes	City of Salem	
Northeast	Garnet Street NE/ Nebraska Avenue NE/ 22 <sup>nd</sup> Street NE	Market Street NE	D Street NE	Family-Friendly Bikeway	City of Salem	\$84,000
Northeast	Greencrest Street NE	Auburn Road NE	Center Street NE	Shared Lane Markings	City of Salem	\$7,000
Northeast	Hayesville Drive NE	Lancaster Drive NE	Lisa Street NE	Bike Lanes	City of Salem, Marion County	•
Northeast	Herrin Road NE	Middle Grove Drive NE	Cordon Road NE	Bike Lanes	Marion County	
Northeast	Jade Street NE	47th Avenue NE	Eastern Terminus	Family-Friendly Bikeway	Marion County	\$19,000
Northeast	Royalty Drive NE	Center Street NE	Regal Drive NE	Family-Friendly Bikeway	City of Salem	\$25,000
Northeast	Scepter Way NE/Regal Drive NE/Princess Lane NE	Southern Terminus of Scepter Way NE	Swegle Road NE	Family-Friendly Bikeway	City of Salem	\$76,000
Northeast	Walker Road NE/ Carolina Avenue NE/ Randi Lane NE/48 <sup>th</sup> Avenue NE	Swegle Road NE	Herrin Road NE	Family-Friendly Bikeway	City of Salem, Marion County	\$243,000
South	Ash Avenue SE	Browning Avenue SE	Ewald Avenue SE	Family-Friendly Bikeway	City of Salem	\$27,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



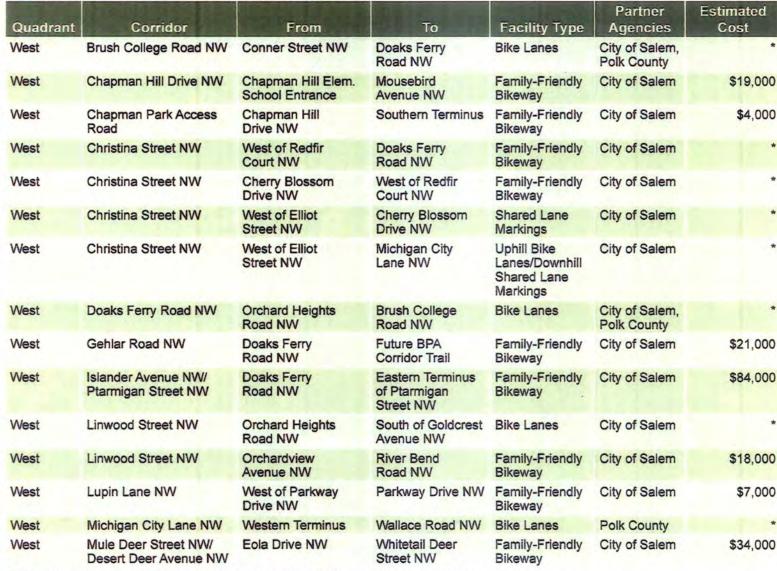
TABLE 7-6 Recommended Tier 2 Bicycle Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost
South	Salem Heights Avenue S	Crestview Drive S	Winola Avenue S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	•
South	Valleywood Drive SE	Lone Oak Road SE	Sunnyside Road SE	Family-Friendly Bikeway	City of Salem	\$93,000
Southeast	14th Avenue NE/SE	Oxford Street SE	Chemeketa Street NE	Shared Lane Markings	City of Salem	\$36,000
Southeast	16th Street SE	McGilchrist Street SE	Oxford Street SE	Bike Lanes	City of Salem	\$421,000
Southeast	46th Place SE/Wildcherry Drive SE	Southern Terminus of 46th Place SE	Connecticut Street SE	Family-Friendly Bikeway	City of Salem	\$28,000
Southeast	Baxter Road SE	Reed Lane SE	East of Salal Street SE	Family-Friendly Bikeway	City of Salem	\$26,000
Southeast	Connecticut Street SE	Grouse Drive SE	Macleay Road SE	Bike Lanes	City of Salem	\$393,000
Southeast	Connecticut Street SE	Wildcherry Drive SE	Grouse Drive SE	Shared Lane Markings	City of Salem	\$8,000
Southeast	Connecticut Street SE/48th Court SE	Pennsylvania Avenue SE	State Street	Family-Friendly Bikeway	Marion County	\$64,000
Southeast	Eastlake Drive SE	Battle Creek Road SE	Landon Street SE	Family-Friendly Bikeway	City of Salem	\$46,000
Southeast	Hilfiker Lane SE/Hillrose Street SE	Sunnyside Road SE	Pringle Road SE	Bike Lanes	City of Salem	*
Southeast	Metolius Avenue SE/ Foxhaven Drive SE/ Cultus Avenue SE	Eastlake Drive SE	Boone Road SE	Family-Friendly Bikeway	City of Salem	\$37,000
Southeast	Oxford Street SE	14th Street SE	16th Street SE	Bike Lanes	City of Salem	\$114,000
Southeast	Pennsylvania Avenue SE	Connecticut Street SE	Cordon Road SE	Bike Lanes	Marion County	\$140,000
Southeast	Wiltsey Road SE	Sunnyside Road SE	Madelyn Avenue SE	Bike Lanes	City of Salem	
West	7th Street NW/Taggart Drive NW	Patterson Street NW	Wallace Road NW	Shared Lane Markings	City of Salem	\$12,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



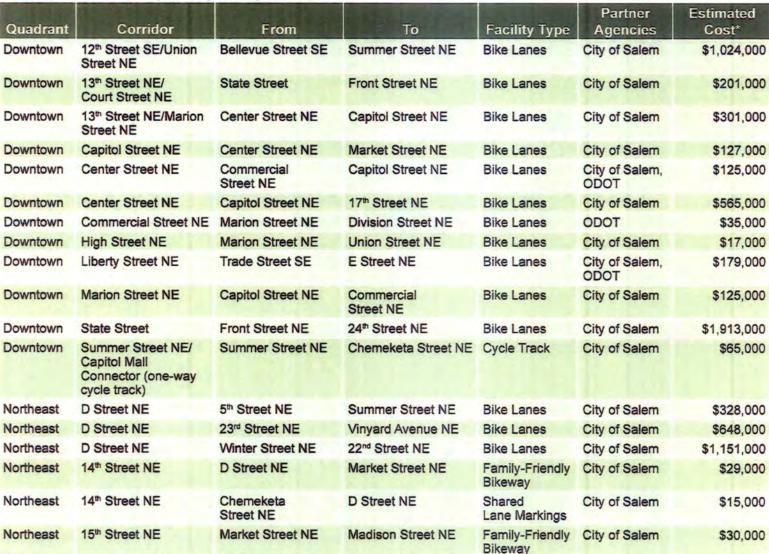
TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost
West	Parkway Drive NW	Glen Creek Road NW	Lupin Lane NW	Bike Lanes	City of Salem	\$397,000
West	Patterson Street NW	6th Street NW	7th Street NW	Bike Lanes	City of Salem	\$11,000
West	Piedmont Avenue NW/ 6th Street NW	Cascade Drive NW	Patterson Street NW	Family-Friendly Bikeway	City of Salem	\$66,000
West	Taggart Drive NW/Bartell Drive NW	Wallace Road NW	Glen Creek Road NW	Shared Lane Markings	City of Salem	\$7,000
West	Whitetail Deer Street NW/Margarett Street NW/Engel Avenue NW/Hillcrest Court NW/Kent Street NW/Arrow Street NW	Burley Hill Drive NW	Cascade Drive NW	Family-Friendly Bikeway	City of Salem	\$107,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



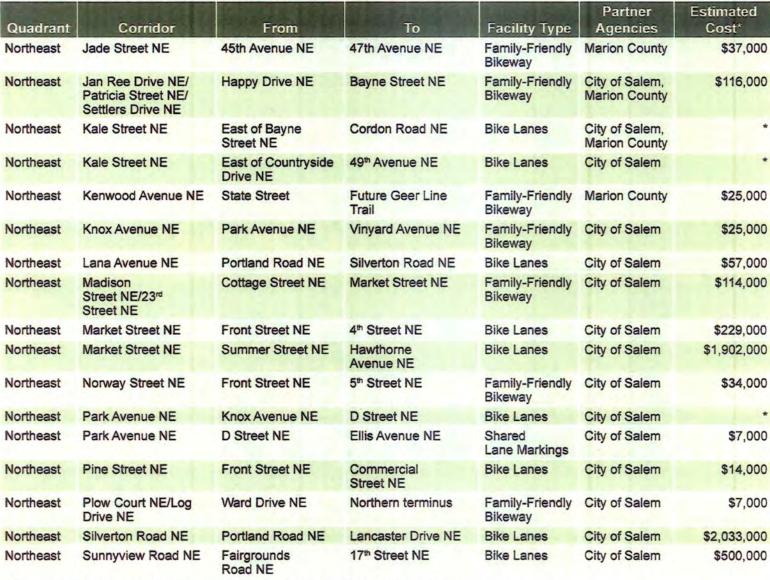
TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	18th Street NE	Madison Street NE	Garfield Street NE	Family-Friendly Bikeway	City of Salem	\$19,000
Northeast	23rd Street NE	Ellis Avenue NE	Market Street NE	Shared Lane Markings	City of Salem	\$6,000
Northeast	36th Avenue NE/ Midway Avenue NE/ Auburn Road NE	Center Street NE	Lancaster Drive NE	Family-Friendly Bikeway	Marion County	\$53,000
Northeast	38th Avenue NE/Manor Drive NE/Weathers Street NE	D Street NE	Eastern Terminus of Weathers Street NE	Family-Friendly Bikeway	City of Salem	\$77,000
Northeast	45th Avenue NE/Jade Street NE/Happy Drive NE	Ward Drive NE	Kale Street NE	Family-Friendly Bikeway	Marion County	\$117,000
Northeast	49th Avenue NE	Kale Street NE	Hazelgreen Road NE	Bike Lanes	City of Salem	
Northeast	49th Avenue NE	Hayesville Drive NE	Kale Street NE	Shared Lane Markings	City of Salem, Marion County	\$13,000
Northeast	5th Street NE	D Street NE	Norway Street NE	Family-Friendly Bikeway	City of Salem	\$49,000
Northeast	Academy Street NE	Maple Avenue NE	Fairgrounds Road NE	Family-Friendly Bikeway	City of Salem	\$33,000
Northeast	Chester Avenue NE	Lansing Avenue NE	Byram Street NE	Family-Friendly Bikeway	City of Salem	\$20,000
Northeast	Division Street NE	Liberty Street NE	High Street NE	Bike Lanes	City of Salem	\$18,000
Northeast	Fisher Road NE	South of Market Street NE	Market Street NE	Shared Lane Markings	City of Salem	\$4,000
Northeast	Greencrest Street NE	State Street	Auburn Road NE	Bike Lanes	Marion County	*
Northeast	Highland Avenue NE	Front Street NE	Maple Avenue NE	Shared Lane Markings	City of Salem	\$14,000
Northeast	Highland Avenue NE	Maple Avenue NE	Portland Road NE	Shared Lane Markings	City of Salem	\$14,000
Northeast	Hood Street NE/ Fairgrounds Road NE	Front Street NE	Summer Street NE	Bike Lanes	City of Salem	\$162,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7 Recommended Tier 3 Bicycle Projects- By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	Swegle Road NE	Plateau Street NE	Cordon Road NE	Bike Lanes	City of Salem, Marion County	\$480,000
Northeast	Ward Drive NE	Lancaster Drive NE	Cordon Road NE	Shared Lane Markings	City of Salem, Marion County	\$42,000
South	Acacia Drive S	Sumac Drive S	Hansen Avenue S	Shared Lane Markings	City of Salem	\$7,000
South	Acacia Drive S	River Road S	Sumac Drive S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$14,000
South	Alice Avenue S	Mountain View Drive S	Commercial Street SE	Family-Friendly Bikeway	City of Salem	\$21,000
South	Browning Avenue S	Western Terminus	West of Cloud Drive S	Shared Lane Markings	City of Salem	\$7,000
South	Browning Avenue SE	Liberty Road S	Lone Oak Road SE	Shared Lane Markings	City of Salem	\$9,000
South	Browning Avenue SE	Ash Avenue SE	Commercial Street SE	Shared Lane Markings	City of Salem	\$13,000
South	Bush Street S	Western Terminus	Bush's Pasture Park	Family-Friendly Bikeway	City of Salem	\$45,000
South	Byers Street S/Deer Run Avenue S	Viewcrest Road S	Northern Terminus	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem, Marion County	*
South	Cedarcrest Drive S/ Brookwood Street S/ Rock Creek Drive S	Red Leaf Drive S	Liberty Road S	Family-Friendly Bikeway	City of Salem	\$59,000
South	Commercial Street SE	Mission Street SE	Superior Street SE	Bike Lanes	City of Salem	\$155,000
South	Crestview Drive S	Southern Terminus	Madrona Avenue S	Family-Friendly Bikeway	City of Salem	\$13,000
South	Crestview Drive S	Shurman Drive S	Northern Terminus	Family-Friendly Bikeway	City of Salem	\$28,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Crestview Drive S	Madrona Avenue S	Hansen Avenue S	Family-Friendly Bikeway	City of Salem	\$58,000
South	Crestview Drive S/ Shurman Drive S	Hansen Avenue S	River Road S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$16,000
South	Croisan Creek Road S	Skyline Road S	Kuebler Boulevard SE	Bike Lanes	City of Salem, Marion County	•
South	Croisan Ridge Way S	Existing Northern Terminus	Heath Street S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem, Marion County	*
South	Croisan Scenic Way S	North of Roberta Avenue S	Croisan Creek Road S	Bike Lanes	City of Salem	*
South	Croisan Scenic Way S	Skyline Road S	Joplin Street S	Bike Lanes	City of Salem	\$802,000
South	Croisan Scenic Way S	North of Brock Loop S	Spring Street S	Bike Lanes	City of Salem, Marion County	
South	Croisan Scenic Way S	Joplin Street S	North of Brock Loop S	Shared Lane Markings	City of Salem	\$3,000
South	Croisan Scenic Way S	Spring Street S	North of Roberta Avenue S	Shared Lane Markings	City of Salem	*
South	Ewald Avenue S	Stanley Lane S	Ash Avenue SE	Family-Friendly Bikeway	City of Salem	\$53,000
South	Fairview Avenue SE	Commercial Street SE	Cottage Street NE	Shared Lane Markings	City of Salem	\$10,000
South	Fern Drive S	Heath Street S	River Road S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	*
South	Future Unnamed Street	Heath Street S	Homestead Road S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	

<sup>\*</sup>The estimated cost for these projects are already included in the Street System Element.

TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Gregory Lane SE	Lone Oak Road SE	Jones Road SE	Family-Friendly Bikeway	City of Salem	\$16,000
South	Hansen Avenue S	Crestview Drive S	Argyle Drive S	Shared Lane Markings	City of Salem	\$15,000
South	Hansen Avenue S	Acacia Drive S	Crestview Drive S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$34,000
South	Heath Street S	Deer Run Avenue S	Existing Western Terminus	Uphill Bike Lanes/Downhill Shared Lane Markings	Marion County	*
South	High Street SE/ Church Street SE	Fairview Avenue SE	Hoyt Street SE	Family-Friendly Bikeway	City of Salem	\$48,000
South	Holder Lane SE	West of Seeger Lane SE	Lone Oak Road SE	Shared Lane Markings	City of Salem	100
South	Homestead Road S	River Road S	Brown Island Road S	Bike Lanes	City of Salem	\$1,170,000
South	Homestead Road S	Southern Terminus	River Road S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	
South	Idylwood Drive SE	Lone Oak Road SE	Sunnyside Road SE	Shared Lane Markings	City of Salem	\$20,000
South	Kuebler Boulevard S	Urban Growth Boundary	Croisan Creek Road S	Bike Lanes	City of Salem	
South	Liberty Road S	Urban Growth Boundary	Rainier Drive SE	Bike Lanes	Marion County	
South	Lone Oak Road SE	Rees Hill Road SE	Muirfield Avenue SE	Bike Lanes	City of Salem, Marion County	
South	Madrona Avenue S	Crestview Drive S	Stanley Lane S	Bike Lanes	City of Salem	*
South	Madrona Avenue S	Winola Avenue S	Commercial Street SE	Bike Lanes	City of Salem	

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



Quadrant	Corridor	From	To	Facility Type	Partner Agencies	Estimated Cost*
South	Madrona Avenue SE	Commercial Street SE	Pringle Road SE	Bike Lanes	City of Salem	\$925,000
South	Madrona Avenue S	Croisan Scenic Way S	Crestview Drive S	Bike Lanes	City of Salem	
South	Marietta Street SE	Coloma Drive SE	Lone Oak Road SE	Family-Friendly Bikeway	City of Salem	\$18,000
South	Marietta Street SE	Liberty Road S	Eastern Terminus	Family-Friendly Bikeway	City of Salem	\$34,000
South	Mildred Lane S	Skyline Road S	Liberty Road S	Bike Lanes	City of Salem, Marion County	*
South	Neelon Drive S/ Garlock Street S/ Cavalier Drive S/ Luradel Avenue S	Browning Avenue S	Eastern Terminus of Luradel Avenue S	Family-Friendly Bikeway	City of Salem	\$26,000
South	Red Leaf Drive S/ Summercrest Drive S	Future Alignment of Mildred Lane SE	Skyline Road S	Family-Friendly Bikeway	City of Salem	\$91,000
South	Rees Hill Road SE	Lone Oak Road SE	Sunnyside Road SE	Bike Lanes	City of Salem, Marion County	
South	River Road S	Urban Growth Boundary	West of Riverdale Road S	Bike Lanes	City of Salem, Marion County	*
South	River Road S	Viewcrest Road S	West of Equestrian Loop S	Bike Lanes	City of Salem, Marion County	
South	Rural Avenue S	Saginaw Street S	Commercial Street SE	Family-Friendly Bikeway	City of Salem	\$8,000
South	Rural Avenue S	Western Terminus	John Street S	Family-Friendly Bikeway	City of Salem	\$12,000
South	Rural Avenue SE	Commercial Street SE	Pringle Road SE	Shared Lane Markings	City of Salem	\$23,000
South	Salem Heights Avenue SE/Ratcliff Drive SE	Liberty Road S	Hulsey Avenue SE	Shared Lane Markings	City of Salem	\$20,000
South	Skyline Road S	Urban Growth Boundary	South of Summercrest Drive S	Bike Lanes	City of Salem, Marion County	*

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.

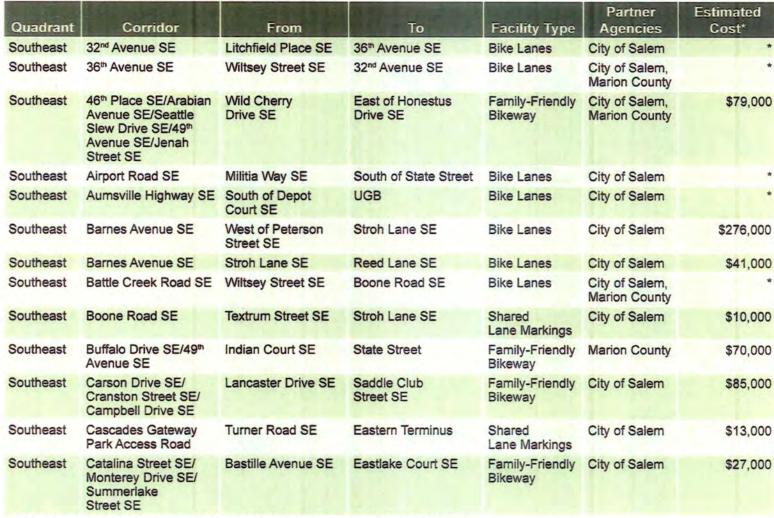
TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Stanley Lane S	Browning Avenue S	Ewald Avenue S	Family-Friendly Bikeway	City of Salem	\$28,000
South	Sunnyside Road SE	Urban Growth Boundary	Rees Hill Road SE	Bike Lanes	City of Salem	
South	Vista Avenue SE	Bluff Avenue SE	Pringle Road SE	Bike Lanes	City of Salem, Marion County	\$196,000
South	Vista Avenue SE	Cottage Street SE	Bluff Avenue SE	Shared Lane Markings	City of Salem	\$11,000
South	Waller Street SE	Western terminus	13th Street SE	Family-Friendly Bikeway	City of Salem	\$15,000
South	Winola Avenue S	Southern Terminus	Madrona Avenue S	Family-Friendly Bikeway	City of Salem	\$13,000
South	Woodmansee Street SE	Western Terminus	Sunnyside Road SE	Shared Lane Markings	City of Salem	\$3,000
Southeast	12 <sup>th</sup> Street SE/Albert Drive SE/Mandy Avenue SE/Copper Glen Drive SE	Hilfiker Lane SE	Pringle Road SE	Family-Friendly Bikeway	City of Salem	\$80,000
Southeast	14th Avenue SE/ Neahkahnie Street SE/13th Avenue SE/Jonmart Avenue SE	Rees Hill Road SE	Wiltsey Road SE	Family-Friendly Bikeway	City of Salem	\$97,000
Southeast	22 <sup>nd</sup> Street SE	Southern Terminus	McGilchrist Street SE	Shared Lane Markings	City of Salem	\$16,000
Southeast	22 <sup>nd</sup> Street SE/Electric Street SE	Oxford Street SE	East of 23rd Street SE	Shared Lane Markings	City of Salem	\$9,000
Southeast	23rd Street SE	McGilchrist Street SE	Mission Street SE	Shared Lane Markings	City of Salem	\$17,000
Southeast	23rd Street SE/ Townsend Way SE/ Ford Street SE	Mission Street SE	Mill Street SE	Family-Friendly Bikeway	City of Salem	\$55,000
Southeast	25th Street SE	Mission Street	State Street	Bike Lanes	City of Salem	*

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



**TABLE 7-7**Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	To	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Cinnabar Street SE/ Natalie Avenue SE	Eastern terminus of Natalie Avenue SE	Mildred Lane SE	Family-Friendly Bikeway	City of Salem	\$17,000
Southeast	Crowley Avenue SE/ Chaparral Drive SE	Eastern Terminus	Hilfiker Lane SE	Family-Friendly Bikeway	City of Salem	\$31,000
Southeast	Deer Park Drive SE	Turner Road SE	Aumsville Highway SE	Bike Lanes	City of Salem	*
Southeast	Electric Street SE	East of 23rd Street SE	25th Street SE	Shared Lane Markings	City of Salem	\$736,000
Southeast	Fabry Road SE	Sugar Plum Avenue SE	Battle Creek Road SE	Bike Lanes	City of Salem	*
Southeast	Future Unnamed Street	Madrona Avenue SE	22 <sup>nd</sup> Street SE	Bike Lanes	City of Salem	\$644,000
Southeast	Future Unnamed Street	Turner Road SE	Lancaster Drive SE	Bike Lanes	City of Salem	
Southeast	Future Unnamed Street 1	West of Reed Lane SE	West of Reed Lane SE	Shared Lane Markings	City of Salem	\$397,000
Southeast	Future Unnamed Street 2	West of Reed Lane SE	West of Reed Lane SE	Shared Lane Markings	City of Salem	\$475,000
Southeast	Gath Road SE/Turner Road SE	Urban Growth Boundary	37th Avenue SE	Bike Lanes	City of Salem	•
Southeast	Genesis Street SE	Robins Lane SE	Northern Terminus	Family-Friendly Bikeway	City of Salem	\$18,000
Southeast	Glenwood Drive SE	Lancaster Drive SE	Connecticut Avenue SE	Family-Friendly Bikeway	Marion County	\$56,000
Southeast	Hines Street SE	12th Street SE	14th Street SE	Bike Lanes	City of Salem	\$225,000
Southeast	Kashmir Way SE	36th Avenue SE	Eastland Avenue SE	Shared Lane Markings	Marion County	\$12,000
Southeast	Macleay Road SE	Arabian Avenue SE	Cordon Road SE	Bike Lanes	City of Salem, Marion County	*
Southeast	Madras Street SE	East of Commercial Street SE	Wiltsey Road SE	Bike Lanes	City of Salem	\$235,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Mill Street SE/Trade Street SE	12th Street SE	25th Street SE	Family-Friendly Bikeway	City of Salem	\$100,000
Southeast	Oakhill Avenue SE/ Centennial Street SE	12th Street SE	Pringle Road SE	Family-Friendly Bikeway	City of Salem	\$36,000
Southeast	Oxford Street SE	16th Street SE	22 <sup>nd</sup> Street SE	Bike Lanes	City of Salem	
Southeast	Pikes Pass Street SE/ Soapstone Avenue SE	Mistymorning Avenue SE	Reed Lane SE	Family-Friendly Bikeway	City of Salem	\$43,000
Southeast	Reed Lane SE	Pringle Road SE	Fairview Industrial Drive SE	Bike Lanes	City of Salem	•
Southeast	Reed Lane SE	Jamison Drive SE	Baxter Road SE	Family-Friendly Bikeway	City of Salem	\$15,000
Southeast	Reed Lane SE	Soapstone Avenue SE	Jamison Drive SE	Shared Lane Markings	City of Salem	\$11,000
Southeast	Reed Lane SE	Wiltsey Road SE	Soapstone Avenue SE	Shared Lane Markings	City of Salem	
Southeast	Reed Lane SE/ Boone Road SE/27 <sup>th</sup> Avenue SE/Marietta Street SE	Baxter Road SE	Fairview Industrial Drive SE	Bike Lanes	City of Salem	\$1,960,000
Southeast	Rees Hill Road SE	Sunnyside Road SE	Fairway Avenue SE	Shared Lane Markings	City of Salem	\$17,000
Southeast	Robins Lane SE/ Brentwood Drive SE	East of Genesis Street SE	Battle Creek Road SE	Bike Lanes	Marion County	
Southeast	Saddle Club Street SE	Lancaster Drive SE	Campbell Drive SE	Shared Lane Markings	City of Salem	\$13,000
Southeast	Serenity Drive SE/ Tanglewood Way SE	Lois Court SE	36th Avenue SE	Family-Friendly Bikeway	Marion County	\$47,000
Southeast	Stroh Lane SE	Kuebler Boulevard SE	Boone Road SE	Bike Lanes	City of Salem	\$74,000
Southeast	Textrum Street SE	Boone Road SE	South of Royvonne Avenue SE	Family-Friendly Bikeway	City of Salem	\$19,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.

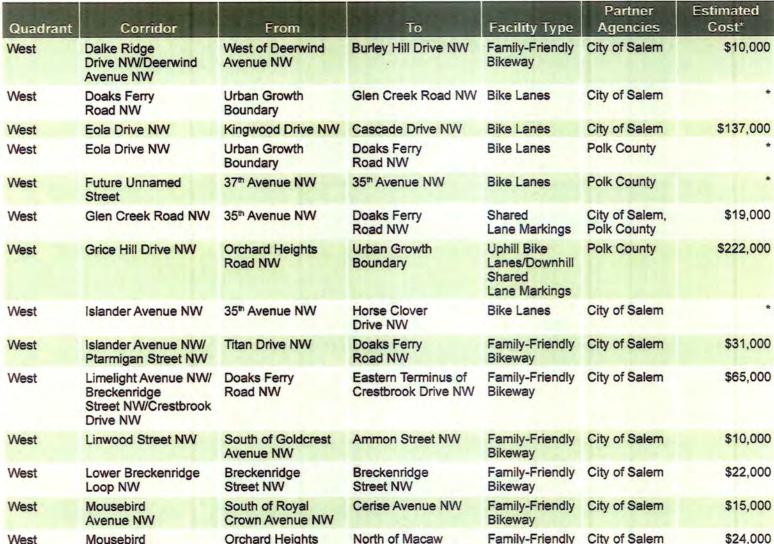
TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Turner Road SE	Urban Growth Boundary	Gath Road SE	Bike Lanes	City of Salem, Marion County	
Southeast	Turner Road SE	37th Avenue SE	South of Cascades Gateway Park	Bike Lanes	City of Salem, Marion County	
Southeast	Valleywood Drive SE/ Sunstone Street SE	Sunnyside Road SE	Mildred Lane SE	Family-Friendly Bikeway	City of Salem	\$15,000
Southeast	Wiltsey Road SE	Battle Creek Road SE	36th Avenue SE	Bike Lanes	Marion County	
Southeast	Woodscape Drive SE	Baxter Road SE	Reed Lane SE	Family-Friendly Bikeway	City of Salem	\$34,000
West	35th Avenue NW	Existing Northern Terminus	Orchard Heights Road NW	Bike Lanes	City of Salem	*
Vest	35th Avenue NW	Glen Creek Road NW	Existing Northern Terminus	Shared Lane Markings	Polk County	\$10,000
West	37th Avenue NW	Urban Growth Boundary	Orchard Heights Road NW	Bike Lanes	Polk County	•
West	40th Avenue NW	Urban Growth Boundary	Orchard Heights Place NW	Bike Lanes	Polk County	\$645,000
Vest	Andrew Avenue NW/ Elliot Street NW/ Cherry Blossom Drive NW	Future Ellen Lane Park	Christina Street NW	Family-Friendly Bikeway	City of Salem	\$ <mark>5</mark> 9,000
West	Brookside Avenue NW	Doaks Ferry Road NW	Wallace Road NW	Family-Friendly Bikeway	City of Salem	\$45,000
Vest	Brush College Road NW	Urban Growth Boundary	Conner Street NW	Bike Lanes	City of Salem, Polk County	
Vest	Burley Hill Drive NW	Eola Drive NW	Glen Creek Road NW	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$25,000
West	Cascade Drive NW/ Parkway Drive NW	Eola Drive NW	Glen Creek Road NW	Family-Friendly Bikeway	City of Salem	\$83,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



Street NW

Bikeway

Avenue NW

Road NW



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
West	Mousebird Avenue NW	Lambert Street NW	Wallace Road NW	Family-Friendly Bikeway	City of Salem	\$54,000
West	Mousebird Avenue NW	North of Macaw Street NW	South of Royal Crown Avenue NW	Family-Friendly Bikeway	City of Salem	\$140,000
West	Orchard Heights Road NW	Urban Growth Boundary	Titan Drive NW	Bike Lanes	Polk County	
West	Patterson Street NW	7th Street NW	Northern Terminus	Bike Lanes	City of Salem	\$16,000
West	Patterson Street NW	Edgewater Street NW	6th Street NW	Bike Lanes	City of Salem	\$64,000
West	Patterson Street NW	Glen Creek Road NW	Lavona Drive NW	Family-Friendly Bikeway	City of Salem	\$7,000
West	Stoneway Drive NW	Highway 22	College Drive NW	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$334,000
West	Stoneway Drive NW/ Kaley Avenue NW	College Drive NW	Eola Drive NW	Family-Friendly Bikeway	City of Salem	\$40,000
West	Vickery Drive NW	Urban Growth Boundary	Colorado Way NW	Uphill Bike Lanes/Downhill Shared Lane Markings	Polk County	\$124,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.





# PEDESTRIAN SYSTEM ELEMENT

The goal of the City of Salem is to encourage and increase safe pedestrian travel. Many short trips to school, work, or the neighborhood store can be made entirely by walking. The key to encouraging more walking trips is to eliminate obstacles to walking such as deficient sidewalks, a lack of connectivity, unattractive sidewalks, and concerns about safety. A completed, well-designed, inviting sidewalk system encourages walking and provides important connections to other modes of transportation such as transit. By providing this infrastructure, we can expect to decrease the need for people to drive in their cars every time they want to make a trip. This, in turn, helps to lessen traffic congestion, preserve good air quality, improve public health, and ehnance community livability in Salem.

Originally developed in the mid 1990s, the Pedestrain System Element was updated through the Bike and Walk Salem Project, initiated in 2010. The Pedestrian System Element identifies specific strategies that will result in a well-designed, safe, and convenient pedestrian network in Salem and the surrounding Urban Growth Area. The Pedestrian Network presented on Maps 8-3 through 8-12 identifies and prioritizes needed improvements in the pedestrian system.

It is important to note that some of the pedestrian connections shown require additional refinement to determine how the desired connection can be accomplished. This is particularly true of proposed shared-use paths that would appear to cross over private property or through other sensitive areas (e.g., historic resource, natural resource, etc.). What is shown on the Pedestrian Network reflects only a conceptual alignment based on the need for pedestrian connectivity. Any publicly-funded project to pursue creation of a shared-use path will require that a feasibility study be conducted to identify and address the full range of issues associated with the proposed connection.

# What is the pedestrian network today?

Existing conditions for walking in Salem were evaluated as a basis for creating recommendations for future improvement strategies and projects. The following tasks were undertaken to understand what Salem's pedestrian network looks like today:

- Conducted field work.
- Used information from the City's Geographic Information System, Planning, and Public Works Departments.
- · Analyzed crash data from the Oregon Department of Transportation.
- Examined existing local, regional, and state plans and policies.
- Collected extensive public input through the project website, questionnaires, an online interactive comment map, listening stations, project meetings, and public open houses.

Existing condition highlights are described in the following section.

# SIDEWALK COVERAGE

Salem's existing pedestrian network consists of sidewalks, paved and unpaved path corridors, and various crossing treatments at intersections and mid-block locations. Sidewalk coverage is highest in Downtown Salem, where sidewalks exist on both sides of most streets. Several areas outside of Downtown such as neighborhoods east of Lancaster Drive (NE and SE), near Commercial Street SE and Liberty Road S, and parts of West Salem have



significant gaps in sidewalk coverage. In these areas, sidewalk gaps exist along some major streets, while residential streets may lack sidewalks altogether.

# SIDEWALK CONDITIONS ON CRITICAL ADA ROUTES

In light of the need for upgraded facilities in several areas that accommodate able-bodied and mobility-impaired users alike, and limited financial resources, a Critical Americans with Disabilities Act (ADA) Routes Network was developed as part of this Plan. The Critical ADA Routes Network comprises approximately 150 miles of streets within the Salem Urban Growth Boundary (which equates to about 300 miles of sidewalks) that connect mobility-impaired users with major destinations. The Critical ADA Routes network was developed based on extensive input provided by members of the disabled community, City staff, pedestrian advocates, and the public involvement process. The Critical ADA Routes Network is presented in Map 8-1: Critical ADA Routes Network.

Using existing available data, City of Salem staff conducted a broad assessment of existing sidewalk conditions along the Critical ADA Routes Network, assigning general ratings to corridor segments based on current physical conditions. While not citywide, this assessment provides a general understanding of the sidewalk conditions facing disabled pedestrians along key routes.

- 60 percent of sidewalks along the Critical ADA Routes Network are in "excellent" or "good" condition, with little
  or no cracking or other adverse surface conditions.
- 10 percent of sidewalks along the Critical ADA Routes Network are in "fair" condition; having cracks or some
  other tripping hazards that make it hard for mobility-impaired pedestrians to get around.
- 30 percent of sidewalks along the Critical ADA Routes Network are in "poor" or "bad" condition; having cracks
  or other conditions that make it hard for mobility-impaired pedestrians to get around.

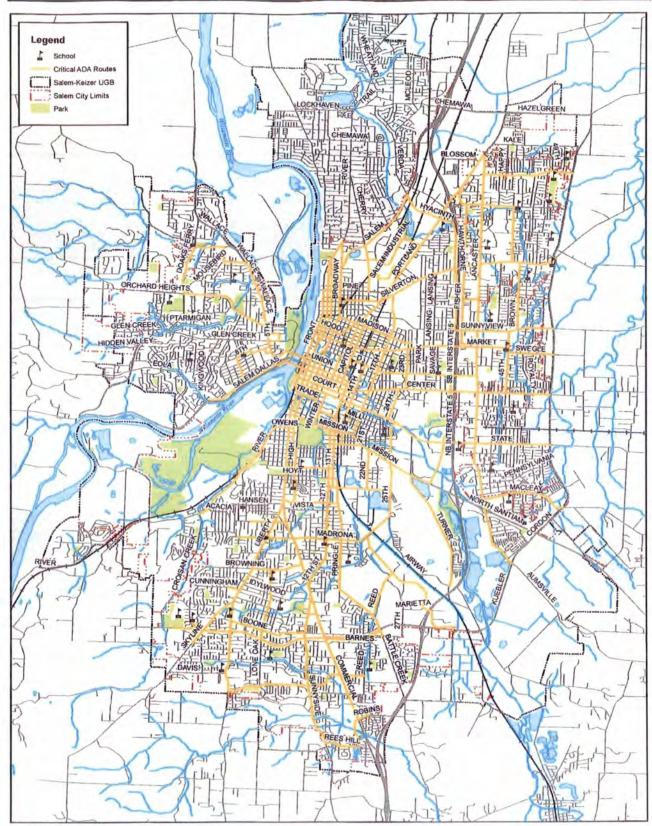
The pedestrian improvement strategies and projects that came out of the Critical ADA Routes assessment are included in the pedestrian system recommendations that are described in this Element and listed in Tables 8-5 through 8-7.

#### STREET CONNECTIVITY

Street connectivity represents an important issue facing pedestrians. Some areas, including the downtown core, West Salem's Edgewater District, and neighborhoods immediately to the east, north, and south of Downtown benefit from generally well-connected streets. However, beyond these areas, the street system is less connected with large blocks and cul-de-sacs in several areas that can make walking distances longer. Since most walking trips are for short distances (one mile or less), long street blocks or discontinuous streets may hamper the practicality of walking.

#### OFF-STREET PATH NETWORK

Salem currently lacks a comprehensive and interconnected path network, with existing paths concentrated primarily in the city's central neighborhoods. The existing paved path system includes longer path segments along Salem Parkway, State Street, 12th Street (NE and SE), and on the Center and Union Street bridges; while shorter segments exist within Riverfront Park, Bush's Pasture Park and Geer Community Park, Informal unpaved paths also exist



Map 8-1: Critical ADA Routes

Bike & Walk Salem
Source: City of Salem, ODOT, MWVCOG, Cherriots, Salem-Keizer School District
Author: Alta Planning + Design



between some subdivisions and along undeveloped public rights-of-way that help to provide local pedestrian connectivity.

# PEDESTRIAN ACCESS TO TRANSIT

Ensuring that pedestrians have a safe and comfortable route to transit stops is a critical element towards greater transit use. Field observations of major transit stops were conducted to identify existing passenger infrastructure (e.g., shelters and rider information) and the current pedestrian network close to each stop. This was done because the presence or absence of these elements may influence a person's decision whether to use transit (particularly for new or infrequent transit users). Major transit stops were identified by reviewing ridership data provided by the Salem Area Mass Transit District.

Several of the observed major transit stops in Salem were found to lack important pedestrian infrastructure components and have missing sidewalks, difficult crossings, and/or steep curb ramps. Additionally, a few major transit stops, such as the stop at Lancaster Drive and State Street, were found to lack critical passenger infrastructure, such as a shelters, benches, and posted schedules.

#### **NEEDS ASSESSMENT**

The technical pedestrian system needs assessment included field work and the review of background data and information to determine items such as key pedestrian destinations and existing access, high crash corridors and intersections, and the location of transportation disadvantaged populations.

Supplementing field work and the review of background information, the pedestrian system needs were identified based on feedback received during the public involvement process. Pedestrian system need highlights are provided below:

- Upgraded or new sidewalks are needed in the vicinity of major pedestrian destinations.
- Sidewalk maintenance is critical for pedestrians, especially for pedestrians using mobility-assistance devices.
- Improved wayfinding is needed to better orient pedestrians to key destinations such as libraries, parks, and community centers.

# **Policy Framework**

The Pedestrian System Element of the Salem TSP establishes goals, objectives, and policies that will guide how improvements are made to Salem's pedestrian facilities over the next 25 years. Pedestrian-related policies in Salem's previous Pedestrian Plan placed a major focus on connecting the pedestrian network by building new sidewalks. This updated Pedestrian Plan adds a special emphasis on ADA compliance and accommodating a wider range of pedestrians, including those that require mobility-assistance devices.

The projects and strategies included in this updated Pedestrian Plan focus on the following areas:

Serving a broad range of pedestrians (including users of various ages, confidence levels, trip types, and abilities).



- · Enhancing the existing system (e.g., upgrades to meet ADA requirements) to better serve users.
- · Building upon investments in the existing and planned system.
- Expanding the system to streamline walking connections and developing new routes to better serve existing and future destinations.
- Establishing seamless links with surrounding communities including Keizer, and Marion and Polk counties.
- · Enhancing user safety and comfort.

This policy framework reflects the State Transportation Planning Rule requirement that a pedestrian system plan element be included in local transportation system plans.

# Goals, Objectives, and Policies

The City of Salem has the following goal, objectives, and policies for the planning, development, and operation of its pedestrian system.

GOAL: To provide a comprehensive system of connecting sidewalks and walkways for a range of pedestrians with different abilities that will encourage and increase safe pedestrian travel and active transportation to support public health.

#### **OBJECTIVE NO. 1**

The City of Salem shall create a comprehensive system of pedestrian facilities.

### Policy 1.1 Inventory Existing System and Identify Future Needs

The City shall inventory and map existing pedestrian facilities. Facility inventories and selected usage surveys shall be performed every five years to determine the success or failure of meeting the Plan's pedestrian goal, objectives, and policies.

### Policy 1.2 Establish Sidewalk Construction Program

To complete the pedestrian facility network, the City shall establish a Sidewalk Construction Program that reflects the City's funding resources. This program will give priority to the construction of missing sidewalks in already developed areas of the City that would provide improved access to schools, parks, shopping, and transit services.

### Policy 1.3 Focus Attention on Intermodal Connections

Sidewalks and walkways shall complement access to transit stations/stops, train stations, and multiuse paths. Activity centers and business districts should focus attention on and encourage pedestrian travel within their proximity.



## **Policy 1.4 Ensuring Future Sidewalk Connections**

All future development shall include sidewalk and walkway construction as required by the Salem Revised Code and adopted City of Salem Design Standards. All road construction or renovation projects shall include sidewalks. The City shall support, as resources are available, projects that address identified barriers to pedestrian travel or safety.

## Policy 1.5 Complete Connections with Crosswalks

All signalized intersections shall have marked crosswalks. School crosswalks will be marked where crossing guards are provided. Marked crosswalks, along with safety enhancements (medians and curb extensions), shall be provided, as resources are available, at unsignalized intersections and uncontrolled traffic locations in order to provide greater mobility in areas frequently traveled by persons with limited pedestrian capabilities. Marked crosswalks may also be installed at other high volume pedestrian locations without medians or curb extensions if a traffic study shows there would be a benefit to those pedestrians.

## Policy 1.6 Compliance with ADA Standards

The City shall comply with the requirements set forth in the Americans with Disabilities Act regarding the location and design of sidewalks. To do so, the City shall establish Critical ADA Routes where compliance with Americans with Disabilities Act Accessibility Guidelines is prioritized. Critical ADA routes are to be those that provide direct, convenient, and safe on-street and off-street pathway connections to existing and planned neighborhood and community destinations such as schools, shopping areas, parks, multifamily developments, government offices, and transit stops.

#### **OBJECTIVE NO. 2**

Increase citywide journey to work walking mode share (U.S. Census) to 7 percent by 2020, and 11 percent by 2030.

## Policy 2.1 Maintaining and Assuring the Quality of Facilities

The City shall establish standards for the maintenance and safety of pedestrian facilities. These standards shall include the removal of hazards and obstacles to pedestrian travel, as well as maintenance of benches and landscaping. A minimum clear path of 36 inches shall be maintained in compliance with ADA standards, with a priority for ADA critical routes. Definition of a clear path includes an area free of debris, hazards, and obstacles, as well as substantially broken sidewalks.

Owners of property within the city limits and adjacent to sidewalks built since September 1, 1992, will be responsible for repairing or replacing damaged sidewalks, unless the damage has been caused by a City street tree. Owners of property within the city limits and adjacent to sidewalks built prior to September 1, 1992, will be assigned responsibility for repairing or replacing damaged sidewalks after the City of Salem first repairs the existing sidewalk and brings them up to an acceptable standard. The City will remain responsible for future damage caused by City street trees.

#### Policy 2.2 Pedestrian Supportive Land Uses

Comprehensive Plan land use designations and zoning shall be developed to allow for mixed land uses which promote pedestrian travel.

8-6—PEDESTRIAN SYSTEM ELEMENT

**DRAFT DECEMBER 2012** 



## Policy 2.3 Promotion of Walking for Health and Community Livability

The City shall encourage efforts that inform and promote the health, economic, and environmental benefits of walking for the individual and the community. Walking for travel and recreation shall be encouraged to achieve a more healthful environment that reduces pollution and noise to foster a more livable community.

## **Policy 2.4 Connecting Pathway Network**

The City shall encourage the development of a connecting, multiuse pathway network, using linear corridors such as rivers, creeks, utility easements, and abandoned rail lines, using such programs as rail-banking, which complement and connect to the sidewalk, park, and transit systems.

#### **OBJECTIVE NO. 3**

The City of Salem shall encourage education services and promote safe pedestrian travel in order to reduce the number of accidents involving pedestrians by 50 percent and aim for zero fatalities by 2030. (Note: 45 pedestrian-related crashes, with 5 resulting in fatalities in 2008.)

## Policy 3.1 Education of Pedestrian Safety Needs

The City shall encourage schools, safety organizations, and law enforcement agencies to provide information and instruction on pedestrian safety issues that focus on prevention of the most important accident problems. The programs shall educate all roadway users of their privileges and responsibilities when driving, bicycling, and walking.

#### Policy 3.2 Taking Action to Improve Safety

The City shall enforce pedestrian safety laws and regulations to help increase safety as measured by a reduction in accidents. Attention should be focused on areas where high volumes of automobile and pedestrian travel occur. Warnings and citations given to drivers and pedestrians should serve to impress the importance of safety issues.

#### Policy 3.3 Completion of Street Lighting Facilities

The City shall work toward the completion of the street lighting system, designed to City illumination standards, on all Arterial and Collector streets within the Urban Service Area (USA).

#### Policy 3.4 Safe Access to Schools

The City shall work with the Salem-Keizer School District and neighborhood associations to maintain and improve its programs to evaluate the existing pedestrian access to local schools, estimate the current and potential use of walking as a travel mode, evaluate safety needs, and propose changes to increase the percentage of children and young adults safely using this mode.

## **Performance Measures**

Evaluating progress towards the implementation of pedestrian goals can help the City and community understand what has been achieved through project implementation. This information can inform plan updates and future



plans. The performance measures and targets in the table below rely on readily available data, specifically network implementation and journey to work mode share data collected by the US Census, to help ensure periodic evaluation.

TABLE 8-1 Pedestrian System Performance Measures

Performance Measure	Target
Pedestrian Commute Mode Share*	Increase citywide journey to work walking mode share (US Census) to 7 percent by 2020, and 11 percent by 2030.
Pedestrian Network Construction**	Construct 90 percent of the Critical ADA Routes by 2030.

<sup>\*</sup>According to the American Community Survey (ACS), walking Journey to Work mode share was 3.6% for 2006-2008.

**Facility Type** 

## **Pedestrian Facility Types**

The recommended pedestrian projects refer to a variety of pedestrian facility types.

TABLE 8-2 Pedestrian Facility Types

**Sidewalks:** Paved walkways adjacent to roadways; particularly important for mobility-impaired pedestrians. Design standards and guidelines are provided by FHWA, ADA and ODOT.



**Shared-Use Paths:** Physically separated from motor vehicle traffic; serve one or more non-motorized user including bicyclists, pedestrians, in-line skaters, skateboarders, or wheelchairs; typically serve bi-directional traffic. Design guidance is provided by FHWA and ODOT. Design should be tailored to particular project locations.



**Curb Ramps:** Facilitate transitions between the sidewalk and roadway; particularly important for mobility-impaired pedestrians and other "wheel" users. Design standards and guidelines are provided by ADA.

<sup>\*\*</sup>Note that off-street paths should be counted only towards bicycle network construction evaluation and not pedestrian network construction so as not to double count off-street path construction.



## **Facility Type**



Median Refuge Islands: Enable pedestrians to break up a crossing into multiple segments, allowing pedestrians to judge conflicts with vehicles traveling in each direction separately, while also providing a resting location so that slower pedestrians can wait for a break in traffic. Design guidance is provided by FHWA and ODOT.



**Curb Extensions:** Expand the sidewalk or curb face into the on-street parking lane at intersections or mid-block crossings; shorten the pedestrian crossing distance; commonly used for traffic calming. Design guidance is provided by FHWA and ODOT.



Audible Pedestrian Signals: Used at signalized intersections to assist visually-impaired pedestrians by alerting them to when they may safely enter a crosswalk; provide additional information regarding the length of time the signal will remain in the pedestrian crossing phase. Design guidance is provided by FHWA.



Pedestrian Countdown Signals: Used at signalized intersections; provide a visual cue to pedestrians indicating remaining time in the pedestrian crossing phase. Design guidance is provided by FHWA.

## Citywide Pedestrian Recommendations

The following are recommendations for citywide efforts, some of which are already underway, to enhance Salem's pedestrian environment on a citywide scale.

### SIDEWALK INVENTORY AND INSPECTION

The City will continue its Sidewalk Inspection and Repair Program to enable the City to measure progress toward upgrading the existing sidewalk network and completing the sidewalk system. Priority inspections should be assigned to the approximately 150-mile Critical ADA Routes network identified in Map 8-1: Critical ADA Routes Network.

#### SIDEWALK INFILL

The City will continue to pursue sidewalk infill and upgrade opportunities. Per the City's street design standards, sidewalks will be developed as part of new roadway construction, while upgrades along existing streets may occur



in tandem with other planned corridor improvements. Other options include privately-funded small sidewalk gap closures on existing streets, possibly triggered upon a change in ownership of the adjacent property. For projects constructed independently of larger corridor-wide improvements, priority is assigned to the Critical ADA Routes Network and corridors that serve major pedestrian destinations.

#### ALTERNATIVES TO SIDEWALKS

The public right-of way located on either side of a paved roadway is typically intended for walking, whether or not a sidewalk currently exists. However, completing some sidewalk gaps can be challenging.

In areas where paved sidewalks are not feasible or appropriate, several options can be explored, including paths constructed of pervious materials, shoulder widening, traffic calming measures, and/or colored shoulders. The latter two options can visually narrow the roadway and may slow traffic, making the street more pedestrian-friendly.

#### CROSSING IMPROVEMENTS

Significant opportunities also exist to enhance the pedestrian crossing environment at intersections and mid-block locations throughout the city. Potential crossing treatments include pedestrian refuge islands, passive pedestrian detection, curb extensions and mid-block crossings. Additional treatments could include high-visibility crosswalks and signs, pedestrian countdown signals, and the addition of pedestrian crossings on intersection legs where crossings are currently prohibited.

#### UPGRADES TO ACCOMMODATE PEDESTRIANS WITH DISABILITIES

Salem recognizes that all pedestrian routes should safely and conveniently accommodate able-bodied and mobility-impaired users alike. The approximately 150-mile Critical ADA Routes Network provides guidance for where improvements should be prioritized to enhance mobility and accessibility for pedestrians with disabilities. Examples of potential treatments are described briefly below.

- Repair or replacement of damaged sidewalks (e.g., to address cracking, breaking, and uneven surfaces).
- Sidewalk obstruction removal or relocation (e.g., utility poles, mailboxes, encroaching vegetation).
- Reconstruction of steep driveway cross-slopes.
- Pedestrian push button retrofits (placed at a location accessible by wheelchair users).
- Audible pedestrian signals at signalized intersections.

As corridors and intersections are upgraded to better accommodate pedestrians with disabilities, each disability type and its corresponding limitations must be considered. It is important to also be aware of how planning and designing for people with one disability may affect users with other impairments. For instance, curb cuts and smooth transitions to the street assist people in wheelchairs, but may present challenges for sight-impaired pedestrians attempting to locate the curb.

### TRANSIT ACCESS ENHANCEMENTS



The City of Salem will work jointly with the Salem Area Mass Transit District to enhance pedestrian access to transit stops. Key recommendations include providing all of the following at transit stops:

- · Convenient and direct pedestrian links to transit stops.
- Paved landing pads to safely accommodate wheelchairs.
- · Covered passenger shelters.
- · Seating areas.
- Posted system maps, route maps, and schedules (additional options include providing real-time information display of upcoming bus arrivals).
- · Adequate lighting.
- · Trash receptacles.

#### STREETSCAPE ENHANCEMENTS

Streetscape treatments help establish neighborhood identity, activate public spaces, and are a key ingredient in creating an attractive and inviting pedestrian environment. Examples of streetscape treatments include street trees, ornamental lighting, street furniture, outdoor dining, awnings on building facades, and public art. Several recent planning efforts include key streetscape-related recommendations that this Plan supports, including the Salem Vision 2020 Action Plan, Salem Downtown Strategic Action Plan, and Edgewater/Second Street Redevelopment Action Plan.

#### "GREEN STREET" ENHANCEMENTS

As the City of Salem works to improve and expand the pedestrian environment, opportunities exist to implement supplemental treatments that benefit both pedestrians and the natural environment. Often referred to as "green street" treatments, these innovative applications address stormwater management while improving walkability through new sidewalk connections, traffic calming, and other pedestrian-friendly elements. Common green street treatments include:

- Minimizing impermeable surfaces.
- · Installing bioswales.
- · Installing curb extensions with stormwater treatment elements.
- Using permeable pavements, where practical.

#### WAYFINDING SIGNS

Wayfinding signs can vastly improve the walking environment by orienting pedestrians (especially those unfamiliar with an area) to and through destinations, and highlight features that may have otherwise been overlooked by the

1 ENGROSSED ORDINANCE BILL NO. 20-12 2 AN ORDINANCE RELATING TO THE BICYCLE ELEMENT AND THE PEDESTRIAN 3 ELEMENT OF THE SALEM TRANSPORTATION SYSTEM PLAN; AMENDING THE 4 SALEM AREA COMPREHENSIVE PLAN 5 The City of Salem ordains as follows: 6 Section 1. Findings. 7 a. Statewide Planning Goals 8 (1) Goal 1: Citizen Involvement. To develop a citizen involvement program that 9 ensures the opportunity for citizens to be involved in all phases of the planning process. 10 The City conducted substantial public outreach for over a year prior to conducting any 11 hearings on proposals, including citizen forums and the creation of a Stakeholder Advisory 12 Group to obtain public input throughout the planning process and ensure that citizens would be 13 involved in the development of the Bicycle and Pedestian Elements. In addition, to provide 14 additional opportunites for public involvement, the City conducted a public hearing before the 15 Salem Planning Commission, which is the City's committee for citizen involvement under 16 Goal 1, and a public hearing before the City Council. The public outreach, public involvement 17 in the planning process, and hearings before both the Planning Commission and City Council 18 resulted in substantial citizen involvement in the planning process, and comply with, and 19 therefore satisfy, Goal 1. 20 (2) Goal 2: Land Use Planning. To establish a land use planning process and policy 21 framework as a basis for all decisions and actions related to use of land and to assure an 22 adequate factual base for such decisions and actions. 23 The Salem Transportation System Plan (TSP) is adopted as a Detailed Plan of the Salem 24 Revised Code. The Salem TSP contains Comprehensive Transportation Policies, These 25 policies, together with the goals, objectives, policies, maps, and projects found in each of the 26 individual Salem TSP elements, constitute the basis for transportation planning within the Salem 27 Urban Area. The proposed amendments comply with Goal 2 because, as set forth in these 28 findings, they are consistent with the policies contained in the Salem Area Comprehensive Plan 29 through their support of a multimodal transportation system that connects residential and

employment land uses as designated in the Salem Area Comprehensive Plan.

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 (3) Goal 3: Agricultural Lands. To preserve and maintain agricultural lands.

The proposed amendments are consistent with the land use designations contained in the Salem Area Comprehensive Plan. Neither new projects, nor any of the other proposed amendments, will convert land designated for Exclusive Farm Use by the Zoning Ordinance to non-agricultural uses beyond what is anticipated in the Salem Area Comprehensive Plan, and therefore, the proposal complies with Goal 3.

(4) Goal 4: Forest Lands. To conserve forest lands by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use of forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture.

The proposed amendments are limited to the lands contained within the Salem Urban Growth Boundary (UGB). Because there are no forest lands within the Salem UGB, the proposed amendments will have no impact on forest lands, and therefore, the proposal complies with Goal 4.

(5) Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces. To protect natural resources and conserve scenic and historical areas and open spaces.

The proposed amendments expand bicycle and pedestrian access to natural resources, scenic and historic areas, and open space within the Salem UGB. The proposed amendments encourage non-motorized travel to these sensitive areas. Bicycle and pedestrian travel creates less noise, uses less energy, and is less disruptive to the natural resources than automobile travel and associated parking facilities. As individual projects move forward, they will be designed in a manner that is consistent with the design standards adopted by the City of Salem and will have the least impact on the environment as possible. As Goal 5 relates to the proposed pedestrian trail in the area between Rural Ave. and Hoyt Ave., the proposal provides only that such a trail be studied for the general area, and does not require that a trail be located within the cemeteries located between the two streets. If further study concludes that a trail should be located in the study area, then a minor amendment to the TSP will be necessary, in which case an Economic, Social, Environmental, and Energy (ESEE) consequences analysis will be conducted, if required by Oregon law. An ESEE analysis is not necessary or required at the time of adoption of this

proposal, because the need for a connection between the two streets is subject to further study, and therefore it is not possible to determine whether there will be any impacts to the study area, the presence of any conflicting uses, and the consequences of a trail.

(6) Goal 6: Air, Water, and Land Resources Quality. To maintain and improve the quality of air, water, and land resources of the state.

The proposed amendments expand transportation options and specifically encourage non-motorized travel. The proposed amendments are consistent with Goal 6 because they encourage non-motorized travel and decrease reliance on motorized transportation, which will reduce impacts that motorized transportation has to the air, water, and land resources of the state. The development of projects proposed in this amendment will be undertaken consistent with Oregon and local regulations related to the protection of air, water, and land resources. The Salem TSP directs the provision of transportation facilities and services, including bicycle and pedestrian facilities and services, in a manner that has the least impact on the environment as possible, given the City's urban character. Therefore, the proposal is consistent with Goal 6.

(7) Goal 7: Areas Subject to Natural Disasters and Hazards. To protect people and property from natural hazards.

The Salem TSP seeks to limit transportation facilities in areas that are known to be prone to damage or destruction due to disasters or hazards. Where this is not possible, transportation facilities incorporate proper mitigation and design elements. The overall transportation system is designed to provide multiple routes to most areas of the city via multiple travel modes. The proposed amendments require individual projects to be designed in a manner that is consistent with the design standards adopted by the City of Salem, including the avoidance of an area prone to natural hazards, and if necessary, the mitigation of the risks of hazard, and therefore the proposal is consistent with Goal 7.

(8) Goal 8: Recreational Needs. To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

The proposed amendments have been planned in coordination with the current update to the Comprehensive Parks System Master Plan. The proposed amendments to the Pedestrian and Bicycle Elements are consistent with Goal 8 because they expand connections to existing and

proposed trails within the City's Park system, and provide for increased pedestrian and bicycle access to parks and recreational facilities.

(9) Goal 9: Economic Development. To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

The proposed amendments are consistent with Goal 9 because they support the City's economic development efforts by offering alternative transportation options to residents and increased access from residential areas to goods, services, cultural resources, and employment centers. Increasing bicycle and pedestrian access also reduces the need for off-street parking.

(10) Goal 10: Housing. To provide for the housing needs of citizens of the state.

The proposed amendments are consistent with Goal 10 because they support the land uses designated in the Salem Area Comprehensive Plan through the provision of an integrated network of facilities and additional transportation options for residents, which increases access from residential areas to goods, services, cultural resources, and employment centers, and encourages higher density housing development and non-motorized travel.

(11) Goal 11: Public Facilities and Services. To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

The Salem TSP constitutes the transportation component of the City's Public Facilities Plan. The Salem TSP matches the provision of transportation services and facilities to the overall travel needs of the community, and strives to provide the most efficient and timely comprehensive transportation system possible. The proposal is consistent with Goal 11 because it supports timely, orderly, and efficient provision of public facilities and services through the creation of an enhanced pedestrian and bicycle transportation plan, and prioritizes projects based on need and feasibility.

(12) Goal 12: Transportation. To provide and encourage a safe, convenient, and economic transportation system.

The Salem TSP establishes a comprehensive transportation plan that provides increased services and facilities for all modes of travel, increasing overall mobility for the community.

The proposed amendments to the Pedestrian and Bicycle Elements of the Salem TSP are

consistent with Goal 12 because they will benefit modal connectivity, access, safety, convenience, and the increased use of non-motorized transportation.

(13) Goal 13: Energy and Conservation. To conserve energy.

The proposal expands transportation options and specifically encourages non-motorized travel which does not require the use of non-renewable energy sources, thereby conserving such energy resources for future needs. The proposal is consistent with Goal 13 because it aims to reduce energy consumption by increasing the overall number of trips by non-motorized travel.

(14) Goal 14: Urbanization. To provide an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

The proposal is consistent with Goal 14 because it accommodates the needs of a diverse urban population for bicycle and pedestrian travel as alternative modes of transportation within the Salem UGB, and encourages more dense development within the Salem Urban Area by providing additional and more convenient travel options for residents, thereby encouraging patterns of development that have more efficient connections to urban uses, and therby reducing the need to expand the UGB. The location and type of improvements proposed complement and connect with existing and planned improvements in adjacent urban and rural jurisdictions, thereby providing for an orderly and efficient transition among the jurisdiction's transportation systems. The amendments expand travel options for pedestrians and cyclists that help create more vibrant and livable communities, reduce congestion, improve health, increase safety, and provide lower-cost travel choices. Therefore, the proposal is consistent with Goal 14.

(15) Goal 15: Willamette River Greenway. To protect, conserve, enhance, and maintain the natural, scenic, historical, agricultural, economic, and recreational qualities of land along the Willamette River as the Willamette Greenway.

These amendments are consistent with Goal 15 because any bicycle or pedestrian facilities proposed within the Willamette River Greenway must continue to comply with the City's Greenway Plan and with SRC Chapter 141, Willamette Greenway. At the time of development of any project in the Willamette River Greenway, each project shall be required to comply with Goal 15. Projects that are proposed to be located within the Willamette Greenway

1	Boundary will provide recreational bicycle and pedestrian access to the natural resources within		
2	the area in a manner that is least impactful, and most consistent with the importance of the		
3	Willamette Greenway as a natural, scenic, historical, agricultural, economic, and recreational		
4	resource to the public.		
5	(16) Goals 16, 17, 18, and 19: Coastal Resource Goals.		
6	These Goals do not apply to the Salem TSP,		
7	b. Transportation Planning Rule		
8	The State Transportation Planning Rule is the implementing rule for Statewide Planning		
9	Goal 12 (Transportation). The State Transportation Planning Rule requires refinement plans to		
0	comply with the applicable Statewide Planning Goals, and acknowledged comprehensive plan		
1	policies. One of the primary reasons for developing the Salem TSP was to satisfy requirements		
12	found in the State Transportation Planning Rule. All of the proposed amendments recommended		
13	for adoption are supportive of the goals and requirements of the State Transportation Planning		
14	Rule because they support efforts to create a multi-modal transportation network and reduce		
15	reliance on motorized vehicles. Therefore, adoption of the proposal complies with the		
16	requirements of the State Transporation Planning Rule, and does not require the City to invoke o		
17	comply with OAR 660-012-0025(3).		
8	c. Salem-Keizer Metropolitan Region: Salem-Keizer Area Transportation Study 2011-		
19	2035 Regional Transportation Systems Plan		
20	Salem-Keizer Area Transportation Study (SKATS) is the regional metropolitan planning		
21	organization for the Salem-Keizer area. Housed within the Mid-Willamette Valley Council of		
22	Governments, SKATS is charged with developing the regional transportation system plan. The		
23	State Transportation Planning Rule requires that the Salem TSP and SKATS Regional		
24	Transportation System Plan be consistent with each other.		
25	A SKATS staff member was on the Stakeholder Advisory Committee throughout the		
26	planning process that led to these proposed amendments. Staff coordinated with SKATS		
27	throughout the process to make sure that the proposed amendments are consistent with the		
28	Regional Transportation System Plan.		
29	The goals, objectives, and policies of the Salem TSP and the proposed amendments are		

consistent with the goal of the SKATS Regional Transportation Systems Plan because they

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support development of a multimodal and comprehensive transportation system that provides for movement of people by the mode of their choice, which is a key component of the goal of the Regional Transportation Systems Plan. The goals, objectives, and policies contained in the Bicycle and Pedestrian Elements of the Salem TSP support the objective of the Regional Transportation Systems Plan to provide a multi-modal system that offers the residents of the area choices for their transportation needs, and has the potential to decrease overall congestion as well as reduce pollutants and greenhouse gas creation. The projects identified in the amendments to the Salem TSP support creation of new bicycle and pedestrian facilities on regional corridors. The percent of regional corridors with bicycle facilities and sidewalks is one indicator of the objective to provide a multi-modal system in the Regional Transportation Systems Plan.

## d. The Salem Area Comprehensive Plan

The Salem TSP complies with all of the goals, objectives, and policies found in the Salem Area Comprehensive Plan. The proposed amendments are consistent with and supportive of the goals, objectives, and policies found in the Salem Area Comprehensive Plan, as described below:

(1) B. General Development Policy 4, Energy: The City and Counties shall consider and foster the efficient use of energy in land use and transportation planning.

The provision and enhancement of bicycle and pedestrian facilities offer individuals additional options to use energy-efficient modes of transportation, and therefore the proposal is consistent with this Policy.

(2) E. Residential Development Policy 2(a), Facilities and Services Location: Residential uses and neighborhood facilities and services shall be located to accommodate pedestrian, bicycle, and vehicle access.

The proposed amendments identify pedestrian and bicycle facilities necessary to support residential uses and neighborhood facilities, and provide alternative, non-motorized travel options for residential areas to access commercial, retail, and industrial uses, and therefore the proposal is consistent with this Policy.

(3) E. Residential Development Policy 8(a), Circulation System and Through Traffic: Residential neighborhoods shall be served by a transportation system that provides access for pedestrian, bicycles, and vehicles while recognizing the neighborhood's

physical constraints and transportation service needs: (a) The transportation system shall promote all modes of transportation and dispersal rather than concentration of through traffic.

The proposal include bicycle and pedestrian facilities that provide access to residential neighborhoods and promotes non-motorized modes of transportation. Proposed projects encourage dedicated routes for non-motorized modes of transportation that will project a safer transportation system and dispersal of traffic. Therefore the proposal complies with this Policy.

(4) J. Transportation Goal: To provide a balanced, multimodal transportation system for the Salem Urban Area that supports the safe and efficient movement of goods and people.

The proposed amendments support the safe movement of people in the Salem Urban Area by foot and on bicycle, by providing additional and dedicated routes for non-motorized modes of transportation. Therefore the proposal complies with this Goal.

(5) J. Transportation Policy 4, Multimodal Transportation System: The transportation system for the Salem Urban Area shall consist of an integrated network of facilities and services for a variety of motorized and non-motorized travel modes.

The proposal expands the planned network of facilities to support walking and bicycling in the Salem Urban Area, and integrates new projects with existing transporation facilities both within Salem and adjacent jurisdictions. Therefore the proposal complies with this Policy.

(6) J. Transportation Policy 11, Decreased Reliance on the Single Occupant Vehicle: Local governments within the Salem Urban Area shall develop multimodal plans, services, and programs that decrease reliance on the Single Occupant Vehicle as the dominant means of travel.

The proposed amendments support a decreased reliance on the Single Occupant Vehicle by planning for an expanded network of bicycle and pedestrian facilities, and encouraging alternative non-motorized modes of transportation through safer and expanded routes. Therefore the proposal complies with this Policy.

(7) J. Transportation Policy 16, Accessibility for People with Disabilities: "The transportation system shall be designed with consideration of the needs of people with disabilities by meeting the requirements set forth in the Americans with Disabilities Act."

The proposal enhances and increases bicycle and pedestrian transporation facilities in the Salem Urban Area. The planned facilities will be developed consistent with the requirements of the Americans with Disabilities Act, and will provide a safer, more extensive, and more integrated transportation system that will help meet the needs of people with disabilities.

(8) J. Transportation Policy 19, Neighborhood Livability: "Transportation facilities shall be designed and constructed to: minimize noise; energy consumption; neighborhood disruption; economic losses to the private or public economy, and social, environmental, and institutional disruptions; and to encourage the use of public transit, bikeways, and

The proposal supports the development and maintenance of bikeways, walkways, and access to public transit through policy and identification of new facilities, which will encourage alternative non-motorized modes of transportation. Increasing bicycle and pedestrian transportation will meet the objectives of this Policy, and therefore the proposal complies with

- Section 2. The Bicycle System Element of the Salem Transportation System Plan, adopted June 28, 1998, and amended February 14, 2000, May 14, 2001, January 24, 2005, March 28, 2005,
- April 23, 2007, and April 26, 2010, is hereby deleted in its entirety and replaced with "The 18
- Bicycle System Element," as set forth in "Exhibit 1," which is attached hereto and incorporated 19
- 20
- 21 Section 3. The Pedestrian System Element of the Salem Transportation System Plan, adopted
- June 28, 1998, and amended February 14, 2000, May 14, 2001, January 24, 2005, March 28, 22
- 2005, April 23, 2007, and April 26, 2010, is hereby deleted in its entirety and replaced with 23
- "The Pedestrian System Element," as set forth in "Exhibit 2," which is attached hereto and 24
- 25
  - Section 4. The Street System Element, Objective 2, Policy 2.1 Multimodal Street Design is
    - "The City of Salem shall design its streets to safely accommodate pedestrian, bicycle, and motor vehicle travel, motorized and non-motorized transportation. including transit service."

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1	Section 5. The Transit System Element, Policy 1.6 - Intermodal Connectivity is hereby amended				
2	as follows:				
3	"The City of Salem shall encourage connectivity between different travel modes.				
4	Transit stops, transfer centers, and park-and-ride facilities should be accessible by				
5	pedestrian, bicycle, bus, and automobile travel modes. Priority should be given to				
6	completing the sidewalk network within a quarter-mile of transit stops. Intercity				
7	passenger bus, aviation, and rail terminals should be accessible by transit				
8	services."				
9	Section 6. The Bicycle System Element adopted by Section 2 of this ordinance and the				
10	Pedestrian System Element adopted by Section 3 of this ordinance are hereby made a part of the				
11	Salem Area Comprehensive Plan.				
12	Section 7. Severability. Each section of this ordinance, and any part thereof, is severable, and				
13	if any part of this ordinance is held invalid by a court of competent jurisdiction, the remainder of				
14	this ordinance shall remain in full force and effect.				
15	PASSED by the City Council this day of, 2012.				
16	ATTEST:				
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19	City Recorder				
20	Approved by City Attorney:				
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23	Checked by: J. Warncke				
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# **BICYCLE SYSTEM ELEMENT**

Bicycles offer a viable and economical mode of transportation with fewer negative impacts on air quality and finite land resources than those associated with automobiles. To increase the role of the bicycle as a viable mode of transportation in the city, it is important to provide a safe, convenient, well connected, comprehensive system of bicycle facilities that accommodates a range of bicyclists with varying skill levels.

In addition to creating facilities for bicycles, the community must develop an awareness that bicycles and motor vehicles are equal partners on the roadway. The bicycle is considered a vehicle in the State of Oregon Motor Vehicle Code and must adhere to the same rules of the road. Likewise, motorists must respect the presence and vulnerability of bicyclists.

Originally developed in the mid 1990s, the Bicycle System Element was updated through the Bike and Walk Salem project, initiated in 2010. The Bicycle System Element establishes a "roadmap" for a safe and convenient bicycle system in Salem and the surrounding Urban Growth Area. The Bicycle Network presented on Maps 7-1 through 7-5 is intended to guide completion of a comprehensive, safe, and convenient bicycle system. This network incorporates a variety of bicycle facility types and citywide strategies described later in this Element.

It is important to note that some of the bicycle connections shown require additional refinement to determine how the desired connection can be accomplished. This is particularly true of proposed shared-use paths that would appear to cross over private property or through other sensitive areas (e.g., historic resource, natural resource, etc.). What is shown on the Bicycle Network reflects only a conceptual alignment based on the need for connectivity. Any publicly-funded project to pursue creation of a shared-use path will require that a feasibility study be conducted to identify and address the full range of issues associated with the proposed connection.

## What is the bicycle network today?

Existing conditions for bicycling in Salem were evaluated as a basis for creating recommendations for future improvement strategies and projects. The following tasks were undertaken to understand what Salem's bicycle network looks like today:

- · Conducted field work.
- Used information from the City's Geographic Information System (GIS), planning, and public works departments.
- Analyzed crash data from the Oregon Department of Transportation (ODOT).
- Examined existing local, regional, and state plans and policies.
- Collected extensive public input through the project website, questionnaires, an online interactive comment map, listening stations, project meetings, and public open houses.

Existing condition highlights are described in the following section.

### **NETWORK COVERAGE**

Salem's existing bicycle network generally consists of bike lanes, paved and unpaved path corridors, and a small network of streets with recently-installed shared lane markings. Most bike lanes exist on arterial and collector



streets, which provide direct and efficient routes to major destinations. The distribution of Salem's bike lane network generally reflects the distribution of major streets across the city.

However, while several streets radiating from Downtown include bike lanes, fewer options exist for cross-town travel.

#### SYSTEM CONNECTIVITY

Connectivity is also an issue, as the bike lane network includes gaps in several locations. The City has recently expanded the on-street bikeway system with more diverse facility types, namely the recent installation of shared lane markings on Chemeketa Street NE and Commercial Street NE in Downtown and on Rosemont Avenue NW in West Salem. Implementation of these recent projects contributes to a more well-connected on-street system in these areas.

#### **BICYCLE PARKING**

The availability and type of bicycle parking in Salem varies by location. Downtown Salem provides the greatest availability of short- and long-term parking options, including an expanding inventory of bicycle racks. Bicycle lockers, available for rent on a quarterly or semi-annual basis, exist in the Liberty Square and Chemeketa parkades, YMCA, City Hall, and at the 12th Street SE Amtrak Station.

#### BICYCLE WAYFINDING SIGNAGE

The City of Salem has achieved significant progress in developing its bicycle wayfinding signage, particularly in the downtown core and surrounding neighborhoods, and in inner West Salem. The City plans to install additional signage in these areas to simplify bicyclist connections to bridges and other key destinations and routes.

#### OFF-STREET PATH NETWORK

Salem currently lacks a comprehensive and interconnected path network, with existing paths concentrated primarily in the city's central neighborhoods. The existing paved path system includes longer path segments along Salem Parkway, River Road S, State Street, 12th Street (NE and SE), and on the Center and Union Street bridges; while shorter segments exist within Riverfront Park, Bush's Pasture Park, and State Lands Ballfields City Park. Informal unpaved paths also exist along some undeveloped public rights-of-way. Despite the presence of short segments, paths are generally lacking in most of West Salem and in neighborhoods east of Interstate 5.

#### **BICYCLE ACCESS TO TRANSIT**

Bicycle access to transit is essential to establishing seamless multi-modal transportation connections. Bicycling and transit are mutually beneficial, and increasing bicycle access is recognized as an efficient and effective way to improve transit ridership, as bicycles effectively extend transit's reach.

The availability of transit service can also help meet the needs of bicycle users. For example, bicyclists who may not be comfortable riding at night or in inclement weather may be more inclined to make a bicycle trip knowing that transit exists as an alternative option for their return trip should conditions change during an outing. Transit can



also help bicyclists overcome steep hills and provides a convenient safety net when bicyclists encounter a flat tire, equipment breakdown, or other unforeseen event.

Transit stop passenger infrastructure, such as short- and long-term bicycle parking near transit stops, can help to improve multi-modal transportation connections. Some of the major transit stops in Salem provide bicycle parking, though most do not. Currently, Cherriots buses include bike racks with a capacity for two bicycles.

### **NEEDS ASSESSMENT**

The technical bicycle system needs assessment included field work and the review of background data and information to determine items such as key bicyclist destinations and existing access, high crash corridors and intersections, and the location of transportation disadvantaged populations.

Supplementing field work and the review of background information, the project team identified bicycle system needs based on feedback received during the public involvement process. Bicycle system need highlights are provided below:

- · There is a desire for improved bicycle system connectivity.
- More formalized bicycle facilities are desired along major streets (e.g., 25th Street SE, Reed Road SE, Skyline Road S, Turner Road SE, Brown Road NE).
- Enhanced visual cues (e.g., shared lane markings or physical separation) are needed to increase motorists' awareness of bicyclists on the roadway.

#### **BICYCLE USER TYPES**

Bicyclists vary substantially in their experience, confidence levels, and preferences for bicycle facility types. Since this Plan aims to enhance user safety and comfort for all potential bicyclists, it is important to understand the various types of bicyclists that may want to use the system.

The overall population can be divided into four general groups according to their abilities and inclination toward bicycling for transportation. The following sections briefly describe the four primary bicycle user types.

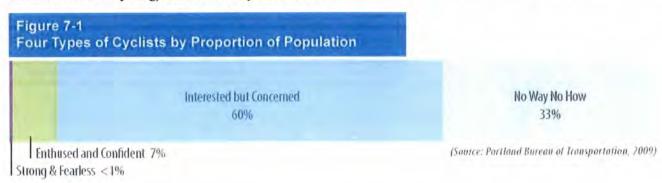
- "Strong and fearless" These bicyclists make up the smallest portion of the bicycling population, and are comfortable bicycling on almost any road (regardless of roadway condition and presence of bicycle facilities).
- "Enthused and confident" These bicyclists represent the majority of people who bike regularly. These cyclists
  typically prefer to ride on streets designed with bicyclists in mind (e.g., streets with bike lanes).
- "Interested but concerned" These bicyclists represent the majority of the general population. They likely rode
  a bike during childhood and may ride for recreation, but they hold concerns about riding on major streets with
  higher vehicle speeds and volumes. Riding on residential streets is a possibility, but these riders typically wouldn't
  ride on or across major streets without bicycle infrastructure.



 "Not Interested in Bicycling ('No Way, No How')" This population is either unable to ride a bicycle or is simply not interested in bicycling regardless of the existence of a bikeway network.

This plan aims to serve the first three categories, with an emphasis on the "Interested but concerned" category because these bicyclists represent the majority of the general population. The breakdown of the population represented by each of these four groups is represented by the relative size of the bars in the figure below. This typology is helpful for framing the discussion about how and where people may choose to bicycle.

This Plan is targeted at increasing the user comfort and safety of the first three categories of bicyclists (those who are interested in bicycling) on Salem's bicycle network.



## **Policy Framework**

The Bicycle System Element of the Salem TSP establishes goals, objectives, and policies that will guide how improvements are made to the bicycle network over the next 25 years. Salem's previous Bicycle Plan placed a major focus on building new bike lanes, which typically accommodate more confident and commuter cyclists. Research in recent years has shed light on a much broader user base whose preferences and demands may differ from one another. Considering a wider range of potential bicycle facilities (such as shared lane markings, family-friendly bikeways, colored bicycle lanes, cycle tracks, and buffered bicycle lanes in addition to the bike lanes and trail network recommended in the previous Bicycle Plan) increases the potential to accommodate a greater number of users. Considering a wider range of potential bicycle facilities also increase the likelihood of providing a complete bicycle network balanced with other modes, such as transit and automobiles.

This updated Bicycle Plan goes beyond an emphasis on bicycle lanes by focusing on the following areas:

- Serving a broad range of existing and potential cyclists (including users of various ages, experience and confidence levels, and trip types).
- Building upon investments in the existing and planned system and enhancing the existing system to better serve users.
- Expanding the system to streamline bicycle connections and develop new routes to better serve existing and future destinations.
- · Establishing seamless links with surrounding communities including Keizer, and Marion and Polk counties.
- · Enhancing user safety and comfort.



## Goals, Objectives, and Policies

The City of Salem has the following goals and policies for the planning, development, and operation of its bicycle system:

GOAL: To provide a comprehensive system that accommodates a range of bicyclists with varying skill levels by providing a well-connected system of bicycle facilities that will encourage increased ridership, safe bicycle travel, active transportation, and support public health.

#### **OBJECTIVE NO. 1**

The City of Salem will create a comprehensive system of bicycle facilities.

## Policy 1.1 Provide Bicycle Facilities on Arterial and Collector Streets

Bicycle lanes shall be provided on all newly constructed Arterial and Collector streets. Arterial and Collector streets undergoing overlays or reconstruction will be re-striped with bicycle lanes, as designated on Maps 7-1 through 7-5. Every effort will be made to retrofit existing Arterials and Collectors with bicycle lanes, as designated on the Maps. Where bicycle lanes are difficult to accommodate on existing Arterials and Collectors due to limited right-of-way or other environmental constraints, alternate bicycle facilities may be provided on a parallel street within the vicinity of an existing Arterial or Collector.

## Policy 1.2 Mitigation of On-street Parking Loss Due to Future Bicycle Facility Projects

Where new, City-sponsored bicycle facilities require the removal of on-street parking spaces on existing roadways, the City shall provide parking facilities that mitigate, at a minimum, the existing parking demand with nearby on-street parking. This policy does not apply to street widening or major reconstruction projects.

#### **Policy 1.3 Connecting Trail Network**

To enhance the system of on-street bicycle lanes, the City shall encourage the development of a connecting, multiuse trail network using linear corridors such as: rivers, creeks, utility easements, and abandoned rail lines using such programs as rail-banking that complements the on-street bicycle system.

### Policy 1.4 Eliminate Barriers to Bicycle Travel

The City shall actively pursue a comprehensive system of bicycle facilities through designing and constructing projects, as resources are available, and implementing standards and regulations designed to eliminate barriers to bicycle travel.

As a result of this policy, new developments or major transportation projects will neither create new, nor maintain existing, barriers to bicycle travel. Through the implementation of development Codes and standards, the City will require the creation of pathways and connections for bicyclists to schools, neighborhood shopping, and other activity centers. The City will adopt, include, and use bicycle supportive design and signage standards as part of roadway design standards, zoning and subdivision regulations, parking code requirements, railroad crossing standards, and other appropriate documents. As resources are available, the City will support projects designed to eliminate identified barriers relating to bicycle travel, either as stand-alone projects or as part of a major capital improvement project.



## Policy 1.5 Bicycle System Identification and Signage

As resources are available, the City shall, in consultation with local bicyclists, review existing and proposed bicycle lanes, family-friendly bikeways, cycle tracks, buffered bicycle lanes, crossing treatments, other bicycle facilities, and other streets, to identify a preferred bicycle system, and make improvements as necessary for these routes to function better for bicyclists. The system shall be identified using wayfinding signage on facilities, and shown on updates of the bicycle route map.

Wayfinding signage shall be prioritized to aid cyclists' ability to navigate from arterials or collectors to nearby, parallel family-friendly bikeways, especially in areas with a high number of destinations such as shopping areas.

### **OBJECTIVE NO. 2**

Increase citywide journey to work (U.S. Census) bicycling mode share to 3 percent by 2020 and 5 percent by 2030 (2008 baseline is 1.6 percent based on 2006-2008 American Community Service data).

### Policy 2.1 Establish a Baseline of Bicycle Use

Upon adoption of the Plan, the City will conduct the necessary research to establish a baseline of bicycle use for all trips. Necessary facility inventories and usage surveys will be performed every five years to determine the success or failure of the Plan's bicycle goal, objectives, and policies.

### Policy 2.2 Complete the Bicycle System

Recognizing that a completed system of bicycle facilities is one of the most important factors in encouraging bicycle travel, the City will construct 70 percent of the bicycle network by 2030. The "bicycle network" is defined as shared lane markings, family-friendly bikeways, bike lanes (buffered, raised, and colored included), off-street paths, and cycle tracks, with priority given to projects that fill a missing link in the bicycle system or address an identified safety hazard.

## Policy 2.3 Establish Minimum Standards for Bicycle Facility Maintenance

The City shall develop minimum standards that will maintain bicycle facilities clean of debris, properly striped, and clearly marked and signed.

#### Policy 2.4 Develop a Maintenance Reporting Program

To assist the City in achieving a high standard of maintenance on existing bicycle facilities, a program shall be developed that allows the public to identify repair, sweeping, and other maintenance needs.

# Policy 2.5 Require Relevant Bicycle Accommodations During All Transportation Construction Projects

The City shall require each urban street construction project within the city to include consideration of bicyclists in the traffic control plan; including placement of signs, routing, and lane width. High standards for resurfacing and sweeping shall be required of all construction projects in the roadway right-of-way.



## Policy 2.6 City Code Requirements for Bicycle Parking

The City of Salem Revised Code will contain bicycle parking supply requirements and standards that require new developments to provide a minimum amount of bicycle parking, based on the needs of the specific zone or land use type.

## Policy 2.7 Develop a Bicycle Parking Program for Businesses

To assist businesses desiring to install bicycle parking, standards and placement criteria will be developed for acceptable short- and long-term bicycle parking facilities, including bicycle parking corrals. Annually, the City will provide a limited number of installed bicycle racks to existing businesses and agencies in commercial districts that were developed prior to bicycle parking requirements, by request, on a first come, first served basis, as resources are available.

## Policy 2.8 Bicycle Parking at Transit and Intermodal Facilities

The City shall encourage the installation of secure, public bicycle parking facilities for both short- and long-term parking needs at park and ride facilities, transit stations, bus terminals, train stations, airports, and other intermodal facilities. The City shall encourage the continuation of bicycle racks on transit vehicles.

## Policy 2.9 Promote Bicycle Use

The City shall encourage bicycling by sponsoring or participating in activities that promote bicycle transportation and recreation.

## Policy 2.10 Enhance Bicycle Access to All City Offices

Where practicable, the City shall provide secure bicycle parking and lockers for employees and visitors at all City offices and provide showers and lockers for employees.

### Policy 2.11 Travel by Skateboard

The City encourages all forms of active transportation, including the use of skateboard and similar devices, in a manner that protects the safety of all roadway users.

#### **OBJECTIVE NO. 3**

The City of Salem shall encourage education services and promote safe bicycle travel in order to reduce the number of accidents involving bicyclists by 50 percent and aim for zero fatalities by the year 2030 (note: 60 reported bicycle crashes in 2008).

### Policy 3.1 Target and Eliminate Key Behaviors that Lead to Bicycle Accidents

The City shall encourage schools, safety organizations, and law enforcement agencies to provide information and instruction on bicycle safety issues that focus on the most important accident problems.



## Policy 3.2 Bicycle Safety Awareness Programs

The City shall develop training and awareness programs that encourage the public to ride safely and use bicycle safety equipment when bicycling. These programs shall encourage all roadway users to courteously share the road and be aware of their privileges and responsibilities when driving, bicycling, and walking.

### Policy 3.3 Safe Access to Schools

The City shall work with the Salem-Keizer School District and neighborhood associations to maintain and improve its programs to evaluate the existing bicycle access to local schools and supporting infrastructure at schools (bicycle racks, lockers, etc.), estimate the current and potential use of bicycling as a travel mode, evaluate safety needs, and propose changes to increase the percentage of children and young adults safely using this mode.

## **Performance Measures**

Evaluating progress towards the implementation of bicycle goals can help the City and community understand what has been achieved through project implementation. This information can inform plan updates and future plans. The performance measures and targets in Table 7-1 rely on readily available data, specifically network implementation and journey to work mode share data collected by the US Census, to help ensure periodic evaluation.

TABLE 7-1
Bicycle System Performance Measures

Performance Measure	Target	
Bicycle Commute Mode Share*	Increase citywide journey to work (US Census) bicycling mode share to 3 percent by 2020, and 5 percent by 2030.	
Bicycle Network Construction	Construct 70 percent of the bicycle network by 2030. The "bicycle network" is defined as shared lane markings, family-friendly bikeways, bike lanes (buffered, raised, and colored included), off-street paths**, and cycle tracks.	

<sup>\*</sup>According to the American Community Survey (ACS), bicycle Journey to Work mode share was 1.6% for t2006-2008.

<sup>\*\*</sup>Note that shared-use paths should be counted only toward bicycle network construction evaluation and not pedestrian network construction so as not to double count shared-use path construction.



## **Bicycle Facility Types**

The recommended bicycle projects refer to several different bicycle facility types. A brief description of each facility type and purpose is provided below for reference.

TABLE 7-2
Bicycle Facility Types and Treatments

## **Facility Type**



Bike Lanes: Designated exclusively for bicycle travel; separated from vehicle travel lanes with striping and also include pavement stencils; typically most appropriate on major streets where higher traffic volumes and speeds create a greater need for separation between cyclists and motorists. This is an FHWA approved treatment.

Shared Lane Markings: High-visibility pavement markings that heighten the awareness of cyclists sharing the road with motorists; often used on streets where bike lanes are desirable but not possible due to physical or other constraints; positioned strategically in the travel lane to encourage cyclists to ride in a straight line so their movements are predictable to motorists, while also riding at an appropriate distance from the "door zone" of adjacent parked cars; may not be used on streets with posted speeds greater than 35 M.P.H. This is an FHWA approved treatment.

Family-Friendly Bikeways: Also known as bicycle boulevards, these are lower-volume, lower-speed streets optimized for bicycle travel through treatments such as traffic calming, bicycle wayfinding signs, pavement markings, and intersection crossing treatments; intended to prioritize bicycle circulation while discouraging non-local cut-through traffic; intended for the "interested, but concerned" bicycle user types, appropriate treatments should be determined on a case-by-case basis through engineering analysis and coordination with agencies including Public Works and emergency services. Note that standards/guidelines vary depending on the specific treatment under focus.



**Shared-Use Paths:** Physically separated from motor vehicle traffic; serve one or more nonmotorized user including bicyclists, pedestrians, in-line skaters, skateboarders, or wheelchairs; typically serve bi-directional traffic. Design guidance is provided by FHWA and ODOT. Design should be tailored to the particular project location.



Colored Bike Lanes: Similar to conventional bike lanes, with an added coloring treatment to heighten the facility's visibility; particularly effective on bike lanes with frequent vehicle/cyclist conflict points; coloring may take the form of an asphalt mix, pavement dye or skid-resistant application material. The focus of colored bike lanes should be conflict areas. FHWA has issued interim approval for green bike lanes.



TABLE 7-2
Bicycle Facility Types and Treatments

## Facility Type



Buffered Bike Lanes: Conventional bike lanes paired with a delineated buffer space (typically through pavement striping) further separating the bike lane from the adjacent motor vehicle travel lane and/or parking lane; provide greater shy distance between motor vehicles and bicyclists; typically used on streets with excess width (either in the number of lanes or lane width). This is an FHWA-approved treatment, provided MUTCD-compliant markings are used.



Contra-Flow Bike Lanes: Enable bicyclists to safely ride in the opposite direction of vehicle traffic on one-way streets; placed on the opposite side of vehicle travel lanes (to the motorists' left), and typically separated from traffic with a double yellow line; signs should be posted at intersecting streets, alleys and driveways, informing motorists to expect two-way traffic; intersection traffic controls along the street should also be installed and oriented toward the contra-flow lane; on-street parking prohibited between the contra-flow lane and the curb. This is an FHWA-approved treatment, provided MUTCD-compliant signs and markings are used.



Cycle Tracks: Exclusive bicycle facility combining the user experience of a shared-use path with the on-street infrastructure of a conventional bike lane; separated from vehicle travel lanes, parking lanes and sidewalks; can be either one-way or two-way, on one or both sides of a street; careful design attention is necessary at intersections, driveways and other bicycle/vehicle conflict points. Design guidance is provided by FHWA and ODOT.



**Bicycle Detection (Signalized Intersections):** Enables cyclists to trigger a green signal phase through the use of a push-button, loop detector or video detector. This is an FHWA-approved treatment



Advanced Stop Bars ("Bike Boxes"): Designated area at the head of a traffic lane at a signalized intersection providing bicyclists a safe and visible means to maneuver ahead of queuing traffic during a red signal phase; helps prevent "right hook" collisions with turning vehicles at the start of the "green" signal indication by positioning cyclists in front of the leading vehicle; additional treatments include a right-turn-on-red prohibition, supplemental warning signs, and may also include pavement coloring to heighten visibility of the bike box. This is currently designated by FHWA as an "experimental" treatment.



TABLE 7-2
Bicycle Facility Types and Treatments

## Facility Type



Bicycle-Only Signals: Traffic signal device used in conjunction with conventional signals; applied at signalized intersections to indicate bicycle-only signal phases or other bicycle-specific timing strategies; typically used to separate bicycle movements from conflicting motor vehicle movements (e.g., separating through bicycle movements from vehicle turning movements). Bicycle symbols on traffic signals are currently designated by FHWA as an "experimental" treatment.



Bicycle Wayfinding Signs: Wayfinding signs specifically intended for bicyclists; placed at key locations leading to and along bicycle routes, at junctions of multiple routes, and at user "decision points;" may display destinations, distances and "riding time." This is an FHWA-approved treatment, though more limited compared with Salem's current signs. ODOT prescribes additional standards for signs within ODOT right-of-way.

## Citywide Recommendations

The following section describes recommendations to enhance Salem's bicycle environment on a citywide scale.

### INTERSECTION UPGRADES

Facilitate convenient, safe, comfortable and intuitive bicycle movements through intersections using intersection crossing treatments. Several potential intersection crossing treatments for bicycles are described in Table 7-2. Additional potential treatments include the optimization of traffic signal timing for bicycle speeds, and the reduction of multiple vehicle turning lanes (to reduce the number of potential conflict points).

Appropriate treatments will vary based on site-specific conditions and issues. A detailed engineering analysis should be conducted prior to implementation to identify the appropriate treatment(s) at each intersection.

## RAILROAD CROSSING IMPROVEMENTS

Though most at-grade street/railroad crossings in Salem intersect perpendicularly (the ideal crossing angle for bicyclists, pedestrians, and wheelchair users), the crossing angle at some locations may present difficulties for safe bicycle maneuvers. Additionally, railroad tracks imbedded in the street parallel to bicycle travel (e.g., along Front Street NE north of Downtown) may complicate travel. Where a 90-degree railroad/street crossing is not possible, additional shoulder widths are to be provided to enable a cyclist to cross at a safe angle. If a safe crossing angle cannot be provided (due to physical constraints or other factors) and where train speeds are low, commercially-available compressible flangeway fillers should be considered.

#### TRANSIT ACCESS ENHANCEMENTS



The City of Salem and Salem Area Mass Transit District will need to work jointly to enhance pedestrian and bicycle access to transit stops. Key recommendations include providing:

- · Convenient and direct bicycle links to transit stops.
- · Paved landing pads to safely accommodate wheeled users.
- · Covered passenger shelters.
- · Seating areas.
- Posted system map, route map, and schedule (additional options include real-time information display of upcoming bus arrivals).
- · Adequate lighting.
- · Trash receptacles.
- · Short- and long-term bicycle parking.

#### BICYCLE PARKING

Destinations in Downtown and throughout Salem could benefit from improved bicycle parking facilities. Based on international best practices for cost, simplicity of design and theft-resistance, the recommended single-rack design is the inverted-U style rack mounted parallel to the curb.

For higher capacity bicycle parking, "bike corrals" provide increased bicycle storage options. Bike corrals involve converting a specific number of on-street vehicle parking spaces into bicycle parking (one on-street parking space typically has the capacity for up to ten bicycles). In addition to providing greater capacity (compared with a single sidewalk rack), on-street bicycle parking can derive numerous benefits, including:

- Maximizing space for sidewalk café tables and seating.
- Improving the pedestrian experience and mobility by reducing congestion from parked bicycles on the sidewalk.
- Improving visibility for merchants and storefronts by opening sightlines from the street and passing traffic.
- Creating additional activity nodes and drawing attention to storefronts.

This Plan supports efforts to diversify Salem's bicycle parking options, including the Downtown Vision 2020 Bicycle/Pedestrian Working Group's concepts for Downtown bike corrals. It is recommended that the City establish criteria for determining appropriate locations for bike corrals or other high-capacity facilities throughout the community (e.g., locations where parking demand exceeds capacity, locations with limited sidewalk space, and locations with clusters of cyclist destinations). Additional options include creating a bicycle rack request system whereby the City works with merchants who express interest in expanding bicycle parking within the public right-of-way. Opportunities also exist to leverage improved bicycle storage in tandem with private development.



#### TRIP-END FACILITIES

The presence and quality of trip-end facilities (e.g., showers, lockers, and changing facilities) can greatly influence a person's decision to complete a trip via bicycle. These facilities enable cyclists to change into work attire (especially after riding in wet or hot conditions). The City of Salem will work with and encourage major employers to improve existing trip-end facilities and/or develop new facilities, as well as encourage developers to include trip-end facilities with new development.

The City will first work with major employers to inventory and assess existing trip-end facilities, followed by identification of locations where new or upgraded facilities are needed. New facilities could be sited at major employment sites, at gyms, and other centrally-located areas.

#### WAYFINDING SIGNAGE

Placing signs along the bikeway network indicating to bicyclists their direction of travel, location of destinations, and the riding time/distance to those destinations will increase users' comfort and accessibility to the bicycle system. Wayfinding signs also visually cue motorists that they are driving along a bicycle route and should use caution.

Salem will build upon the existing and planned signage system by expanding on this concept to cover bikeways throughout the community. Developing a Bicycle Wayfinding Signage Plan would establish guidance for the orderly expansion of the network along existing, planned and proposed bikeways.

#### WILLAMETTE VALLEY SCENIC BIKEWAY

Stretching from Champoeg Park to Eugene and passing directly through Salem, the Willamette Valley Scenic Bikeway represents one of Oregon's most popular and well-known recreational cycling routes, and is credited with boosting bicycle tourism in the Willamette Valley. The route includes wayfinding signage created by the Oregon Parks and Recreation Department (OPRD) to help navigate bicyclists through communities in which the Bikeway passes. As Salem's bicycle network expands to provide additional route options, the City and OPRD should periodically revisit the designated Scenic Bikeway route to explore opportunities for adjustment in order to provide a premier riding experience. For example, completion of a bicycle/pedestrian bridge linking Riverfront and Minto-Brown Island parks presents an excellent opportunity to shift the Scenic Bikeway to a pleasant park-like environment (and away from heavy traffic on the Commercial Street SE/Liberty Street SE/River Road S corridors). The Bikeway's wayfinding signage will accordingly be updated in tandem with route modifications.

#### SYSTEM MAINTENANCE

System maintenance can increase user safety and comfort and encourage the use of the bicycle network. Recommended maintenance activities include the continuation of sweeping, debris removal, sign replacement, trimming overgrown vegetation; graffiti removal, and pavement and signal repair as needed.

#### PROGRAMMATIC STRATEGIES

Becoming a truly bicycle-friendly community requires a multi-faceted approach including encouragement, education, enforcement, and evaluation programs to support on-the-ground infrastructure improvements. Bicycle education and promotional programs can:



- · Promote safety.
- · Raise awareness of bicycling as a legitimate transportation mode.
- Connect current and potential riders to existing resources.
- Educate current and potential bicyclists about their rights and responsibilities.
- Encourage residents to bicycle more often.

These efforts should provide measurable results in the bicycling mode share, increase safe rider behavior (and correspondingly reduce crashes), and raise cultural awareness of cycling.

## **Recommended Bicycle Projects**

Recommendations for bicycle facilities were developed based on:

- Project goals, policies, and evaluation criteria.
- · Field work.
- · Findings from the bicycle needs assessment.
- A review of background documents, plans, studies, and available data.
- Input from the Project Stakeholder Advisory Committee; and input from the public involvement process.

The existing, planned, and proposed bicycle network is shown on Maps 7-1 through 7-5 and individual bicycle projects are listed in Tables 7-5 through 7-7.

Brief descriptions of the types of proposed projects are provided below.

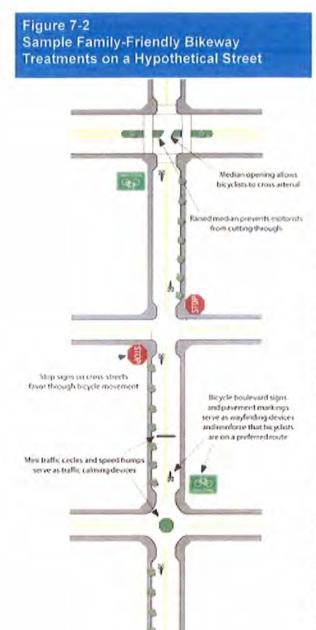
#### **BIKE LANES**

The recommended expansion of Salem's bike lane network is illustrated on Maps 7-1 through 7-5. The expansion is envisioned to occur through new street construction, gap closures on existing streets, and as part of major reconstruction projects on existing roadways.

#### SHARED LANE MARKINGS

Described in Table 7-2, shared lane markings are recommended as an interim measure when physical or other constraints preclude the installation of bike lanes. A combination of bike lanes and shared lane markings can also be used, particularly on streets traversing hills. However, despite the presence of shared lane markings, some riders may still feel uncomfortable sharing the road with motorists on higher-volume roadways. Therefore, this treatment may have limited effectiveness in attracting a broad range of users.

#### **FAMILY-FRIENDLY BIKEWAYS**



Described in Table 7-2 and illustrated in Figure 7-2, family-friendly bikeway treatments are intended to prioritize bicycle circulation while discouraging non-local, cut-through traffic. Family-friendly bikeways (also known as "bicycle boulevards") go beyond signed bike routes to create a safe and attractive riding environment for cyclists of all ages, abilities, and comfort levels.

Many local streets in Salem exhibit family-friendly bikeway characteristics, including lower traffic volumes and speeds, traffic calming measures, and proximity to schools and other bicyclist destinations. The proposed network takes advantage of these attractive corridors, particularly those needing minimal and cost-effective treatments (e.g., wayfinding signage) that could be implemented in the near-term.

Appropriate treatments for each family-friendly bikeway should be determined on a case-by-case basis. As the City moves forward with project implementation, extensive outreach should also be conducted with the bicycling community and affected neighborhood groups. As a result of outreach prior to implementation of a family-friendly bikeway, minor route modifications that do not result in a change to the street cross section may be made and later incorporated into updates of this plan.

#### SHARED-USE PATHS

Significant opportunities exist to develop an expanded shared-use path network in Salem that serves a variety of users. The proposed bicycle network, as shown in Maps 7-1 through 7-5, includes a diverse shared-use path system. Some proposed path corridors would involve upgrading existing sidewalks passing through parks, widening existing narrow paths to minimize bicyclist/pedestrian conflicts, or upgrading existing unpaved paths to accommodate a broader range of users. Most off-street paths are intended for use by pedestrians, bicyclists, skateboarders, and other non-motorized users. In some cases, one or more non-motorized uses may be prohibited based on the width of the facility, adjacent land uses, topography, location relative to

the Bicycle Network, or other considerations. The network of shared-use paths is not intended to be all-inclusive. Additional shared-use paths may be identified through the subdivision or other development process to address neighborhood connectivity.



Where a proposed shared-use path is shown over private property, the desired connection may be provided with sidewalks and local streets that connect to the existing street and sidewalk network in a relatively direct manner. Many of the proposed shared-use path projects will require "path feasibility studies" before a specific alignment can be determined. These studies, which would only occur for paths to be constructed with public funds, will examine issues related to potential environmental impacts, route directness, land availability, property ownership, and estimated costs.

### **ENHANCED BIKEWAY TREATMENTS**

Although bike lanes may be appropriate along many routes, stakeholders and residents acknowledged that bike lanes alone may not always be enough to attract new riders. Therefore, stakeholders and residents throughout the planning process identified several corridors where more innovative treatments are desired to enhance user safety and comfort. These corridors primarily encompass Salem's major street network.

Maps 7-1 through 7-10 identify several roadway corridors as "potential enhanced bikeways," where enhanced bikeway treatments should be considered. Enhanced bikeway treatments could include:

- · Colored bike lanes.
- Buffered bike lanes.
- · Cycle tracks.

These treatments are described briefly in Table 7-2. For each corridor under focus, further analysis will be necessary to identify and address site-specific issues, assess the benefits and trade-offs of an enhanced bikeway treatment, and to identify appropriate treatments.

#### SAFE ROUTES TO SCHOOL IMPROVEMENTS

Projects identified as part of the proposed bicycle network also incorporate relevant bicycle improvements identified Safe Routes to School Solutions. These projects generally consist of on- and off-street bikeway enhancements and intersection improvements near schools.

## **Project Prioritization**

The Bicycle Network, illustrated on Maps 7-1 through 7-5 identifies bicycle capital improvement projects that once constructed will encourage bicycling. The order in which projects in this Element are constructed will depend on many factors, including budget and grant availability, community support, and City priorities. The City does not anticipate that all of these projects will be constructed within the 20-year life of this plan. To prioritize projects included in the proposed Bicycle Network, a network of critical links was developed with an emphasis on family-friendly bikeways in order to create cost-effective facilities that are appealing to the widest range of potential users. These projects were then evaluated using the following eight criteria established for the Bike and Walk Salem Project: system connectivity, multi-modal connections, user safety and comfort, community support, cost, accommodating a broad range of users, environmental justice, and land use connections. The resulting priorities were reviewed by the Bike and Walk Salem Stakeholder Advisory Committee and members of the public.



The evaluation exercise resulted in a three-tiered priority list illustrated on Maps 7-6 through 7-10. The three tiers represent a general implementation timeline:

- · Tier 1, Near-term Priority Network (approximately 0-10 years).
- Tier 2, Medium-term (approximately 10-15 years).
- · Tier 3, Longer-term (approximately 15-20 years or longer).

The Tier 1 projects are designed to complete a priority network of bicycle facilities serving high-priority destinations, including employment centers, parks, and schools. While the tier system helps identify high-priority projects for available funding, it should be noted that medium- and longer-term projects may be implemented at any point in time as part of a development or public works project, or as additional funding becomes available. Additionally the tiers should be reviewed frequently to ensure that they continue to reflect current priorities. Some of the factors that can and should affect project implementation include:

- · Project cost relative to funding availability.
- Change to existing grant programs, or creation of new grant or funding programs that affect the type or number of large-budget projects that can be implemented.
- · Changes in City policy that could affect how local or state funds can be spent.
- Changes to zoning and land use that will affect where and how development occurs in Salem.
- The pace of development, which will affect which projects are implemented through development requirements and impact prioritization by changing existing land use.
- Changes to City staff capacity to manage bicycle projects.
- Community input (e.g., through neighborhood associations or other).
- Directives (policy or otherwise) from elected officials and other governing bodies.
- Interest from partners (such as counties and ODOT) in implementing projects that are partially or entirely within their jurisdiction.

## **Bicycle Project Cost Estimates**

Tables 7-3 and 7-4 summarize total planning-level cost opinions for Salem's proposed bikeway network. Table 7-3 summarizes estimated costs by "tier" while Table 7-4 presents aggregated costs by facility type. It should be noted that estimated costs for shared-use paths and intersection improvements are shown in the Pedestrian Element Chapter, as these facilities benefit both pedestrians and cyclists alike.

TABLE 7-3
Estimated Planning-Level Costs by Tier

Tier	Estimated Cost
Tier 1	\$4,410,000



# TABLE 7-3 Estimated Planning-Level Costs by Tier

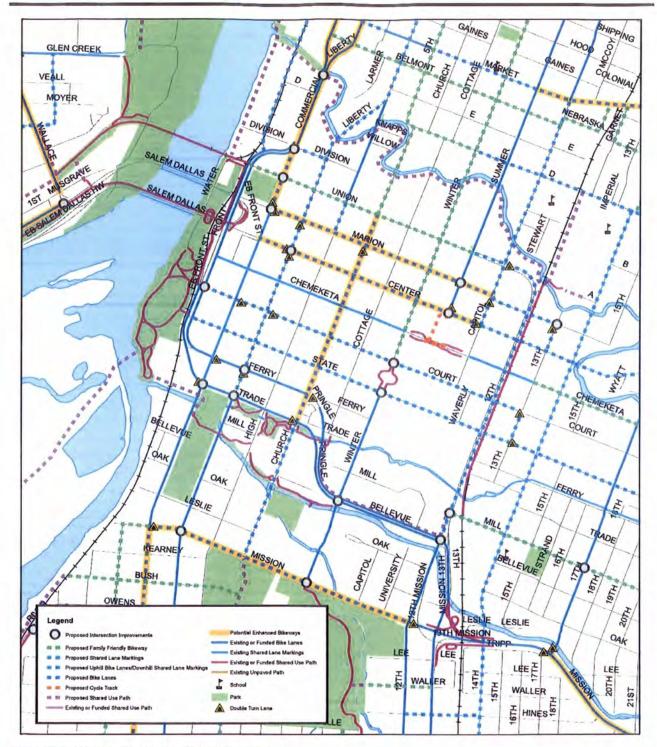
Tier	Estimated Cost
Tier 2	\$4,712,000
Tier 3	\$28,056,000

Note: Estimated Cost totals do not include estimates for projects already accounted for in Tables 3-4, 3-5, 3-6, and 3-7 of the Street System Element. Cost estimates for shared-use paths and intersection improvement projects are included in the Pedestrian Plan Element.

TABLE 7-4
Estimated Planning-Level Costs by Facility Type

Facility Type	Estimated Cost (all Tiers)
Cycle Track	\$145,000
Bike Lanes*	\$27,323,000
Shared Lane Markings	\$2,175,000
Uphill Bike Lanes/Downhill Shared Lane Markings	\$1,067,000
Family-Friendly Bikeway	\$6,468,000

Note: Estimated Cost totals do not include estimates for projects already accounted for in Tables 3-4, 3-5, 3-6, and 3-7 of the Street System Element. Cost estimates for shared-use paths and intersection improvement projects are included in the Pedestrian Plan Element.

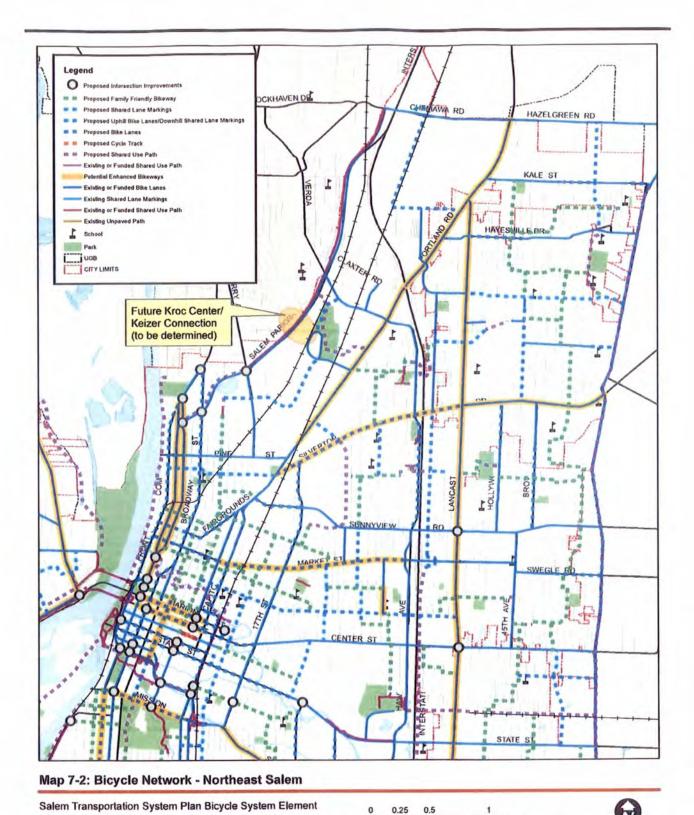


Map 7-1: Bicycle Network - Downtown Salem

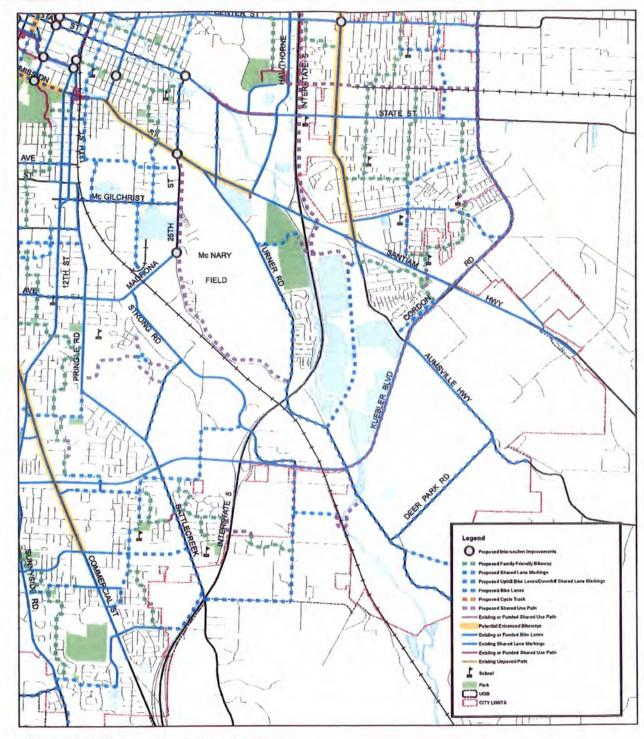
Salem Transportation System Plan Bicycle System Element

0 500 1,000 2,000

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



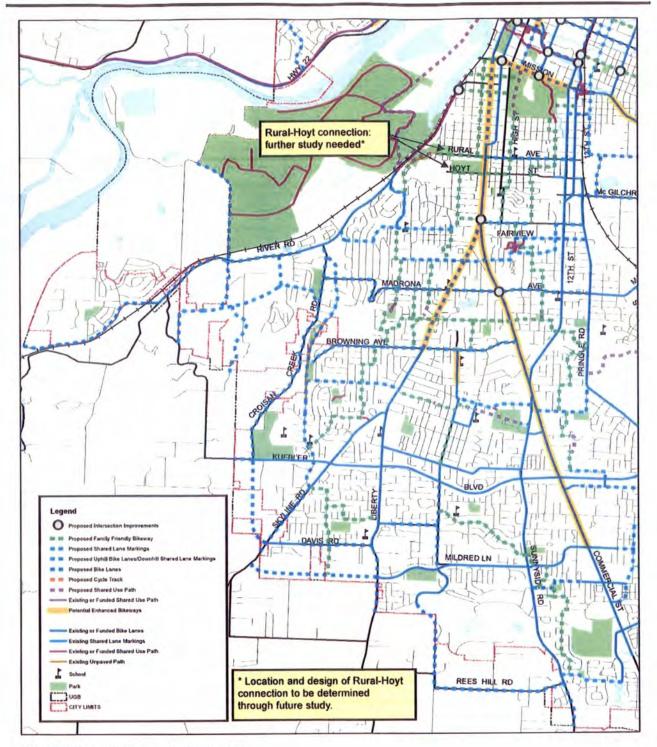
Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



Map 7-3: Bicycle Network - Southeast Salem

Salem Transportation System Plan Bicycle System Element 0 0.25 0.5 1 Miles

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



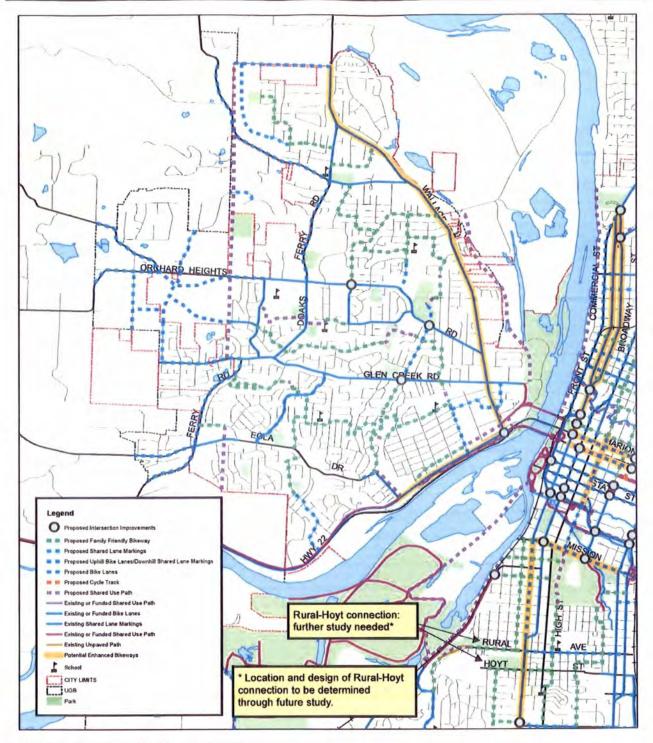
Map 7-4: Bicycle Network - South Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1 Miles



Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



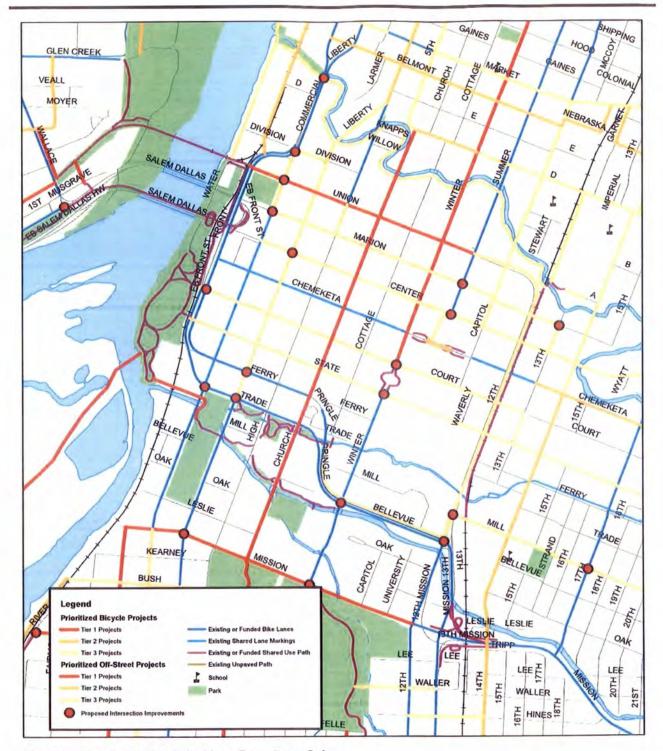
Map 7-5: Bicycle Network - West Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1

Miles

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



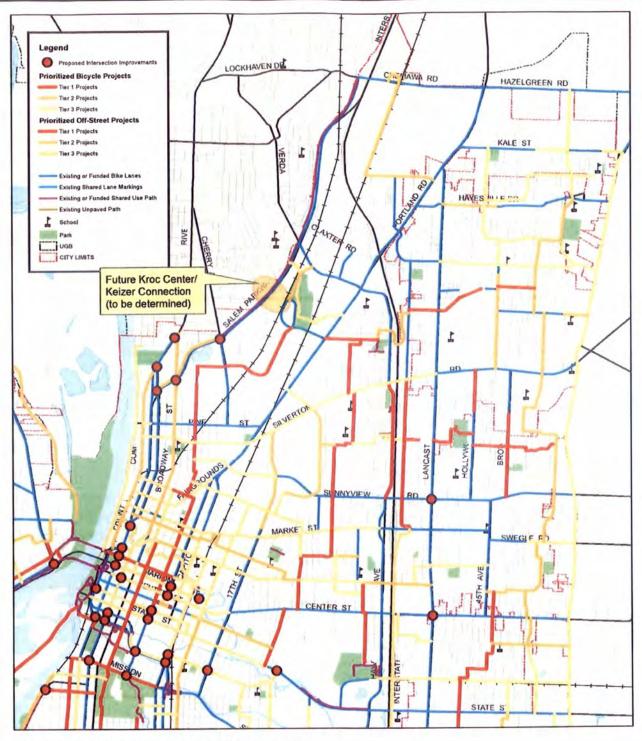
Map 7-6: Bicycle Project Priorities - Downtown Salem

Salem Transportation System Plan Bicycle System Element

0 500 1,000 2,000

Feet

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



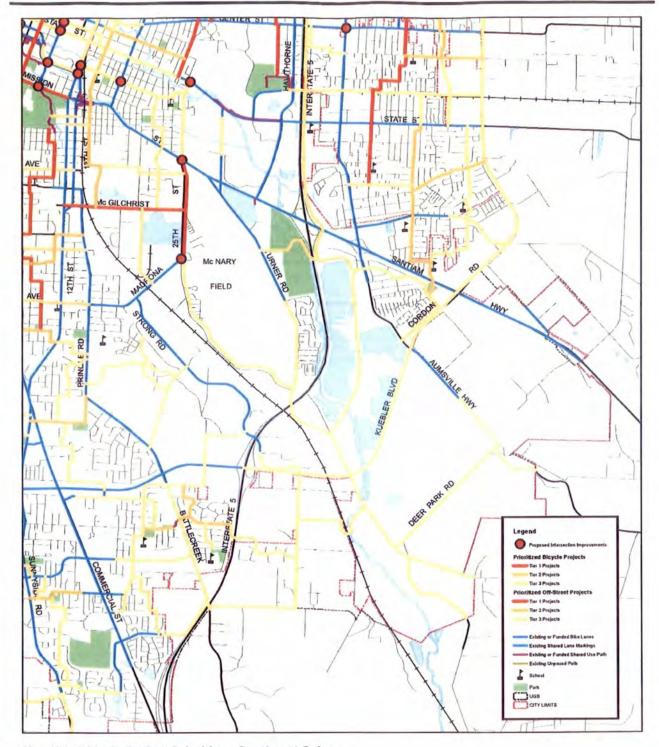
Map 7-7: Bicycle Project Priorities - Northeast Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1

Miles

Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



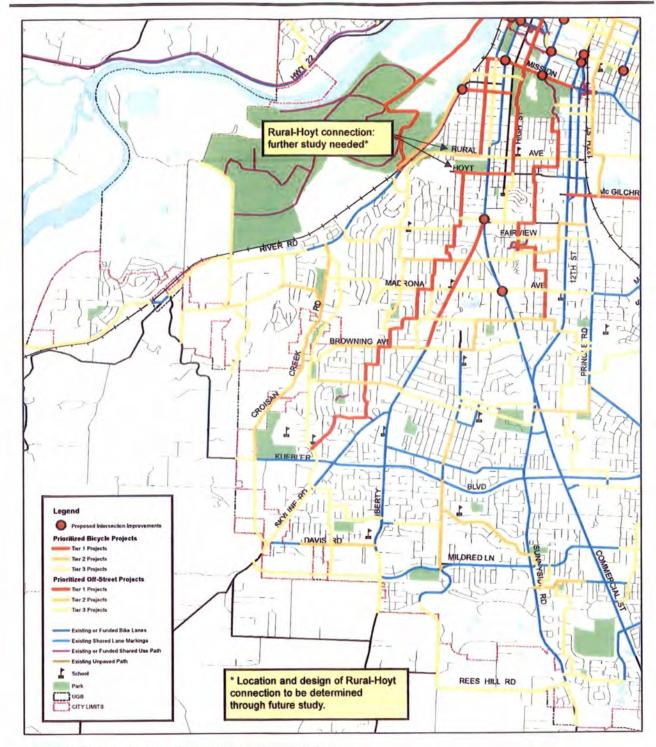
Map 7-8: Bicycle Project Priorities - Southeast Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1 Miles



Disclaimer: The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.

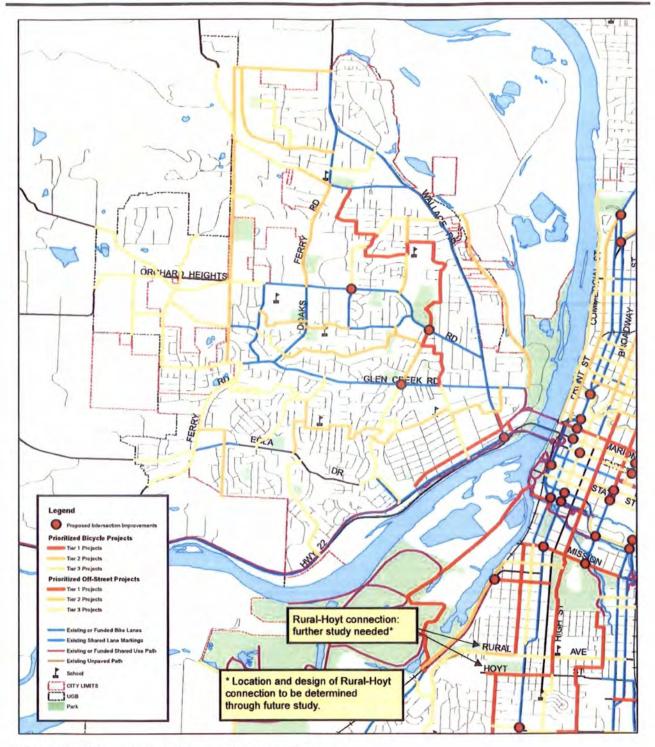


Map 7-9: Bicycle Project Prioritization - South Salem

Salem Transportation System Plan Bicycle System Element

0 0.25 0.5 1

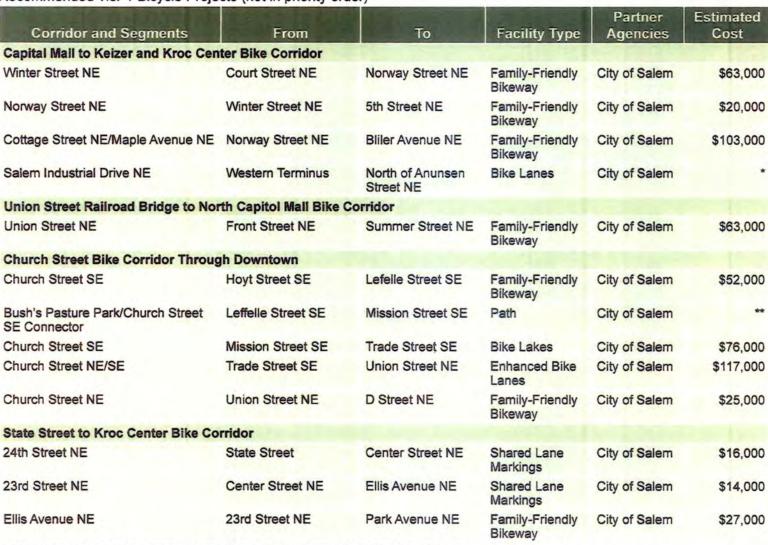
Disclaimer. The alignment of proposed facilities is shown at a conceptual level only. Final alignment and design will be determined through further analysis.



Map 7-10: Bicycle Project Prioritization- West Salem



TABLE 7-5
Recommended Tier 1 Bicycle Projects (not in priority order)



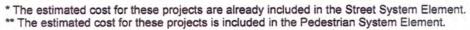
<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



<sup>\*\*</sup> The estimated cost for these projects is included in the Pedestrian System Element.

TABLE 7-5 Recommended Tier 1 Bicycle Projects (not in priority order)

Corridor and Segments	From	То	Facility Type	Partner Agencies	Estimated Cost
Park Avenue NE	Ellis Avenue NE	Market Street NE	Shared Lane Markings	City of Salem	\$8,000
Park Avenue NE	Market Street NE	Sunnyview Road NE	Bike Lanes	City of Salem	\$337,000
Park Avenue NE	Sunnyview Road NE	Florence Avenue NE	Family-Friendly Bikeway	City of Salem	\$46,000
Florence Avenue NE/Chester Avenue NE	Park Avenue NE	Lansing Avenue NE	Family-Friendly Bikeway	City of Salem	\$18,000
Lansing Avenue NE	Chester Avenue NE	Silverton Road NE	Bike Lanes	City of Salem	\$525,000
Williams Avenue NE/Edgewood Avenue NE/30th Avenue NE	Silverton Road NE	Northgate Avenue NE	Family-Friendly Bikeway	City of Salem	\$57,000
Northgate Avenue NE	Portland Road NE	Eastern Terminus	Family-Friendly Bikeway	City of Salem	\$47,000
Geer Community Park to Hoover Ele	ementary School Bike	Corridor			
Illinois Avenue NE/Vinyard Avenue NE	Monroe Avenue NE	D Street NE	Family-Friendly Bikeway	City of Salem	\$72,000
Chemeketa Community College Eas	st/West Bike Corridor				
Cooley Drive NE	Fisher Road NE	Chemeketa CC West Transit Station	Shared Lane Markings	City of Salem, CCC, Marion County	\$15,000
Chemeketa Cross Campus Path	Cooley Drive NE	Satter Drive NE	Path	City of Salem, CCC, Marion County	**
Satter Drive NE	45th Avenue NE	47th Avenue NE	Family-Friendly Bikeway	Marion County	\$33,000
McKay Park East/West Bike Corrido	or				
Beverly Avenue NE	Fisher Road NE	Coral Avenue NE	Shared Lane Markings	City of Salem	\$4,000
Beverly Avenue NE/Phipps Lane NE/ Carolina Avenue NE	Lancaster Drive NE	Eastern Terminus of Carolina Avenue NE	Family-Friendly Bikeway	Marion County	\$33,000





BICYCLE SYSTEM ELEMENT-7-31

**TABLE 7-5** Recommended Tier 1 Bicycle Projects (not in priority order)

From	То	Facility Type	Partner Agencies	Estimated Cost
Phipps Lane NE	Hollywood Drive NE	Path	City of Salem, Marion County, SKSD	**
Hollywood Drive NE	Walker Road NE	Family-Friendly Bikeway	City of Salem	\$79,000
nd Auburn Elementary	School Bike Corridor			
Glendale Drive SE	Dean Street NE	Family-Friendly Bikeway	Marion County	\$189,000
SE to 25th Street SE Bik	e Corridor			
Pringle Road SE	25th Street SE	Bike Lanes	City of Salem	*
12th Street SE	Pringle Road SE	Shared Lane Markings	City of Salem	\$5,000
em High School Bike Co	orridor			
Croisan Scenic Way S	Browning Avenue S	Family-Friendly Bikeway	City of Salem	\$139,000
Barrett Street S	Neelon Drive S	Bike Lanes	City of Salem	*
Browning Avenue S	Stanley Lane S	Family-Friendly Bikeway	City of Salem	\$46,000
Ewald Avenue S	Madrona Avenue S	Family-Friendly Bikeway	City of Salem	\$26,000
Stanley Lane S	Winola Avenue S	Bike Lanes	City of Salem	*
Madrona Avenue S	Salem Heights Avenue S	Family-Friendly Bikeway	City of Salem	\$28,000
Winola Avenue S	View Drive S	Uphill Bike Lane/ Downhill Shared Lane Markings	City of Salem	*
Salem Heights Avenue S	Hansen Avenue S	Family-Friendly Bikeway	City of Salem	\$37,000
	Phipps Lane NE  Hollywood Drive NE  Ind Auburn Elementary Glendale Drive SE  SE to 25th Street SE Bike Pringle Road SE 12th Street SE  Em High School Bike Co Croisan Scenic Way S  Barrett Street S Browning Avenue S  Ewald Avenue S  Stanley Lane S  Madrona Avenue S  Winola Avenue S  Salem Heights	Phipps Lane NE  Hollywood Drive NE  Walker Road NE  Ind Auburn Elementary School Bike Corridor  Glendale Drive SE  Dean Street NE  SE to 25th Street SE Bike Corridor  Pringle Road SE  12th Street SE  Pringle Road SE  Pringle Ro	Phipps Lane NE Hollywood Drive NE Path  Hollywood Drive NE Walker Road NE Family-Friendly Bikeway  Ind Auburn Elementary School Bike Corridor  Glendale Drive SE Dean Street NE Family-Friendly Bikeway  SE to 25th Street SE Bike Corridor  Pringle Road SE 25th Street SE Bike Lanes 12th Street SE Pringle Road SE Shared Lane Markings  Indicate the pringle Road SE Shared Lane Shared Lane Shared Lane Shared Lane Shared Lanes  Indicate the pringle Road SE Shared Lanes  Indicate the pringle Road S	Phipps Lane NE Hollywood Drive NE Path City of Salem, Marion County, SKSD Hollywood Drive NE Walker Road NE Family-Friendly Bikeway  Ind Auburn Elementary School Bike Corridor Glendale Drive SE Dean Street NE Family-Friendly Bikeway  SE to 25th Street SE Bike Corridor Pringle Road SE 25th Street SE Bike Lanes City of Salem Markings  Ind Auburn Elementary School Bike Corridor Pringle Road SE 25th Street SE Bike Lanes City of Salem City of Salem Markings  Ind School Bike Corridor Croisan Scenic Way S Browning Avenue S Family-Friendly Bikeway  Barrett Street S Neelon Drive S Bike Lanes City of Salem City of Salem Browning Avenue S Stanley Lane S Family-Friendly Bikeway  Ewald Avenue S Madrona Avenue S Family-Friendly Bikeway  Stanley Lane S Winola Avenue S Bike Lanes City of Salem Bikeway  Stanley Lane S Winola Avenue S Bike Lanes City of Salem Bikeway  Stanley Lane S Winola Avenue S Bike Lanes City of Salem Bikeway  Stanley Lane S Winola Avenue S Bike Lanes City of Salem Bikeway  Stanley Lane S Winola Avenue S Bike Lanes City of Salem Bikeway  View Drive S Uphill Bike Lane/ City of Salem City of Salem Downhill Shared Lane Markings  Salem Heights Hansen Avenue S Family-Friendly City of Salem

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.
\*\*\* The estimated cost for these projects is included in the Pedestrian System Element.



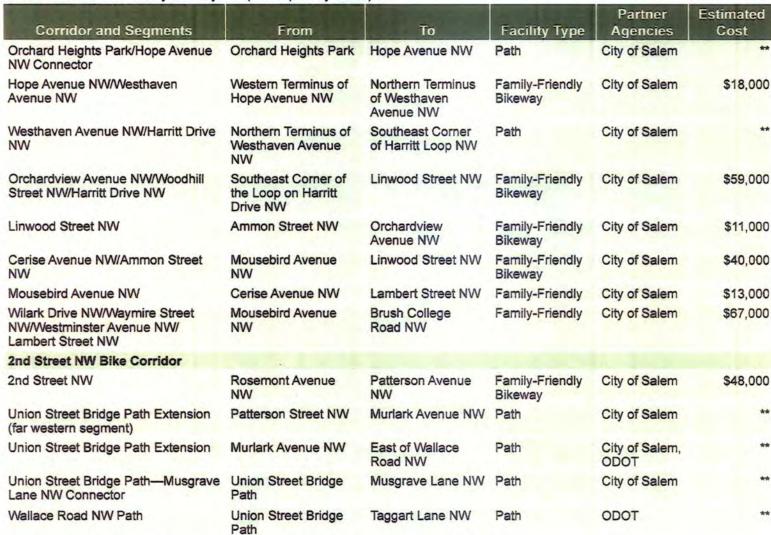
TABLE 7-5 Recommended Tier 1 Bicycle Projects (not in priority order)

Corridor and Segments	From	То	Facility Type	Partner Agencies	Estimated Cost
Hansen Avenue S	Argyle Drive S	Mountain View Drive S	Shared Lane Markings	City of Salem	\$2,000
Mountain View Drive S	Hansen Avenue S	Hoyt Street S	Family-Friendly Bikeway	City of Salem	\$47,000
Hoyt Street S	Skopil Avenue S	Church Street SE	Family-Friendly Bikeway	City of Salem	\$51,000
<b>Bush's Pasture Park to River Road</b>	Bike Corridor				
Miller Street S/SE	River Road S	High Street SE	Family-Friendly Bikeway	City of Salem	\$43,000
Saginaw Street S Bike Corridor					
Saginaw Street S/Mission Street S	Rural Avenue S	Commercial Street SE	Family-Friendly Bikeway	City of Salem	\$93,000
Lower Leffelle/Clark Creek Park/So	uth Village Park Bike C	orridor			
Yew Street SE/Berry Street SE/ Electric Street SE/Summer Street SE	Leffelle Street SE	Vista Avenue SE	Family-Friendly Bikeway	City of Salem	\$121,000
Clark Creek Park Connector	Vista Avenue SE	Norwood Street SE	Path	City of Salem	**
Norwood Street SE/Hulsey Avenue SE/Morningside Street SE/Peck Avenue SE	Clark Creek Park	Harris Avenue SE	Family-Friendly Bikeway	City of Salem	\$79,000
South Village Park Connector	Harris Avenue SE	Ewald Avenue SE	Path	City of Salem	余余
Pringle Creek to Minto-Brown Islan	d Park Corridor				
Pringle Creek Path	Riverfront Park	Civic Center	Path	City of Salem	**
Minto-Brown Island Path	River Road S	Riverfront Park	Path	City of Salem	**
Orchard Heights Park/Brush Colleg	e Park Bike Corridor				
Lupin Lane NW/Larkspur Lane NW/ Karen Way NW	Parkway Drive NW	Glen Creek Road NW	Family-Friendly Bikeway	City of Salem	\$49,000
Parkway Drive NW	Lupin Lane NW	Orchard Heights Road NW	Bike Lanes	City of Salem	*
Orchard Heights Park Access Road	Orchard Heights Road NW	Northern Terminus	Shared Lane Markings	City of Salem	\$6,000
* The estimated cost for these projects are	already included in the Str	eet System Element.			

\* The estimated cost for these projects are already included in the Street System Element.
\*\* The estimated cost for these projects is included in the Pedestrian System Element.



TABLE 7-5
Recommended Tier 1 Bicycle Projects (not in priority order)



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



<sup>\*\*</sup> The estimated cost for these projects is included in the Pedestrian System Element.

TABLE 7-5 Recommended Tier 1 Bicycle Projects (not in priority order)

Corridor and Segments	From	То	Facility Type	Partner Agencies	Estimated Cost
25th Street SE South of Mission S	Street SE Bike Corridor	STORESTON OF THE PERSON NAMED IN			
25th Street SE	Madrona Avenue SE	Mission Street SE	Path	City of Salem	**
Liberty Road S Bike Lanes					
Liberty Road S	Browning Avenue S	Commercial Street S	Enhanced Bike Lanes	City of Salem	*
Mission Street SE, Commercial St	treet SE to 12th Street SE	, Bike Corridor			
Mission Street SE	Commercial Street SE	12th Street SE	Enhanced Bike Lanes	City of Salem	\$146,000
Hawthorne Avenue NE Bike Lanes					
Hawthorne Avenue NE	Sunnyview Road NE	Silverton Road NE	Bike Lanes	City of Salem	*
Fisher Road NE Bike Lanes					
Fisher Road NE	Existing Southern Terminus	Silverton Road NE	Bike Lanes	City of Salem	*
Fisher Road NE	Market Street NE	Existing Southern Terminus	Bike Lanes	City of Salem	*
Hollywood Drive NE Bike Lanes					
Hollywood Drive NE	Hollyridge Loop NE	Silverton Road NE	Bike Lanes	Marion County	*
Brown Road NE Bike Lanes					
Brown Road NE	Sunnyview Road NE	Glendale Avenue NE	Bike Lanes	City of Salem	*

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.
\*\* The estimated cost for these projects is included in the Pedestrian System Element.



TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant

\* The estimated cost for these projects are already included in the Street System Element.

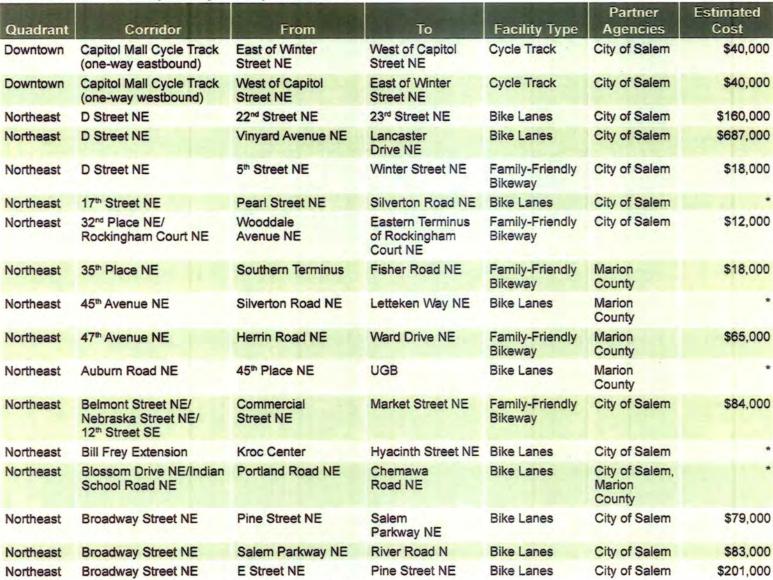




TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant

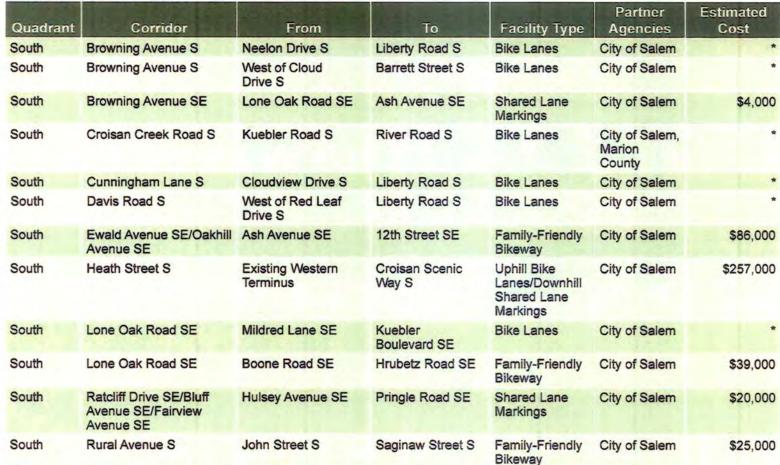
Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost
Northeast	Chemeketa Street NE	13th Street NE	24th Street NE	Family-Friendly Bikeway	City of Salem	\$76,000
Northeast	Dean Street NE	45 <sup>th</sup> Avenue NE	Eastern Terminus	Family-Friendly Bikeway	City of Salem	\$12,000
Northeast	Ellis Avenue NE	Park Avenue NE	Savage Road NE	Family-Friendly Bikeway	City of Salem	\$24,000
Northeast	Florence Avenue NE/ Chester Avenue NE	West of Evergreen Street NE	Lansing Avenue NE	Family-Friendly Bikeway	City of Salem	\$8,000
Northeast	Front Street NE	South of Division Street NE	Riviera Drive NE	Bike Lanes	City of Salem	
Northeast	Garnet Street NE/ Nebraska Avenue NE/ 22 <sup>nd</sup> Street NE	Market Street NE	D Street NE	Family-Friendly Bikeway	City of Salem	\$84,000
Northeast	Greencrest Street NE	Auburn Road NE	Center Street NE	Shared Lane Markings	City of Salem	\$7,000
Northeast	Hayesville Drive NE	Lancaster Drive NE	Lisa Street NE	Bike Lanes	City of Salem, Marion County	
Northeast	Herrin Road NE	Middle Grove Drive NE	Cordon Road NE	Bike Lanes	Marion County	
Northeast	Jade Street NE	47 <sup>th</sup> Avenue NE	Eastern Terminus	Family-Friendly Bikeway	Marion County	\$19,000
Northeast	Royalty Drive NE	Center Street NE	Regal Drive NE	Family-Friendly Bikeway	City of Salem	\$25,000
Northeast	Scepter Way NE/Regal Drive NE/Princess Lane NE	Southern Terminus of Scepter Way NE	Swegle Road NE	Family-Friendly Bikeway	City of Salem	\$76,000
Northeast	Walker Road NE/ Carolina Avenue NE/ Randi Lane NE/48 <sup>th</sup> Avenue NE	Swegle Road NE	Herrin Road NE	Family-Friendly Bikeway	City of Salem, Marion County	\$243,000
South	Ash Avenue SE	Browning Avenue SE	Ewald Avenue SE	Family-Friendly Bikeway	City of Salem	\$27,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



South

TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant



Liberty Road S

Uphill Bike

Lanes/Downhill Shared Lane Markings City of Salem

Salem Heights Avenue S View Drive S



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost
South	Salem Heights Avenue S	Crestview Drive S	Winola Avenue S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	*
South	Valleywood Drive SE	Lone Oak Road SE	Sunnyside Road SE	Family-Friendly Bikeway	City of Salem	\$93,000
Southeast	14th Avenue NE/SE	Oxford Street SE	Chemeketa Street NE	Shared Lane Markings	City of Salem	\$36,000
Southeast	16th Street SE	McGilchrist Street SE	Oxford Street SE	Bike Lanes	City of Salem	\$421,000
Southeast	46 <sup>th</sup> Place SE/Wildcherry Drive SE	Southern Terminus of 46th Place SE	Connecticut Street SE	Family-Friendly Bikeway	City of Salem	\$28,000
Southeast	Baxter Road SE	Reed Lane SE	East of Salal Street SE	Family-Friendly Bikeway	City of Salem	\$26,000
Southeast	Connecticut Street SE	Grouse Drive SE	Macleay Road SE	Bike Lanes	City of Salem	\$393,000
Southeast	Connecticut Street SE	Wildcherry Drive SE	Grouse Drive SE	Shared Lane Markings	City of Salem	\$8,000
Southeast	Connecticut Street SE/48th Court SE	Pennsylvania Avenue SE	State Street	Family-Friendly Bikeway	Marion County	\$64,000
Southeast	Eastlake Drive SE	Battle Creek Road SE	Landon Street SE	Family-Friendly Bikeway	City of Salem	\$46,000
Southeast	Hilfiker Lane SE/Hillrose Street SE	Sunnyside Road SE	Pringle Road SE	Bike Lanes	City of Salem	
Southeast	Metolius Avenue SE/ Foxhaven Drive SE/ Cultus Avenue SE	Eastlake Drive SE	Boone Road SE	Family-Friendly Bikeway	City of Salem	\$37,000
Southeast	Oxford Street SE	14th Street SE	16th Street SE	Bike Lanes	City of Salem	\$114,000
Southeast	Pennsylvania Avenue SE	Connecticut Street SE	Cordon Road SE	Bike Lanes	Marion County	\$140,000
Southeast	Wiltsey Road SE	Sunnyside Road SE	Madelyn Avenue SE	Bike Lanes	City of Salem	*
West	7th Street NW/Taggart Drive NW	Patterson Street NW	Wallace Road NW	Shared Lane Markings	City of Salem	\$12,000

<sup>\*</sup>The estimated cost for these projects are already included in the Street System Element.



TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant

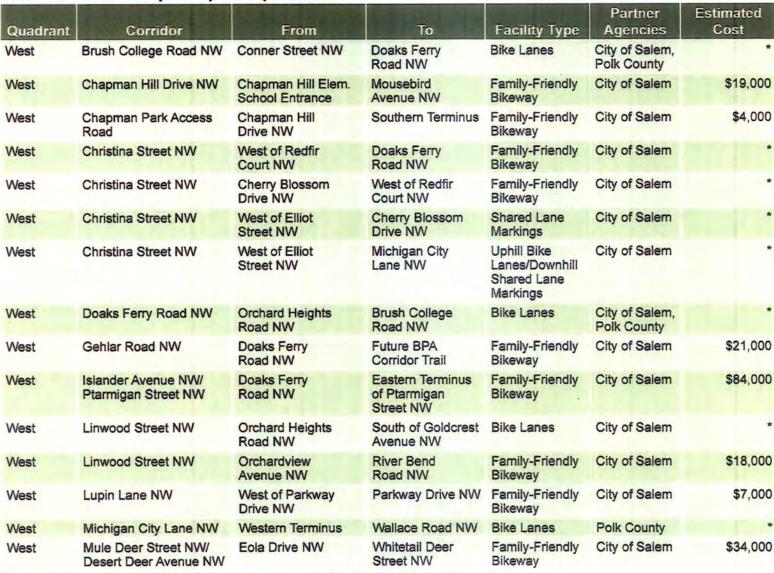






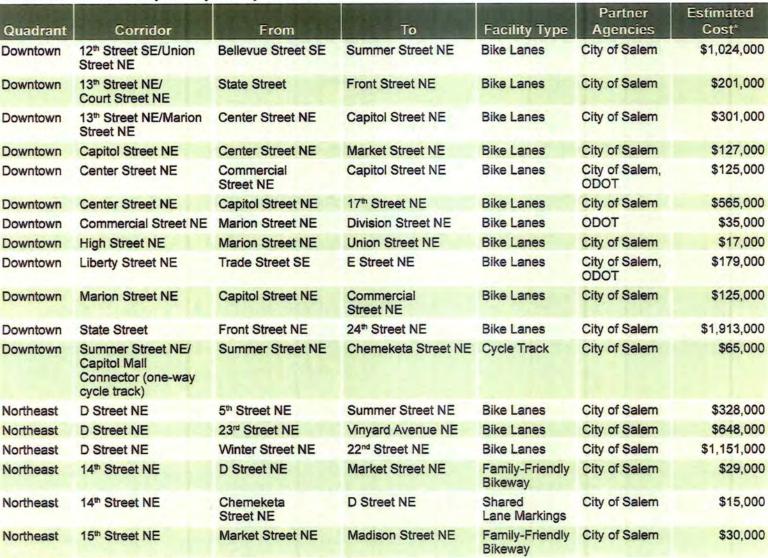
TABLE 7-6
Recommended Tier 2 Bicycle Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost
West	Parkway Drive NW	Glen Creek Road NW	Lupin Lane NW	Bike Lanes	City of Salem	\$397,000
West	Patterson Street NW	6th Street NW	7th Street NW	Bike Lanes	City of Salem	\$11,000
West	Piedmont Avenue NW/ 6th Street NW	Cascade Drive NW	Patterson Street NW	Family-Friendly Bikeway	City of Salem	\$66,000
West	Taggart Drive NW/Bartell Drive NW	Wallace Road NW	Glen Creek Road NW	Shared Lane Markings	City of Salem	\$7,000
West	Whitetail Deer Street NW/Margarett Street NW/Engel Avenue NW/Hillcrest Court NW/Kent Street NW/Arrow Street NW	Burley Hill Drive NW	Cascade Drive NW	Family-Friendly Bikeway	City of Salem	\$107,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



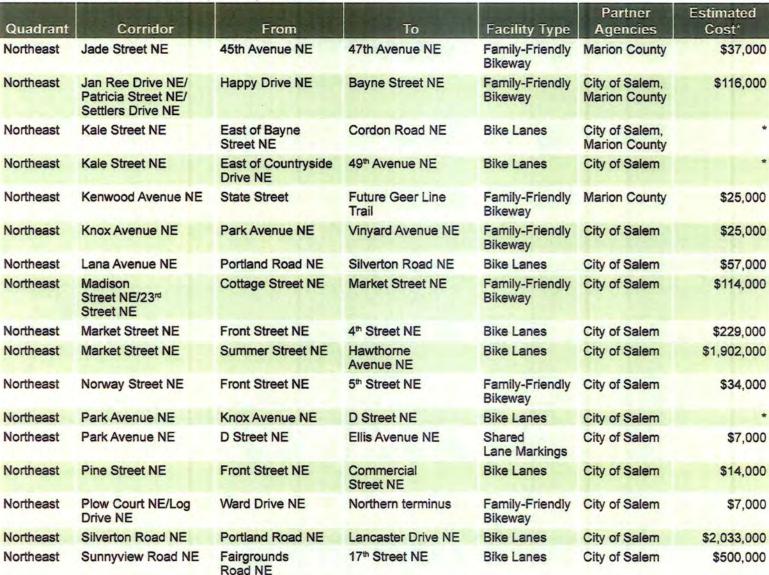
TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	18th Street NE	Madison Street NE	Garfield Street NE	Family-Friendly Bikeway	City of Salem	\$19,000
Northeast	23 <sup>rd</sup> Street NE	Ellis Avenue NE	Market Street NE	Shared Lane Markings	City of Salem	\$6,000
Northeast	36th Avenue NE/ Midway Avenue NE/ Auburn Road NE	Center Street NE	Lancaster Drive NE	Family-Friendly Bikeway	Marion County	\$53,000
Northeast	38th Avenue NE/Manor Drive NE/Weathers Street NE	D Street NE	Eastern Terminus of Weathers Street NE	Family-Friendly Bikeway	City of Salem	\$77,000
Northeast	45 <sup>th</sup> Avenue NE/Jade Street NE/Happy Drive NE	Ward Drive NE	Kale Street NE	Family-Friendly Bikeway	Marion County	\$117,000
Northeast	49th Avenue NE	Kale Street NE	Hazelgreen Road NE	Bike Lanes	City of Salem	
Northeast	49th Avenue NE	Hayesville Drive NE	Kale Street NE	Shared Lane Markings	City of Salem, Marion County	\$13,000
Northeast	5th Street NE	D Street NE	Norway Street NE	Family-Friendly Bikeway	City of Salem	\$49,000
Northeast	Academy Street NE	Maple Avenue NE	Fairgrounds Road NE	Family-Friendly Bikeway	City of Salem	\$33,000
Northeast	Chester Avenue NE	Lansing Avenue NE	Byram Street NE	Family-Friendly Bikeway	City of Salem	\$20,000
Northeast	Division Street NE	Liberty Street NE	High Street NE	Bike Lanes	City of Salem	\$18,000
Northeast	Fisher Road NE	South of Market Street NE	Market Street NE	Shared Lane Markings	City of Salem	\$4,000
Northeast	Greencrest Street NE	State Street	Auburn Road NE	Bike Lanes	Marion County	
Northeast	Highland Avenue NE	Front Street NE	Maple Avenue NE	Shared Lane Markings	City of Salem	\$14,000
Northeast	Highland Avenue NE	Maple Avenue NE	Portland Road NE	Shared Lane Markings	City of Salem	\$14,000
Northeast	Hood Street NE/ Fairgrounds Road NE	Front Street NE	Summer Street NE	Bike Lanes	City of Salem	\$162,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	Swegle Road NE	Plateau Street NE	Cordon Road NE	Bike Lanes	City of Salem, Marion County	\$480,000
Northeast	Ward Drive NE	Lancaster Drive NE	Cordon Road NE	Shared Lane Markings	City of Salem, Marion County	\$42,000
South	Acacia Drive S	Sumac Drive S	Hansen Avenue S	Shared Lane Markings	City of Salem	\$7,000
South	Acacia Drive S	River Road S	Sumac Drive S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$14,000
South	Alice Avenue S	Mountain View Drive S	Commercial Street SE	Family-Friendly Bikeway	City of Salem	\$21,000
South	Browning Avenue S	Western Terminus	West of Cloud Drive S	Shared Lane Markings	City of Salem	\$7,000
South	Browning Avenue SE	Liberty Road S	Lone Oak Road SE	Shared Lane Markings	City of Salem	\$9,000
South	Browning Avenue SE	Ash Avenue SE	Commercial Street SE	Shared Lane Markings	City of Salem	\$13,000
South	Bush Street S	Western Terminus	Bush's Pasture Park	Family-Friendly Bikeway	City of Salem	\$45,000
South	Byers Street S/Deer Run Avenue S	Viewcrest Road S	Northern Terminus	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem, Marion County	
South	Cedarcrest Drive S/ Brookwood Street S/ Rock Creek Drive S	Red Leaf Drive S	Liberty Road S	Family-Friendly Bikeway	City of Salem	\$59,000
South	Commercial Street SE	Mission Street SE	Superior Street SE	Bike Lanes	City of Salem	\$155,000
South	Crestview Drive S	Southern Terminus	Madrona Avenue S	Family-Friendly Bikeway	City of Salem	\$13,000
South	Crestview Drive S	Shurman Drive S	Northern Terminus	Family-Friendly Bikeway	City of Salem	\$28,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

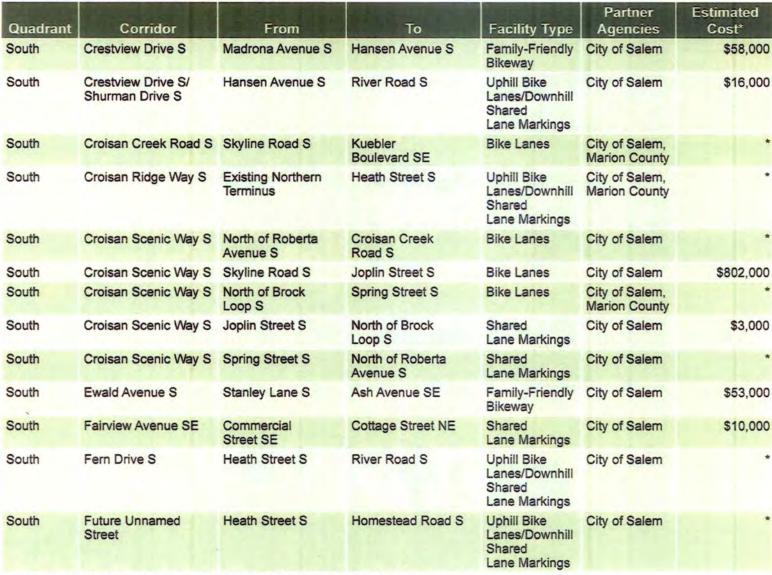






TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Gregory Lane SE	Lone Oak Road SE	Jones Road SE	Family-Friendly Bikeway	City of Salem	\$16,000
South	Hansen Avenue S	Crestview Drive S	Argyle Drive S	Shared Lane Markings	City of Salem	\$15,000
South	Hansen Avenue S	Acacia Drive S	Crestview Drive S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$34,000
South	Heath Street S	Deer Run Avenue S	Existing Western Terminus	Uphill Bike Lanes/Downhill Shared Lane Markings	Marion County	•
South	High Street SE/ Church Street SE	Fairview Avenue SE	Hoyt Street SE	Family-Friendly Bikeway	City of Salem	\$48,000
South	Holder Lane SE	West of Seeger Lane SE	Lone Oak Road SE	Shared Lane Markings	City of Salem	
South	Homestead Road S	River Road S	Brown Island Road S	Bike Lanes	City of Salem	\$1,170,000
South	Homestead Road S	Southern Terminus	River Road S	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	
South	Idylwood Drive SE	Lone Oak Road SE	Sunnyside Road SE	Shared Lane Markings	City of Salem	\$20,000
South	Kuebler Boulevard S	Urban Growth Boundary	Croisan Creek Road S	Bike Lanes	City of Salem	
South	Liberty Road S	Urban Growth Boundary	Rainier Drive SE	Bike Lanes	Marion County	
South	Lone Oak Road SE	Rees Hill Road SE	Muirfield Avenue SE	Bike Lanes	City of Salem, Marion County	DIE -
South	Madrona Avenue S	Crestview Drive S	Stanley Lane S	Bike Lanes	City of Salem	
South	Madrona Avenue S	Winola Avenue S	Commercial Street SE	Bike Lanes	City of Salem	

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

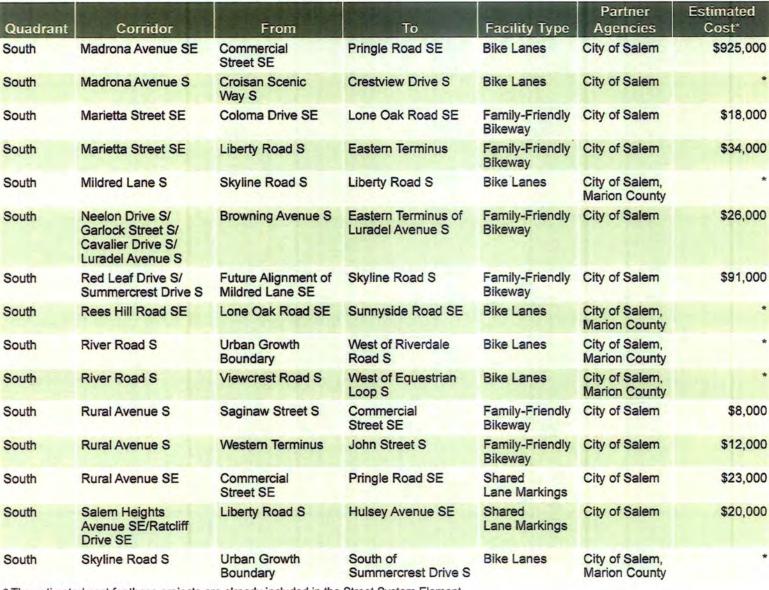






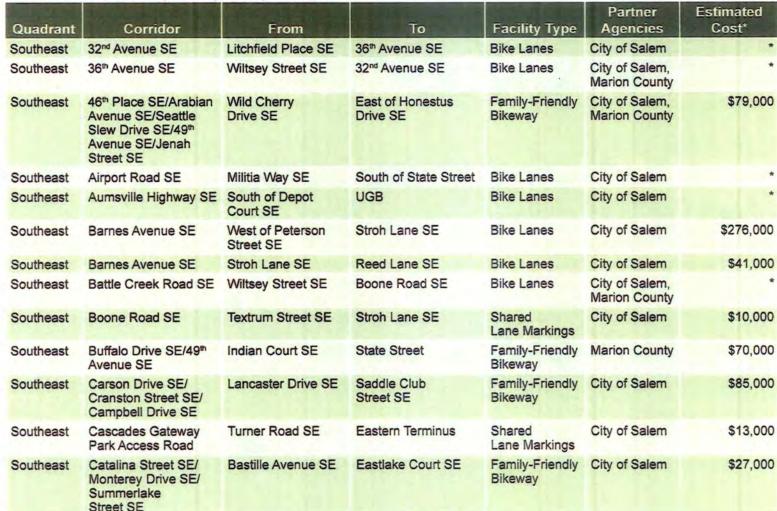
TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Stanley Lane S	Browning Avenue S	Ewald Avenue S	Family-Friendly Bikeway	City of Salem	\$28,000
South	Sunnyside Road SE	Urban Growth Boundary	Rees Hill Road SE	Bike Lanes	City of Salem	*
South	Vista Avenue SE	Bluff Avenue SE	Pringle Road SE	Bike Lanes	City of Salem, Marion County	\$196,000
South	Vista Avenue SE	Cottage Street SE	Bluff Avenue SE	Shared Lane Markings	City of Salem	\$11,000
South	Waller Street SE	Western terminus	13th Street SE	Family-Friendly Bikeway	City of Salem	\$15,000
South	Winola Avenue S	Southern Terminus	Madrona Avenue S	Family-Friendly Bikeway	City of Salem	\$13,000
South	Woodmansee Street SE	Western Terminus	Sunnyside Road SE	Shared Lane Markings	City of Salem	\$3,000
Southeast	12th Street SE/Albert Drive SE/Mandy Avenue SE/Copper Glen Drive SE	Hilfiker Lane SE	Pringle Road SE	Family-Friendly Bikeway	City of Salem	\$80,000
Southeast	14th Avenue SE/ Neahkahnie Street SE/13th Avenue SE/Jonmart Avenue SE	Rees Hill Road SE	Wiltsey Road SE	Family-Friendly Bikeway	City of Salem	\$97,000
Southeast	22 <sup>nd</sup> Street SE	Southern Terminus	McGilchrist Street SE	Shared Lane Markings	City of Salem	\$16,000
Southeast	22 <sup>nd</sup> Street SE/Electric Street SE	Oxford Street SE	East of 23rd Street SE	Shared Lane Markings	City of Salem	\$9,000
Southeast	23rd Street SE	McGilchrist Street SE	Mission Street SE	Shared Lane Markings	City of Salem	\$17,000
Southeast	23rd Street SE/ Townsend Way SE/ Ford Street SE	Mission Street SE	Mill Street SE	Family-Friendly Bikeway	City of Salem	\$55,000
Southeast	25th Street SE	Mission Street	State Street	Bike Lanes	City of Salem	

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



**TABLE 7-7**Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Cinnabar Street SE/ Natalie Avenue SE	Eastern terminus of Natalie Avenue SE	Mildred Lane SE	Family-Friendly Bikeway	City of Salem	\$17,000
Southeast	Crowley Avenue SE/ Chaparral Drive SE	Eastern Terminus	Hilfiker Lane SE	Family-Friendly Bikeway	City of Salem	\$31,000
Southeast	Deer Park Drive SE	Turner Road SE	Aumsville Highway SE	Bike Lanes	City of Salem	*
Southeast	Electric Street SE	East of 23rd Street SE	25th Street SE	Shared Lane Markings	City of Salem	\$736,000
Southeast	Fabry Road SE	Sugar Plum Avenue SE	Battle Creek Road SE	Bike Lanes	City of Salem	*
Southeast	Future Unnamed Street	Madrona Avenue SE	22 <sup>nd</sup> Street SE	Bike Lanes	City of Salem	\$644,000
Southeast	Future Unnamed Street	Turner Road SE	Lancaster Drive SE	Bike Lanes	City of Salem	*
Southeast	Future Unnamed Street 1	West of Reed Lane SE	West of Reed Lane SE	Shared Lane Markings	City of Salem	\$397,000
Southeast	Future Unnamed Street 2	West of Reed Lane SE	West of Reed Lane SE	Shared Lane Markings	City of Salem	\$475,000
Southeast	Gath Road SE/Turner Road SE	Urban Growth Boundary	37th Avenue SE	Bike Lanes	City of Salem	
Southeast	Genesis Street SE	Robins Lane SE	Northern Terminus	Family-Friendly Bikeway	City of Salem	\$18,000
Southeast	Glenwood Drive SE	Lancaster Drive SE	Connecticut Avenue SE	Family-Friendly Bikeway	Marion County	\$56,000
Southeast	Hines Street SE	12th Street SE	14th Street SE	Bike Lanes	City of Salem	\$225,000
Southeast	Kashmir Way SE	36th Avenue SE	Eastland Avenue SE	Shared Lane Markings	Marion County	\$12,000
Southeast	Macleay Road SE	Arabian Avenue SE	Cordon Road SE	Bike Lanes	City of Salem, Marion County	*
Southeast	Madras Street SE	East of Commercial Street SE	Wiltsey Road SE	Bike Lanes	City of Salem	\$235,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Mill Street SE/Trade Street SE	12th Street SE	25th Street SE	Family-Friendly Bikeway	City of Salem	\$100,000
Southeast	Oakhill Avenue SE/ Centennial Street SE	12th Street SE	Pringle Road SE	Family-Friendly Bikeway	City of Salem	\$36,000
Southeast	Oxford Street SE	16th Street SE	22 <sup>nd</sup> Street SE	Bike Lanes	City of Salem	
Southeast	Pikes Pass Street SE/ Soapstone Avenue SE	Mistymorning Avenue SE	Reed Lane SE	Family-Friendly Bikeway	City of Salem	\$43,000
Southeast	Reed Lane SE	Pringle Road SE	Fairview Industrial Drive SE	Bike Lanes	City of Salem	
Southeast	Reed Lane SE	Jamison Drive SE	Baxter Road SE	Family-Friendly Bikeway	City of Salem	\$15,000
Southeast	Reed Lane SE	Soapstone Avenue SE	Jamison Drive SE	Shared Lane Markings	City of Salem	\$11,000
Southeast	Reed Lane SE	Wiltsey Road SE	Soapstone Avenue SE	Shared Lane Markings	City of Salem	
Southeast	Reed Lane SE/ Boone Road SE/27th Avenue SE/Marietta Street SE	Baxter Road SE	Fairview Industrial Drive SE	Bike Lanes	City of Salem	\$1,960,000
Southeast	Rees Hill Road SE	Sunnyside Road SE	Fairway Avenue SE	Shared Lane Markings	City of Salem	\$17,000
Southeast	Robins Lane SE/ Brentwood Drive SE	East of Genesis Street SE	Battle Creek Road SE	Bike Lanes	Marion County	
Southeast	Saddle Club Street SE	Lancaster Drive SE	Campbell Drive SE	Shared Lane Markings	City of Salem	\$13,000
Southeast	Serenity Drive SE/ Tanglewood Way SE	Lois Court SE	36th Avenue SE	Family-Friendly Bikeway	Marion County	\$47,000
Southeast	Stroh Lane SE	Kuebler Boulevard SE	Boone Road SE	Bike Lanes	City of Salem	\$74,000
Southeast	Textrum Street SE	Boone Road SE	South of Royvonne Avenue SE	Family-Friendly Bikeway	City of Salem	\$19,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.

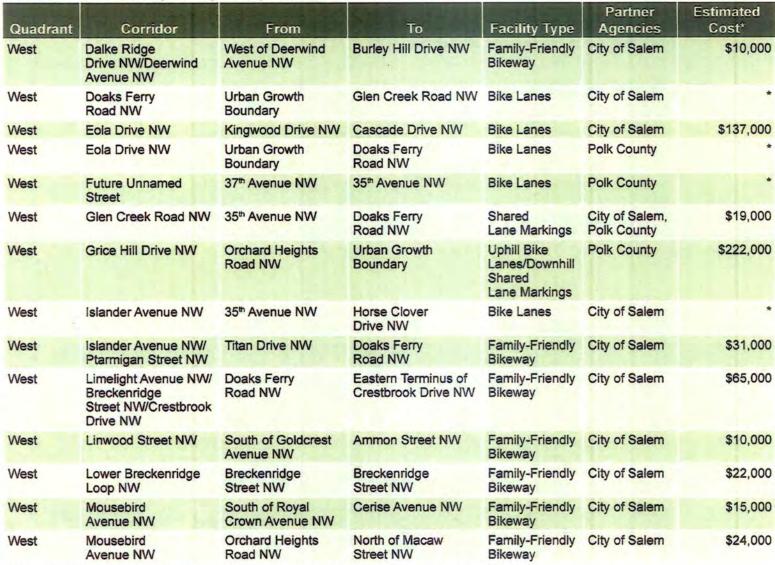
TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Turner Road SE	Urban Growth Boundary	Gath Road SE	Bike Lanes	City of Salem, Marion County	
Southeast	Turner Road SE	37th Avenue SE	South of Cascades Gateway Park	Bike Lanes	City of Salem, Marion County	
Southeast	Valleywood Drive SE/ Sunstone Street SE	Sunnyside Road SE	Mildred Lane SE	Family-Friendly Bikeway	City of Salem	\$15,000
Southeast	Wiltsey Road SE	Battle Creek Road SE	36th Avenue SE	Bike Lanes	Marion County	
Southeast	Woodscape Drive SE	Baxter Road SE	Reed Lane SE	Family-Friendly Bikeway	City of Salem	\$34,000
West	35th Avenue NW	Existing Northern Terminus	Orchard Heights Road NW	Bike Lanes	City of Salem	
West	35th Avenue NW	Glen Creek Road NW	Existing Northern Terminus	Shared Lane Markings	Polk County	\$10,000
West	37 <sup>th</sup> Avenue NW	Urban Growth Boundary	Orchard Heights Road NW	Bike Lanes	Polk County	•
West	40th Avenue NW	Urban Growth Boundary	Orchard Heights Place NW	Bike Lanes	Polk County	\$645,000
West	Andrew Avenue NW/ Elliot Street NW/ Cherry Blossom Drive NW	Future Ellen Lane Park	Christina Street NW	Family-Friendly Bikeway	City of Salem	\$59,000
West	Brookside Avenue NW	Doaks Ferry Road NW	Wallace Road NW	Family-Friendly Bikeway	City of Salem	\$45,000
West	Brush College Road NW	Urban Growth Boundary	Conner Street NW	Bike Lanes	City of Salem, Polk County	*
West	Burley Hill Drive NW	Eola Drive NW	Glen Creek Road NW	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$25,000
West	Cascade Drive NW/ Parkway Drive NW	Eola Drive NW	Glen Creek Road NW	Family-Friendly Bikeway	City of Salem	\$83,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant



<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 7-7
Recommended Tier 3 Bicycle Projects- By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
West	Mousebird Avenue NW	Lambert Street NW	Wallace Road NW	Family-Friendly Bikeway	City of Salem	\$54,000
West	Mousebird Avenue NW	North of Macaw Street NW	South of Royal Crown Avenue NW	Family-Friendly Bikeway	City of Salem	\$140,000
West	Orchard Heights Road NW	Urban Growth Boundary	Titan Drive NW	Bike Lanes	Polk County	
West	Patterson Street NW	7th Street NW	Northern Terminus	Bike Lanes	City of Salem	\$16,000
West	Patterson Street NW	Edgewater Street NW	6th Street NW	Bike Lanes	City of Salem	\$64,000
West	Patterson Street NW	Glen Creek Road NW	Lavona Drive NW	Family-Friendly Bikeway	City of Salem	\$7,000
West	Stoneway Drive NW	Highway 22	College Drive NW	Uphill Bike Lanes/Downhill Shared Lane Markings	City of Salem	\$334,000
West	Stoneway Drive NW/ Kaley Avenue NW	College Drive NW	Eola Drive NW	Family-Friendly Bikeway	City of Salem	\$40,000
West	Vickery Drive NW	Urban Growth Boundary	Colorado Way NW	Uphill Bike Lanes/Downhill Shared Lane Markings	Polk County	\$124,000

<sup>\*</sup> The estimated cost for these projects are already included in the Street System Element.





# PEDESTRIAN SYSTEM ELEMENT

The goal of the City of Salem is to encourage and increase safe pedestrian travel. Many short trips to school, work, or the neighborhood store can be made entirely by walking. The key to encouraging more walking trips is to eliminate obstacles to walking such as deficient sidewalks, a lack of connectivity, unattractive sidewalks, and concerns about safety. A completed, well-designed, inviting sidewalk system encourages walking and provides important connections to other modes of transportation such as transit. By providing this infrastructure, we can expect to decrease the need for people to drive in their cars every time they want to make a trip. This, in turn, helps to lessen traffic congestion, preserve good air quality, improve public health, and ehnance community livability in Salem.

Originally developed in the mid 1990s, the Pedestrain System Element was updated through the Bike and Walk Salem Project, initiated in 2010. The Pedestrian System Element identifies specific strategies that will result in a well-designed, safe, and convenient pedestrian network in Salem and the surrounding Urban Growth Area. The Pedestrian Network presented on Maps 8-3 through 8-12 identifies and prioritizes needed improvements in the pedestrian system.

It is important to note that some of the pedestrian connections shown require additional refinement to determine how the desired connection can be accomplished. This is particularly true of proposed shared-use paths that would appear to cross over private property or through other sensitive areas (e.g., historic resource, natural resource, etc.). What is shown on the Pedestrian Network reflects only a conceptual alignment based on the need for pedestrian connectivity. Any publicly-funded project to pursue creation of a shared-use path will require that a feasibility study be conducted to identify and address the full range of issues associated with the proposed connection.

## What is the pedestrian network today?

Existing conditions for walking in Salem were evaluated as a basis for creating recommendations for future improvement strategies and projects. The following tasks were undertaken to understand what Salem's pedestrian network looks like today:

- Conducted field work.
- · Used information from the City's Geographic Information System, Planning, and Public Works Departments.
- · Analyzed crash data from the Oregon Department of Transportation.
- · Examined existing local, regional, and state plans and policies.
- Collected extensive public input through the project website, questionnaires, an online interactive comment map, listening stations, project meetings, and public open houses.

Existing condition highlights are described in the following section.

### SIDEWALK COVERAGE

Salem's existing pedestrian network consists of sidewalks, paved and unpaved path corridors, and various crossing treatments at intersections and mid-block locations. Sidewalk coverage is highest in Downtown Salem, where sidewalks exist on both sides of most streets. Several areas outside of Downtown such as neighborhoods east of Lancaster Drive (NE and SE), near Commercial Street SE and Liberty Road S, and parts of West Salem have



significant gaps in sidewalk coverage. In these areas, sidewalk gaps exist along some major streets, while residential streets may lack sidewalks altogether.

#### SIDEWALK CONDITIONS ON CRITICAL ADA ROUTES

In light of the need for upgraded facilities in several areas that accommodate able-bodied and mobility-impaired users alike, and limited financial resources, a Critical Americans with Disabilities Act (ADA) Routes Network was developed as part of this Plan. The Critical ADA Routes Network comprises approximately 150 miles of streets within the Salem Urban Growth Boundary (which equates to about 300 miles of sidewalks) that connect mobility-impaired users with major destinations. The Critical ADA Routes network was developed based on extensive input provided by members of the disabled community, City staff, pedestrian advocates, and the public involvement process. The Critical ADA Routes Network is presented in Map 8-1: Critical ADA Routes Network.

Using existing available data, City of Salem staff conducted a broad assessment of existing sidewalk conditions along the Critical ADA Routes Network, assigning general ratings to corridor segments based on current physical conditions. While not citywide, this assessment provides a general understanding of the sidewalk conditions facing disabled pedestrians along key routes.

- 60 percent of sidewalks along the Critical ADA Routes Network are in "excellent" or "good" condition, with little
  or no cracking or other adverse surface conditions.
- 10 percent of sidewalks along the Critical ADA Routes Network are in "fair" condition; having cracks or some other tripping hazards that make it hard for mobility-impaired pedestrians to get around.
- 30 percent of sidewalks along the Critical ADA Routes Network are in "poor" or "bad" condition; having cracks
  or other conditions that make it hard for mobility-impaired pedestrians to get around.

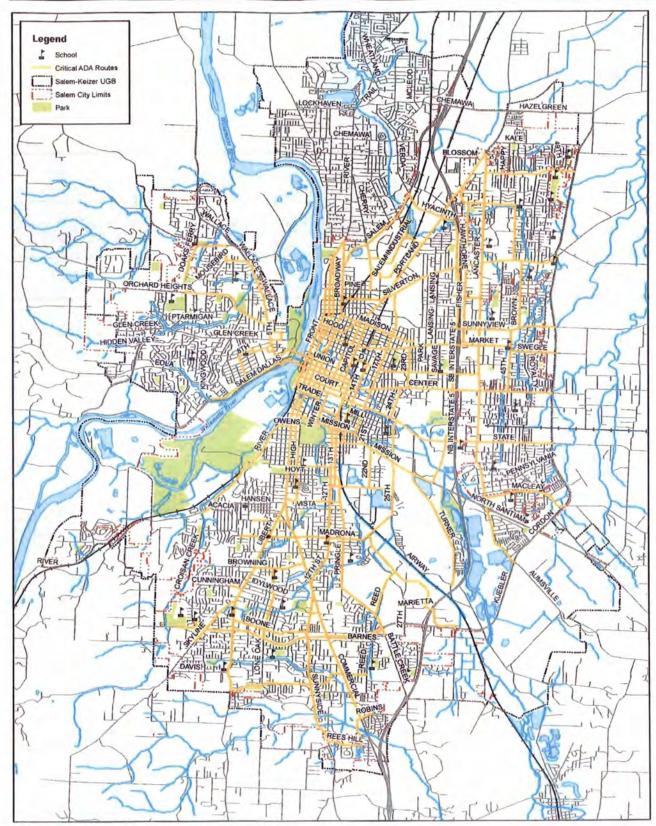
The pedestrian improvement strategies and projects that came out of the Critical ADA Routes assessment are included in the pedestrian system recommendations that are described in this Element and listed in Tables 8-5 through 8-7.

#### STREET CONNECTIVITY

Street connectivity represents an important issue facing pedestrians. Some areas, including the downtown core, West Salem's Edgewater District, and neighborhoods immediately to the east, north, and south of Downtown benefit from generally well-connected streets. However, beyond these areas, the street system is less connected with large blocks and cul-de-sacs in several areas that can make walking distances longer. Since most walking trips are for short distances (one mile or less), long street blocks or discontinuous streets may hamper the practicality of walking.

#### OFF-STREET PATH NETWORK

Salem currently lacks a comprehensive and interconnected path network, with existing paths concentrated primarily in the city's central neighborhoods. The existing paved path system includes longer path segments along Salem Parkway, State Street, 12th Street (NE and SE), and on the Center and Union Street bridges; while shorter segments exist within Riverfront Park, Bush's Pasture Park and Geer Community Park. Informal unpaved paths also exist



Map 8-1: Critical ADA Routes

Bike & Walk Salem Source: City of Salem, ODOT, MMVCOG, Cherriots, Salem-Keizer School District Author: Alta Planning + Design





between some subdivisions and along undeveloped public rights-of-way that help to provide local pedestrian connectivity.

## PEDESTRIAN ACCESS TO TRANSIT

Ensuring that pedestrians have a safe and comfortable route to transit stops is a critical element towards greater transit use. Field observations of major transit stops were conducted to identify existing passenger infrastructure (e.g., shelters and rider information) and the current pedestrian network close to each stop. This was done because the presence or absence of these elements may influence a person's decision whether to use transit (particularly for new or infrequent transit users). Major transit stops were identified by reviewing ridership data provided by the Salem Area Mass Transit District.

Several of the observed major transit stops in Salem were found to lack important pedestrian infrastructure components and have missing sidewalks, difficult crossings, and/or steep curb ramps. Additionally, a few major transit stops, such as the stop at Lancaster Drive and State Street, were found to lack critical passenger infrastructure, such as a shelters, benches, and posted schedules.

# **NEEDS ASSESSMENT**

The technical pedestrian system needs assessment included field work and the review of background data and information to determine items such as key pedestrian destinations and existing access, high crash corridors and intersections, and the location of transportation disadvantaged populations.

Supplementing field work and the review of background information, the pedestrian system needs were identified based on feedback received during the public involvement process. Pedestrian system need highlights are provided below:

- Upgraded or new sidewalks are needed in the vicinity of major pedestrian destinations.
- Sidewalk maintenance is critical for pedestrians, especially for pedestrians using mobility-assistance devices.
- Improved wayfinding is needed to better orient pedestrians to key destinations such as libraries, parks, and community centers.

# **Policy Framework**

The Pedestrian System Element of the Salem TSP establishes goals, objectives, and policies that will guide how improvements are made to Salem's pedestrian facilities over the next 25 years. Pedestrian-related policies in Salem's previous Pedestrian Plan placed a major focus on connecting the pedestrian network by building new sidewalks. This updated Pedestrian Plan adds a special emphasis on ADA compliance and accommodating a wider range of pedestrians, including those that require mobility-assistance devices.

The projects and strategies included in this updated Pedestrian Plan focus on the following areas:

Serving a broad range of pedestrians (including users of various ages, confidence levels, trip types, and abilities).



- Enhancing the existing system (e.g., upgrades to meet ADA requirements) to better serve users.
- Building upon investments in the existing and planned system.
- Expanding the system to streamline walking connections and developing new routes to better serve existing and future destinations.
- · Establishing seamless links with surrounding communities including Keizer, and Marion and Polk counties.
- · Enhancing user safety and comfort.

This policy framework reflects the State Transportation Planning Rule requirement that a pedestrian system plan element be included in local transportation system plans.

# Goals, Objectives, and Policies

The City of Salem has the following goal, objectives, and policies for the planning, development, and operation of its pedestrian system.

GOAL: To provide a comprehensive system of connecting sidewalks and walkways for a range of pedestrians with different abilities that will encourage and increase safe pedestrian travel and active transportation to support public health.

#### OBJECTIVE NO. 1

The City of Salem shall create a comprehensive system of pedestrian facilities.

# Policy 1.1 Inventory Existing System and Identify Future Needs

The City shall inventory and map existing pedestrian facilities. Facility inventories and selected usage surveys shall be performed every five years to determine the success or failure of meeting the Plan's pedestrian goal, objectives, and policies.

# Policy 1.2 Establish Sidewalk Construction Program

To complete the pedestrian facility network, the City shall establish a Sidewalk Construction Program that reflects the City's funding resources. This program will give priority to the construction of missing sidewalks in already developed areas of the City that would provide improved access to schools, parks, shopping, and transit services.

# Policy 1.3 Focus Attention on Intermodal Connections

Sidewalks and walkways shall complement access to transit stations/stops, train stations, and multiuse paths. Activity centers and business districts should focus attention on and encourage pedestrian travel within their proximity.



# **Policy 1.4 Ensuring Future Sidewalk Connections**

All future development shall include sidewalk and walkway construction as required by the Salem Revised Code and adopted City of Salem Design Standards. All road construction or renovation projects shall include sidewalks. The City shall support, as resources are available, projects that address identified barriers to pedestrian travel or safety.

# Policy 1.5 Complete Connections with Crosswalks

All signalized intersections shall have marked crosswalks. School crosswalks will be marked where crossing guards are provided. Marked crosswalks, along with safety enhancements (medians and curb extensions), shall be provided, as resources are available, at unsignalized intersections and uncontrolled traffic locations in order to provide greater mobility in areas frequently traveled by persons with limited pedestrian capabilities. Marked crosswalks may also be installed at other high volume pedestrian locations without medians or curb extensions if a traffic study shows there would be a benefit to those pedestrians.

# Policy 1.6 Compliance with ADA Standards

The City shall comply with the requirements set forth in the Americans with Disabilities Act regarding the location and design of sidewalks. To do so, the City shall establish Critical ADA Routes where compliance with Americans with Disabilities Act Accessibility Guidelines is prioritized. Critical ADA routes are to be those that provide direct, convenient, and safe on-street and off-street pathway connections to existing and planned neighborhood and community destinations such as schools, shopping areas, parks, multifamily developments, government offices, and transit stops.

# **OBJECTIVE NO. 2**

Increase citywide journey to work walking mode share (U.S. Census) to 7 percent by 2020, and 11 percent by 2030.

# Policy 2.1 Maintaining and Assuring the Quality of Facilities

The City shall establish standards for the maintenance and safety of pedestrian facilities. These standards shall include the removal of hazards and obstacles to pedestrian travel, as well as maintenance of benches and landscaping. A minimum clear path of 36 inches shall be maintained in compliance with ADA standards, with a priority for ADA critical routes. Definition of a clear path includes an area free of debris, hazards, and obstacles, as well as substantially broken sidewalks.

Owners of property within the city limits and adjacent to sidewalks built since September 1, 1992, will be responsible for repairing or replacing damaged sidewalks, unless the damage has been caused by a City street tree. Owners of property within the city limits and adjacent to sidewalks built prior to September 1, 1992, will be assigned responsibility for repairing or replacing damaged sidewalks after the City of Salem first repairs the existing sidewalk and brings them up to an acceptable standard. The City will remain responsible for future damage caused by City street trees.

# Policy 2.2 Pedestrian Supportive Land Uses

Comprehensive Plan land use designations and zoning shall be developed to allow for mixed land uses which promote pedestrian travel.

8-6-PEDESTRIAN SYSTEM ELEMENT



# Policy 2.3 Promotion of Walking for Health and Community Livability

The City shall encourage efforts that inform and promote the health, economic, and environmental benefits of walking for the individual and the community. Walking for travel and recreation shall be encouraged to achieve a more healthful environment that reduces pollution and noise to foster a more livable community.

# Policy 2.4 Connecting Pathway Network

The City shall encourage the development of a connecting, multiuse pathway network, using linear corridors such as rivers, creeks, utility easements, and abandoned rail lines, using such programs as rail-banking, which complement and connect to the sidewalk, park, and transit systems.

#### **OBJECTIVE NO. 3**

The City of Salem shall encourage education services and promote safe pedestrian travel in order to reduce the number of accidents involving pedestrians by 50 percent and aim for zero fatalities by 2030. (Note: 45 pedestrian-related crashes, with 5 resulting in fatalities in 2008.)

# Policy 3.1 Education of Pedestrian Safety Needs

The City shall encourage schools, safety organizations, and law enforcement agencies to provide information and instruction on pedestrian safety issues that focus on prevention of the most important accident problems. The programs shall educate all roadway users of their privileges and responsibilities when driving, bicycling, and walking.

#### Policy 3.2 Taking Action to Improve Safety

The City shall enforce pedestrian safety laws and regulations to help increase safety as measured by a reduction in accidents. Attention should be focused on areas where high volumes of automobile and pedestrian travel occur. Warnings and citations given to drivers and pedestrians should serve to impress the importance of safety issues.

#### Policy 3.3 Completion of Street Lighting Facilities

The City shall work toward the completion of the street lighting system, designed to City illumination standards, on all Arterial and Collector streets within the Urban Service Area (USA).

# Policy 3.4 Safe Access to Schools

The City shall work with the Salem-Keizer School District and neighborhood associations to maintain and improve its programs to evaluate the existing pedestrian access to local schools, estimate the current and potential use of walking as a travel mode, evaluate safety needs, and propose changes to increase the percentage of children and young adults safely using this mode.

# Performance Measures

Evaluating progress towards the implementation of pedestrian goals can help the City and community understand what has been achieved through project implementation. This information can inform plan updates and future



plans. The performance measures and targets in the table below rely on readily available data, specifically network implementation and journey to work mode share data collected by the US Census, to help ensure periodic evaluation.

TABLE 8-1
Pedestrian System Performance Measures

Performance Measure	Target
Pedestrian Commute Mode Share*	Increase citywide journey to work walking mode share (US Census) to 7 percent by 2020, and 11 percent by 2030.
Pedestrian Network Construction**	Construct 90 percent of the Critical ADA Routes by 2030.

<sup>\*</sup>According to the American Community Survey (ACS), walking Journey to Work mode share was 3.6% for 2006-2008.

# **Pedestrian Facility Types**

The recommended pedestrian projects refer to a variety of pedestrian facility types.

TABLE 8-2
Pedestrian Facility Types

# Facility Type

**Sidewalks:** Paved walkways adjacent to roadways; particularly important for mobility-impaired pedestrians. Design standards and guidelines are provided by FHWA, ADA and ODOT.



**Shared-Use Paths:** Physically separated from motor vehicle traffic; serve one or more non-motorized user including bicyclists, pedestrians, in-line skaters, skateboarders, or wheelchairs; typically serve bi-directional traffic. Design guidance is provided by FHWA and ODOT. Design should be tailored to particular project locations.



**Curb Ramps:** Facilitate transitions between the sidewalk and roadway; particularly important for mobility-impaired pedestrians and other "wheel" users. Design standards and guidelines are provided by ADA.

<sup>\*\*</sup>Note that off-street paths should be counted only towards bicycle network construction evaluation and not pedestrian network construction so as not to double count off-street path construction.



# **Facility Type**



Median Refuge Islands: Enable pedestrians to break up a crossing into multiple segments, allowing pedestrians to judge conflicts with vehicles traveling in each direction separately, while also providing a resting location so that slower pedestrians can wait for a break in traffic. Design guidance is provided by FHWA and ODOT.



**Curb Extensions:** Expand the sidewalk or curb face into the on-street parking lane at intersections or mid-block crossings; shorten the pedestrian crossing distance; commonly used for traffic calming. Design guidance is provided by FHWA and ODOT.



Audible Pedestrian Signals: Used at signalized intersections to assist visually-impaired pedestrians by alerting them to when they may safely enter a crosswalk; provide additional information regarding the length of time the signal will remain in the pedestrian crossing phase. Design guidance is provided by FHWA.



Pedestrian Countdown Signals: Used at signalized intersections; provide a visual cue to pedestrians indicating remaining time in the pedestrian crossing phase. Design guidance is provided by FHWA.

# Citywide Pedestrian Recommendations

The following are recommendations for citywide efforts, some of which are already underway, to enhance Salem's pedestrian environment on a citywide scale.

#### SIDEWALK INVENTORY AND INSPECTION

The City will continue its Sidewalk Inspection and Repair Program to enable the City to measure progress toward upgrading the existing sidewalk network and completing the sidewalk system. Priority inspections should be assigned to the approximately 150-mile Critical ADA Routes network identified in Map 8-1: Critical ADA Routes Network.

#### SIDEWALK INFILL

The City will continue to pursue sidewalk infill and upgrade opportunities. Per the City's street design standards, sidewalks will be developed as part of new roadway construction, while upgrades along existing streets may occur



in tandem with other planned corridor improvements. Other options include privately-funded small sidewalk gap closures on existing streets, possibly triggered upon a change in ownership of the adjacent property. For projects constructed independently of larger corridor-wide improvements, priority is assigned to the Critical ADA Routes Network and corridors that serve major pedestrian destinations.

## **ALTERNATIVES TO SIDEWALKS**

The public right-of way located on either side of a paved roadway is typically intended for walking, whether or not a sidewalk currently exists. However, completing some sidewalk gaps can be challenging.

In areas where paved sidewalks are not feasible or appropriate, several options can be explored, including paths constructed of pervious materials, shoulder widening, traffic calming measures, and/or colored shoulders. The latter two options can visually narrow the roadway and may slow traffic, making the street more pedestrian-friendly.

#### CROSSING IMPROVEMENTS

Significant opportunities also exist to enhance the pedestrian crossing environment at intersections and mid-block locations throughout the city. Potential crossing treatments include pedestrian refuge islands, passive pedestrian detection, curb extensions and mid-block crossings. Additional treatments could include high-visibility crosswalks and signs, pedestrian countdown signals, and the addition of pedestrian crossings on intersection legs where crossings are currently prohibited.

#### UPGRADES TO ACCOMMODATE PEDESTRIANS WITH DISABILITIES

Salem recognizes that all pedestrian routes should safely and conveniently accommodate able-bodied and mobility-impaired users alike. The approximately 150-mile Critical ADA Routes Network provides guidance for where improvements should be prioritized to enhance mobility and accessibility for pedestrians with disabilities. Examples of potential treatments are described briefly below.

- Repair or replacement of damaged sidewalks (e.g., to address cracking, breaking, and uneven surfaces).
- Sidewalk obstruction removal or relocation (e.g., utility poles, mailboxes, encroaching vegetation).
- Reconstruction of steep driveway cross-slopes.
- Pedestrian push button retrofits (placed at a location accessible by wheelchair users).
- Audible pedestrian signals at signalized intersections.

As corridors and intersections are upgraded to better accommodate pedestrians with disabilities, each disability type and its corresponding limitations must be considered. It is important to also be aware of how planning and designing for people with one disability may affect users with other impairments. For instance, curb cuts and smooth transitions to the street assist people in wheelchairs, but may present challenges for sight-impaired pedestrians attempting to locate the curb.

#### TRANSIT ACCESS ENHANCEMENTS



The City of Salem will work jointly with the Salem Area Mass Transit District to enhance pedestrian access to transit stops. Key recommendations include providing all of the following at transit stops:

- · Convenient and direct pedestrian links to transit stops.
- · Paved landing pads to safely accommodate wheelchairs.
- · Covered passenger shelters.
- · Seating areas.
- Posted system maps, route maps, and schedules (additional options include providing real-time information display of upcoming bus arrivals).
- · Adequate lighting.
- · Trash receptacles.

# STREETSCAPE ENHANCEMENTS

Streetscape treatments help establish neighborhood identity, activate public spaces, and are a key ingredient in creating an attractive and inviting pedestrian environment. Examples of streetscape treatments include street trees, ornamental lighting, street furniture, outdoor dining, awnings on building facades, and public art. Several recent planning efforts include key streetscape-related recommendations that this Plan supports, including the Salem Vision 2020 Action Plan, Salem Downtown Strategic Action Plan, and Edgewater/Second Street Redevelopment Action Plan.

# "GREEN STREET" ENHANCEMENTS

As the City of Salem works to improve and expand the pedestrian environment, opportunities exist to implement supplemental treatments that benefit both pedestrians and the natural environment. Often referred to as "green street" treatments, these innovative applications address stormwater management while improving walkability through new sidewalk connections, traffic calming, and other pedestrian-friendly elements. Common green street treatments include:

- Minimizing impermeable surfaces.
- Installing bioswales.
- · Installing curb extensions with stormwater treatment elements.
- · Using permeable pavements, where practical.

#### WAYFINDING SIGNS

Wayfinding signs can vastly improve the walking environment by orienting pedestrians (especially those unfamiliar with an area) to and through destinations, and highlight features that may have otherwise been overlooked by the



community. This Plan supports efforts to implement a pedestrian wayfinding signage system in Downtown and inner West Salem, and encourages the expansion of the program to eventually serve surrounding areas. Areas or intersections with complex pedestrian routing (e.g., in vicinity of the 12th Street SE/Mission Street SE intersection) should be prioritized for nearer-term implementation.

## SYSTEM MAINTENANCE

System maintenance can increase user safety and comfort and encourage the use of the pedestrian network. Recommended maintenance activities include the continuation of sweeping, debris removal, sign replacement, trimming overgrown vegetation, graffiti removal, and pavement and signal repair as needed.

# PROGRAMMATIC STRATEGIES

Becoming a truly pedestrian-friendly community requires a multi-faceted approach including encouragement, education, enforcement, and evaluation programs to support on-the-ground infrastructure improvements. Pedestrian education and promotional programs can:

- · Promote safety.
- Raise awareness of walking as a legitimate transportation mode.
- · Connect current and potential pedestrians to existing resources.
- Educate current and potential pedestrians about their rights and responsibilities.
- · Encourage residents to walk more often.

In other communities, these efforts have provided measurable increases in the walking mode share, amount of safe walking behavior (and a corresponding reduction in crashes), and an increase in the cultural awareness of walking.

# Recommended Pedestrian Projects

Recommendations for pedestrian facilities were developed based on:

- · Project goals, policies, and evaluation criteria.
- · Field work.
- Findings from the pedestrian needs assessment.
- A review of background documents, plans, studies, and available data.
- · Input from the Project Stakeholder Advisory Committee.
- Input from the public involvement process.



The existing, planned, and proposed pedestrian network is shown on Maps 8-3 through 8-7 and individual pedestrian projects are listed in Tables 8-5 through 8-7.

# SIDEWALK IMPROVEMENTS

Sidewalk improvements constitute a major element of Salem's proposed pedestrian network. Most proposed sidewalk improvements are located along the major street system; however several improvements are targeted on local streets to enhance connections to schools, other neighborhood attractors, and access to transit. The improvement and expansion of Salem's sidewalk network will occur primarily through new street construction and sidewalk infill along existing roadways.

In implementing this Plan element, several methods of providing sidewalks are currently available to the City:

- Private Development of Properties and Subdivisions. All new streets are required to have sidewalks. Most
  developing properties are required to construct sidewalks on abutting street frontages as part of the building
  permit process. The majority of new sidewalks are constructed in this manner.
- City-funded Street Improvement Projects. The City will typically construct sidewalks as part of a street improvement project that brings a street up to urban standards. The City will also use federal and state grants to enhance pedestrian facilities.
- Assessed Projects. An assessed project involves the direct financial participation of abutting or nearby property
  owners to fund the construction of public improvements. This is implemented through the creation of an
  assessment district called a Local Improvement District (LID). Individual properties can also be assessed for the
  improvements required along their own frontage.

# STREET LIGHTING

Currently, all new public streets constructed in Salem require the installation of street lighting. Several options currently exist for property owners to have street lighting in place. Individual owners can pay to have a light in front of their property or, more frequently, a group of property owners from a street lighting district.

#### SHARED-USE PATHS

Significant opportunities exist to develop an expanded shared-use path network in Salem that serves a variety of users. The proposed pedestrian network, as shown in Maps 8-3 through 8-7, includes a diverse shared-use path system. Some proposed path corridors would involve upgrading existing sidewalks passing through parks, widening existing narrow paths to minimize bicyclist/pedestrian conflicts, or upgrading existing unpaved paths to accommodate a broader range of users. Most shared-use paths are intended for use by pedestrians, bicyclists, skateboarders, and other non-motorized users. In some cases, one or more non-motorized uses may be prohibited based on the width of the facility, adjacent land uses, topography, location relative to the bicycle network, or other considerations. The network of shared-use paths is not intended to be all-inclusive. Additional shared-use paths may be identified through the subdivision or other development process to address neighborhoos connectivity.

Where a proposed shared-use path is shown over private property, the desired connection may be provided with sidewalks and local streets that connect to the existing street and sidewalk network in a relatively direct manner.



Many of the proposed shared-use path projects will require "path feasibility studies" before a specific alignment can be determined. These studies, which would only occur for paths to be constructed with public funds, will examine issues related to potential environmental impacts, route directness, land availability, property ownership, and estimated costs.

## SAFE ROUTES TO SCHOOL IMPROVEMENTS

Projects identified as part of the proposed pedestrian network, shown in Maps 8-3 through 8-7, also incorporate relevant pedestrian improvements identified as part of Safe Routes to School Solutions. These projects generally consist of sidewalk, shared-use path, and intersection improvements near schools.

# **Project Prioritization**

The Pedestrian Network illustrated on Maps 8-3 through 8-7 identifies pedestrian capital improvement projects that, once constructed, will encourage walking. The order in which projects in this Element are constructed will depend on many factors, including budget and grant availability, community support, and City priorities. The City does not anticipate that all of these projects will be constructed within the 20-year life of this Plan. To prioritize projects included in the proposed pedestrian network, a network of critical links was developed and then evaluated using the following eight criteria established for the Bike and Walk Salem Project: system connectivity, multi-modal connections, user safety and comfort, community support, cost, accommodating a broad range of users, environmental justice, and land use connections. The resulting priorities were reviewed by the Bike and Walk Salem Stakeholder Advisory Committee and members of the public.

The evaluation exercise resulted in a three-tiered priority list illustrated on Maps 8-8 through 8-12. The three tiers represent a general implementation timeline:

- Tier 1, Near-term (approximately 0-10 years)
- Tier 2, Medium-term (approximately 10-15 years)
- Tier 3, Longer-term (approximately 15-20 years or longer)

While these tiers help to identify high-priority projects for available funding, it should be noted that medium- and longer-term projects may be implemented at any point in time as part of a development or public works project, or as additional funding becomes available. Additionally, the tiers should be reviewed frequently to ensure they continue to reflect current priorities. Some of the factors that can and should affect project implementation include:

- Project cost relative to available funding.
- Change to existing grant programs, or creation of new grant or funding programs that affect the type or number of large-budget projects that can be implemented.
- Changes in City policy that could affect how local or state funds can be spent.
- Changes to zoning and land use that will affect where and how development occurs in Salem.



- The pace of development, which will affect which projects are implemented through development requirements and impact prioritization by changing existing land use.
- Changes to City staff capacity to manage pedestrian projects.
- Community input (e.g., through neighborhood associations or other).
- · Directives (policy or otherwise) from elected officials and other governing bodies.
- Interest from partners (such as counties and ODOT) in implementing projects that are partially or entirely within their jurisdiction.

# **Pedestrian Project Cost Estimates**

Tables 8-3 and 8-4 summarize total planning-level cost opinions for Salem's proposed pedestrian network. Table 8-3 summarizes estimated costs by "tier" while Table 8-4 presents aggregated costs by facility type. The pedestrian project cost estimate tables include costs for shared use paths and intersection improvements. Although these facilities benefit both pedestrians and cyclists alike, they are listed as pedestrian projects.

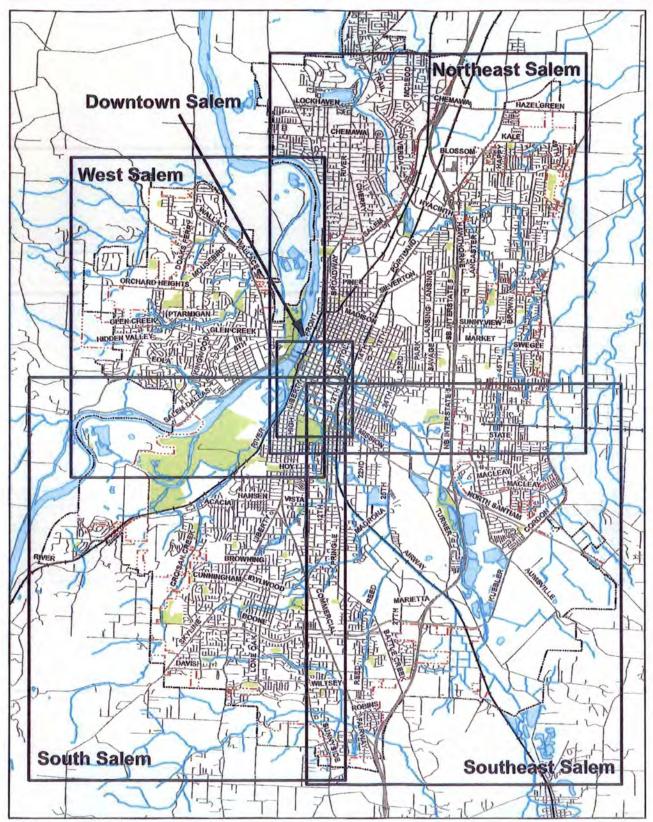
TABLE 8-3
Estimated Planning-Level Costs by Tier

Tier	Estimated Cost		
Tier 1	\$25,761,000		
Tier 2	\$17,454,000		
Tier 3	\$71,558,000		

Note: Estimated cost totals do not include estimates for projects already accounted for in Tables 3-4, 3-5, 3-6, and 3-7 of the Street System Element. Cost totals include shared-use path and intersection improvement projects, which benefit both pedestrians and bicyclists.

TABLE 8-4
Estimated Planning-Level Costs by Facility Type

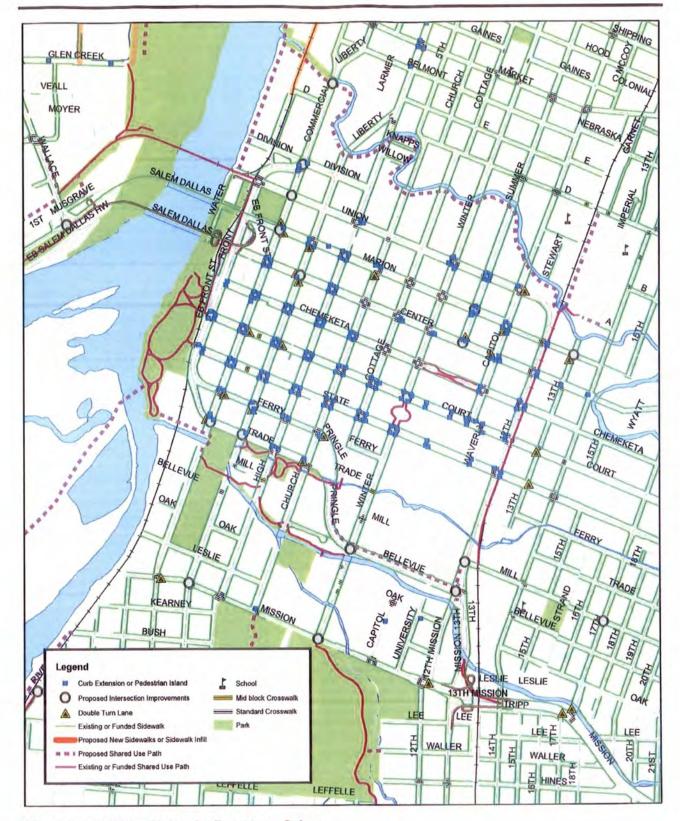
Facility Type	Estimated Cost (all Tiers)
Shared-Use Path	\$75,955,000
Proposed New Sidewalks/Sidewalk Infill	\$26,003,000
Intersection Improvements	\$12,815,000



Map 8-2: Quadrant Key Map

Bike & Walk Salem Source: City of Salem, ODOT, MWVCOG, Cherriots, Salem-Keizer School District Author: Alta Planning + Design

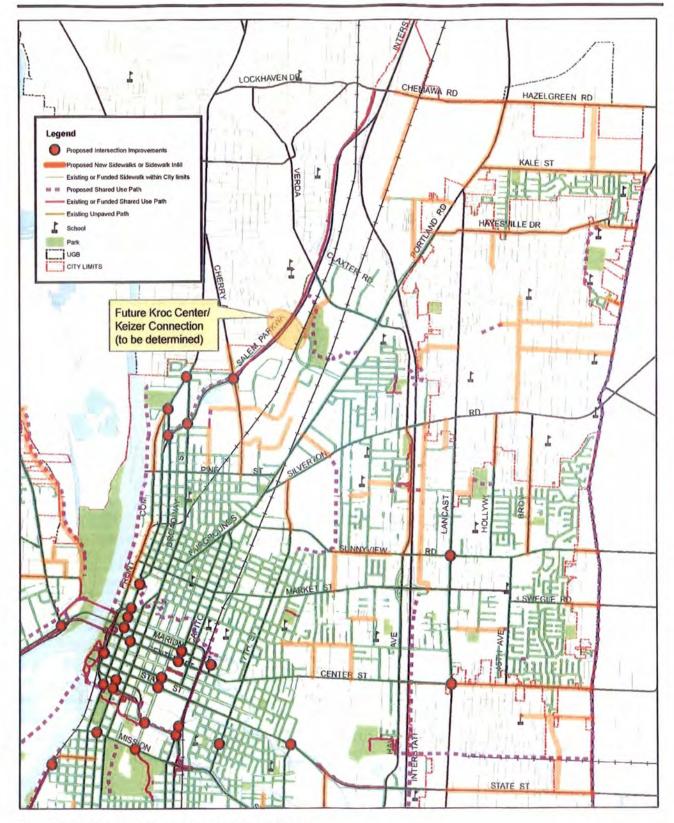




Map 8-3: Pedestrian Network - Downtown Salem

0 500 1,000 2,000 Feet

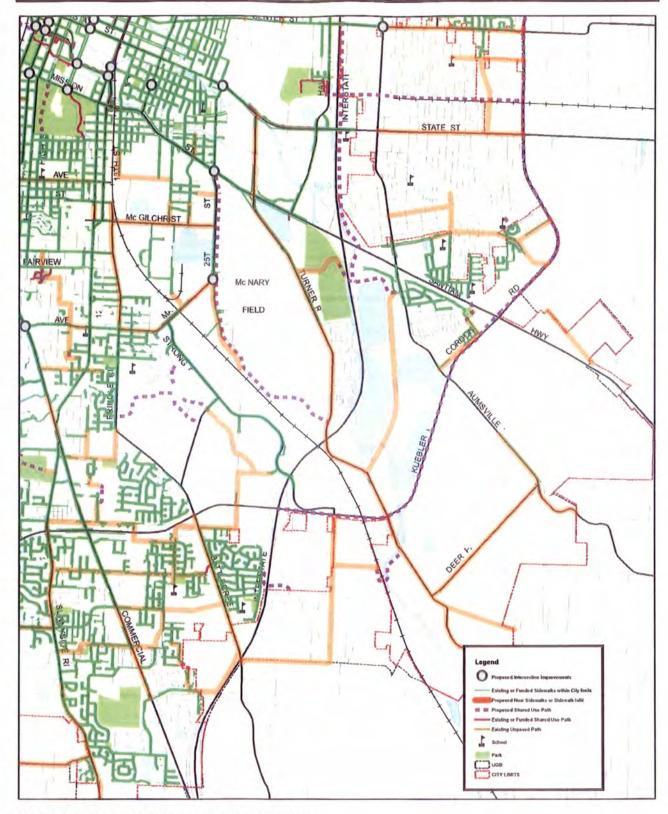




Map 8-4: Pedestrian Network - Northeast Salem

0 0.25 0.5 1 Miles

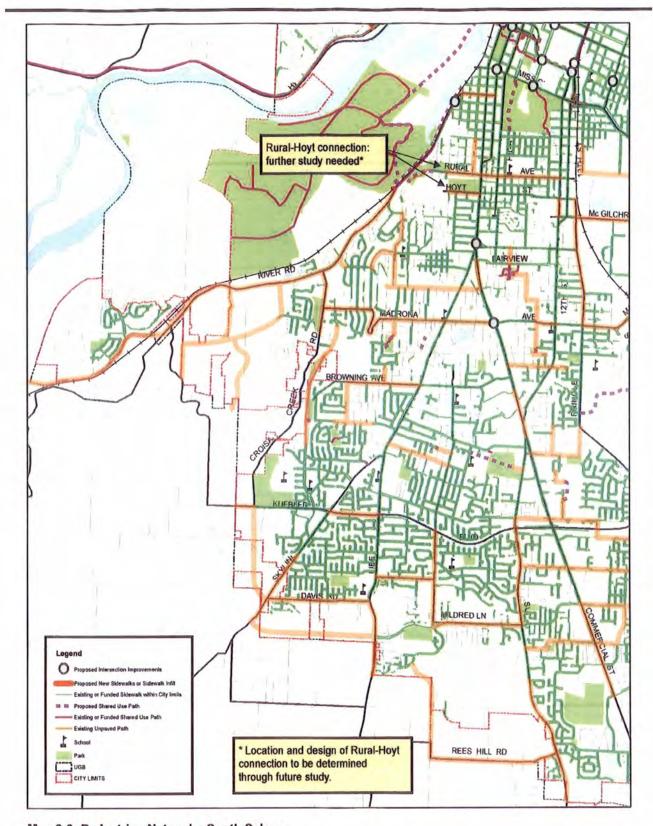




Map 8-5: Pedestrian Network - Southeast Salem

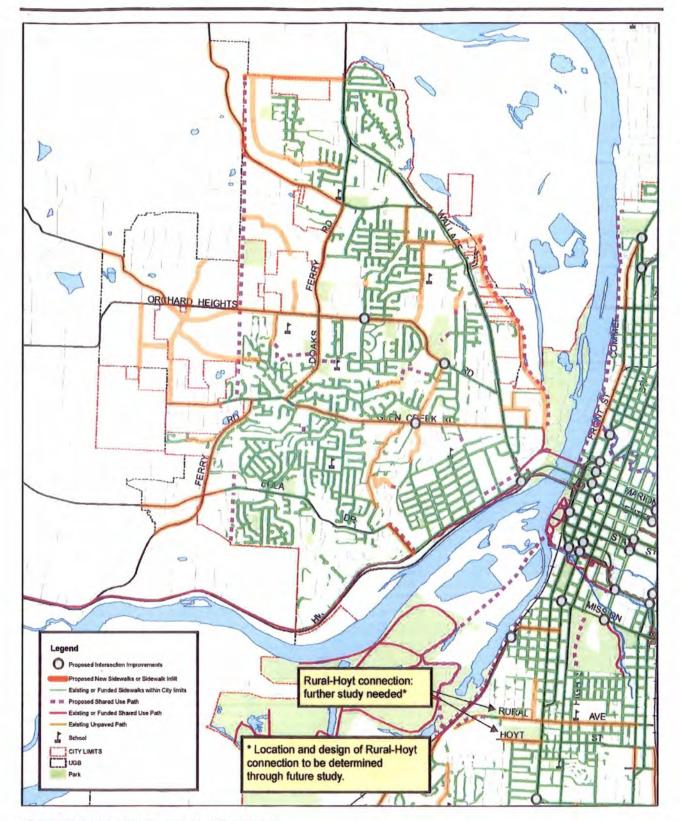
0 0.25 0.5 1 Miles



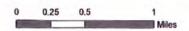


Map 8-6: Pedestrian Network - South Salem

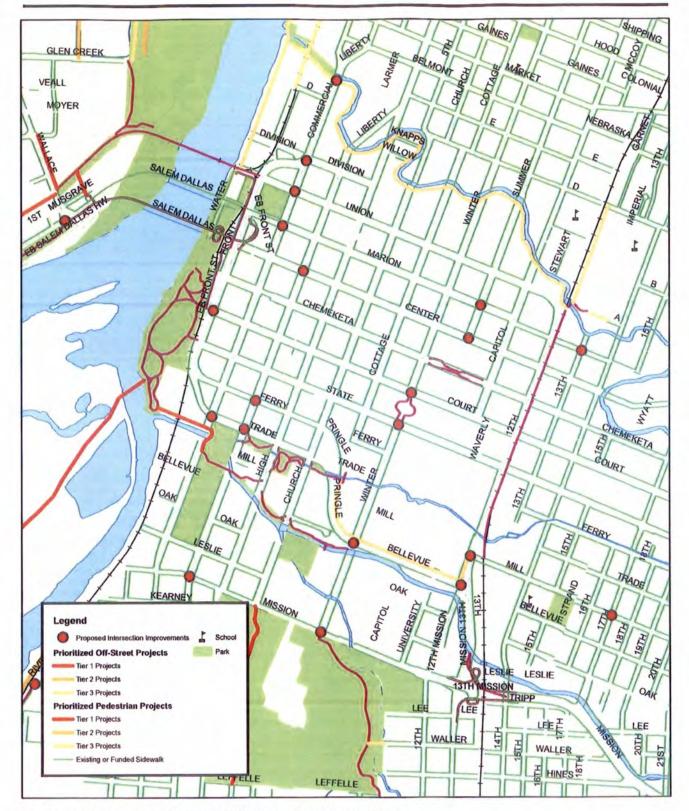
Salem Transportation System Plan Pedestrian System Element 0 0.25 0.5 1 Miles



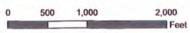
Map 8-7: Pedestrian Network - West Salem



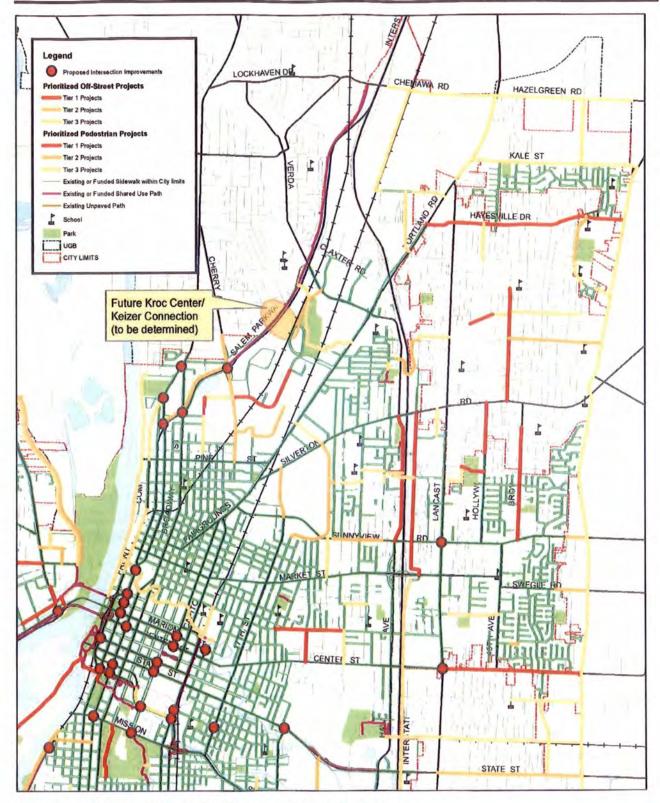




Map 8-8: Pedestrian Project Prioritization - Downtown Salem



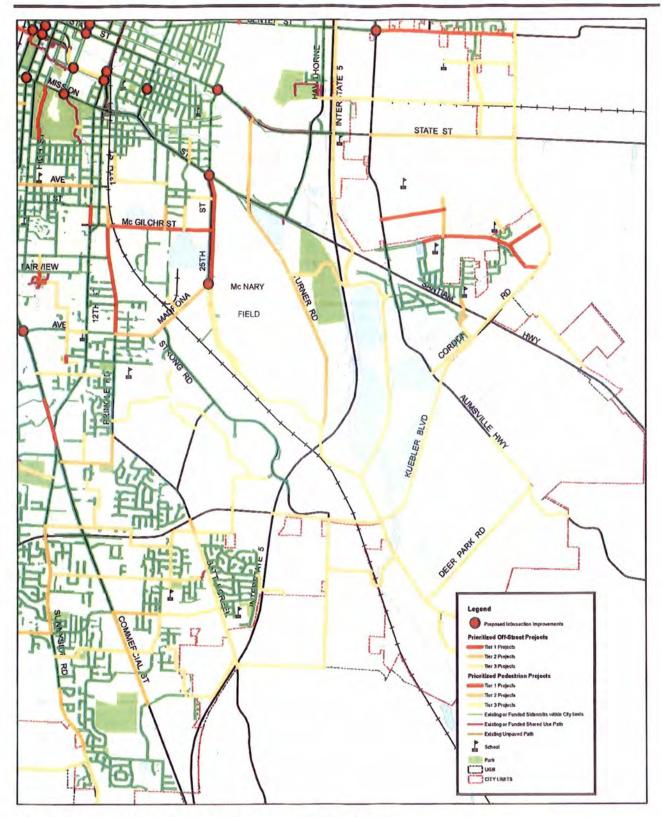




Map 8-9: Pedestrian Project Prioritization - Northeast Salem

0 0.25 0.5 1 Miles

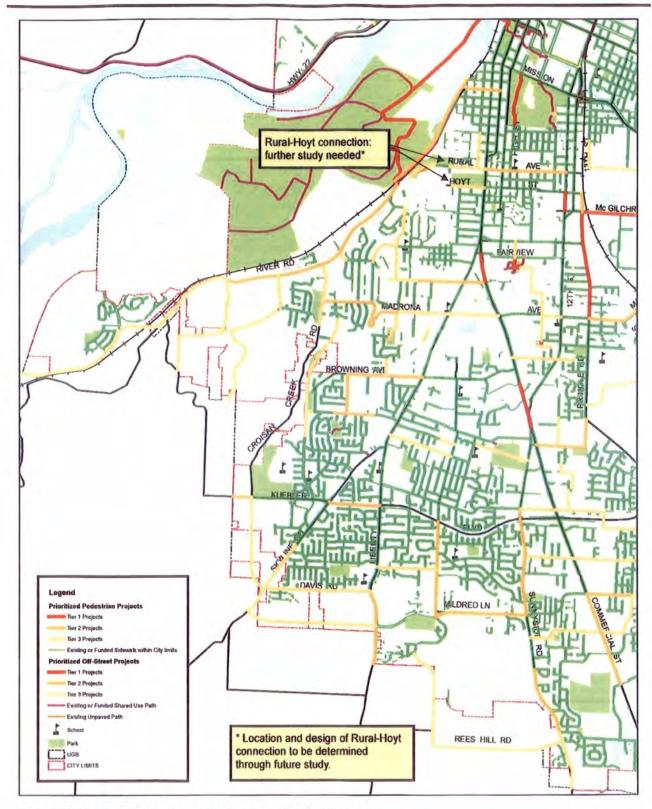




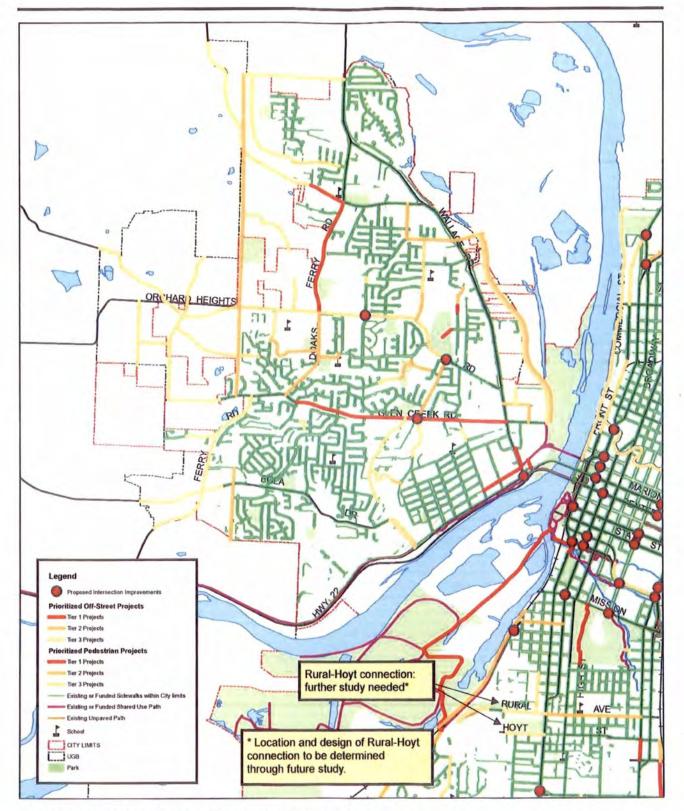
Map 8-10: Pedestrian Project Prioritization - Southeast Salem

0 0.25 0.5 1 Miles





Map 8-11: Pedestrian Project Prioritization - South Salem



Map 8-12: Pedestrian Project Prioritization - West Salem

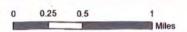




TABLE 8-5
Recommended Tier 1 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Downtown	12th Street SE at Bellevue Street SE	-	-	Intersection Improvements	City of Salem, ODOT	\$400,000
Downtown	12th Street SE at Mill Street SE	-	100-	Intersection Improvements	City of Salem	\$400,000
Downtown	Commercial Street NE. at Marion Street NE	-	-	Intersection Improvements	City of Salem	\$400,000
Downtown	Commercial Street SE at Trade Street SE			Intersection Improvements	City of Salem, ODOT	\$400,000
Downtown	Commercial Street NE at Union Street NE	-	-	Intersection Improvements	City of Salem, ODOT	\$400,000
Downtown	Liberty Street NE at Center Street NE	-	10.04	Intersection Improvements	City of Salem	\$400,000
Downtown	Liberty Street SE at Ferry Street SE	-	7	Intersection Improvements	City of Salem, ODOT	\$400,000
Downtown	Liberty Street SE at Mission Street SE	-	10.2	Intersection Improvements	City of Salem	\$400,000
Downtown	Liberty Street SE at Trade Street SE	-	-	Intersection Improvements	City of Salem, ODOT	\$400,000
Downtown	Pringle Creek Path	Riverfront Park	Civic Center	Shared Use Path	City of Salem	\$165,000
Downtown	Summer Street NE at Center Street NE	-	-	Intersection Improvements	City of Salem	\$400,000
Downtown	Summer Street NE at Marion Street NE	-	-	Intersection Improvements	City of Salem	\$400,000
Downtown	Winter Street SE at Bellevue Street SE/ Pringle Parkway SE	-	-	Intersection Improvements	City of Salem, ODOT	\$400,000

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.

<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-5
Recommended Tier 1 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Downtown	Winter Street NE at Court Street NE	-	-	Intersection Improvements	City of Salem, Oregon Parks & Recreation Dept., Oregon Legislative Administration	\$400,000
Downtown	Winter Street SE at Mission Street SE	-	-	Intersection Improvements	City of Salem	\$400,000
Downtown	Winter Street NE/SE at State Street	A		Intersection Improvements	City of Salem, Oregon Parks & Recreation Dept., Oregon Legislative Administration	\$400,000
Northeast	D Street NE	Thompson Avenue NE	Park Avenue NE	New Sidewalks or Sidewalk Infill	City of Salem	\$478,000
Northeast	23 <sup>rd</sup> Street NE	Center Street NE	D Street NE	New Sidewalks or Sidewalk Infill	City of Salem	\$209,000
Northeast	45th Avenue NE	Silverton Road NE	Ward Drive NE	New Sidewalks or Sidewalk Infill	Marion County	**
Northeast	Broadway Street NE at River Road N	-	A VERTICAL	Intersection Improvements	City of Salem	\$400,000
Northeast	Broadway Street NE at Salem Parkway NE	-	-	Intersection Improvements	City of Salem, ODOT	\$400,000
Northeast	Brown Road NE	Sunnyview Road NE	Arizona Avenue NE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
Northeast	Center Street NE	Lancaster Drive NE	Cordon Road NE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
Northeast	Chemeketa Cross- Campus Path	Cooley Drive NE	Satter Drive NE	Shared Use Path	City of Salem, Marion County, Chemeketa Comm. College	\$170,000
Northeast	Cherry Avenue NE at Salem Parkway NE	-	-	Intersection Improvements	City of Salem, ODOT	\$400,000

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-5
Recommended Tier 1 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	Commercial Street NE at Division Street NE	-	400	Intersection Improvements	City of Salem	\$400,000
Northeast	Fisher Road NE	Existing Southern Terminus	Silverton Road NE	New Sidewalks or Sidewalk Infill	City of Salem	**
Northeast	Fisher Road NE	Market Street NE	Existing Southern Terminus	New Sidewalks or Sidewalk Infill	City of Salem	
Northeast	Hawthorne Avenue NE	Sunnyview Road NE	Silverton Road NE	New Sidewalks or Sidewalk Infill	City of Salem	**
Northeast	Hayesville Drive NE	Portland Road NE	Cordon Road NE	New Sidewalks or Sidewalk Infill	Marion County	**
Northeast	Hollywood Drive NE	South of Hollyridge Loop NE	Silverton Road NE	New Sidewalks or Sidewalk Infill	Marion County	**
Northeast	Lancaster Drive NE at Center Street NE	-	3 33 7	Intersection Improvements	City of Salem, Marion County	\$400,000
Northeast	Lancaster Drive NE at Sunnyview Road NE	-	-	Intersection Improvements	City of Salem	\$400,000
Northeast	Liberty Street NE at River Road N	-	7	Intersection Improvements	City of Salem	\$400,000
Northeast	Liberty Street NE at Salem Parkway NE	-	-	Intersection Improvements	City of Salem, ODOT	\$400,000
Northeast	Maple Avenue NE/ Salem Industrial Drive NE Connector	Bliler Avenue NE	Salem Industrial Drive NE	Shared Use Path	City of Salem	\$63,000
Northeast	Marion Street NE and 13th Street NE	-	1: <del></del> .	Intersection Improvement	City of Salem	\$400,000

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.

<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-5
Recommended Tier 1 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	McKay Park Connector	Phipps Lane NE	Hollywood Drive NE	Shared Use Path	City of Salem, Marion County, Salem-Keizer School Dist.	\$167,000
Northeast	Salem Industrial Drive NE	Cherry Avenue NE	Anunsen Street NE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	12th Street SE	McGilchrist Street SE	Hoyt Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$118,000
South	Bush's Pasture Park/ Church Street SE Connector	Leffelle Street SE	Mission Street SE	Shared Use Path	City of Salem	\$359,000
South	Clark Creek Park Connector	Norwood Street SE	Vista Avenue SE	Shared Use Path	City of Salem	\$114,000
South	Commercial Street SE	Salem Heights Avenue SE	Vista Avenue SE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Commercial Street SE	Sunnyside Road SE	Winding Way SE	New Sidewalks or Sidewalk Infill	City of Salem	\$294,000
South	Commercial Street SE at Alice Avenue S/Fairview Avenue SE	-	-	Intersection Improvements	City of Salem	\$400,000
South	Commercial Street SE at Madrona Avenue SE	***	7	Intersection Improvements	City of Salem	\$400,000
South	Minto-Brown Island Path	River Road S	Riverfront Park	Shared Use Path	City of Salem	\$6,768,000
South	River Road S at Miller Street S	-	1217	Intersection Improvements	City of Salem	\$15,000
South	South Village Park Connector	Ewald Avenue SE	Harris Avenue SE	Shared Use Path	City of Salem	\$42,000
Southeast	17th Street SE at Mill Street SE	7-3	-	Intersection Improvements	City of Salem	\$400,000

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-5
Recommended Tier 1 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	25 <sup>th</sup> Street SE at Madrona Avenue SE	-	-	Intersection Improvements	City of Salem	\$400,000
Southeast	25 <sup>th</sup> Street SE at Mission Street SE	-	-	Intersection Improvements	City of Salem, ODOT	\$400,000
Southeast	25th Street NE/SE at State Street	-	-:	Intersection Improvements	City of Salem	\$400,000
Southeast	Airway Drive SE/25 <sup>th</sup> Street SE	Madrona Avenue SE	Mission Street SE	Shared Use Path	City of Salem	\$703,000
Southeast	Caplinger Road SE	Macleay Road SE	Cordon Road SE	New Sidewalks or Sidewalk Infill	City of Salem	\$178,000
Southeast	Macleay Road SE	Lancaster Drive SE	Connecticut Street SE	New Sidewalks or Sidewalk Infill	Marion County	**
Southeast	McGilchrist Street SE	Pringle Road SE	25th Street SE	New Sidewalks or Sidewalk Infill	City of Salem	ww
Southeast	Pringle Road SE	Madrona Avenue SE	McGilchrist Street SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Rickey Street SE	Houck Middle School	Cordon Road SE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
Vest	Brush College Road NW	Conner Street NW	Doaks Ferry Road NW	New Sidewalks or Sidewalk Infill	City of Salem, Polk County	**
Vest	Doaks Ferry Road NW	Orchard Heights Road NW	Brush College Road NW	New Sidewalks or Sidewalk Infill	City of Salem, Polk County	**
Vest	Glen Creek Road NW	Westfarthing Way NW	Wallace Road NW	New Sidewalks or Sidewalk Infill	City of Salem	\$1,271,000
West	Glen Creek Road NW at Parkway Drive NW		-	Intersection Improvements	City of Salem	\$400,000

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.

<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-5
Recommended Tier 1 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	To	Facility Type	Partner Agencies	Estimated Cost*
West	Orchard Heights Park/Hope Avenue NW Connector	Orchard Heights Park	Hope Avenue NW	Shared Use Path	City of Salem	\$68,000
West	Orchard Heights Road NW at Mousebird Avenue NW	-	-	Intersection Improvements	City of Salem	\$400,000
West	Orchard Heights Road NW at Parkway Drive NW	-		Intersection Improvements	City of Salem	\$400,000
West	Union Bridge Path Extension	Murlark Avenue NW	East of Wallace Road (including grade-separated crossing of Wallace Road NW	Shared Use Path	City of Salem, ODOT	\$1,574,000
West	Union Bridge Path Extension (far western segment)	Patterson Street NW	Murlark Avenue NW	Shared Use Path	City of Salem	\$113,000
West	Union Street Bridge Path-Musgrave Lane NW Connector	Union Street Bridge Path	Musgrave Lane NW	Shared Use Path	City of Salem	\$50,000
West	Wallace Road NW at Edgewater Street NW	-	7.117	Intersection Improvements	City of Salem, ODOT	**
<b>Nes</b> t	Wallace Road NW Path	Union Street Bridge Path	Taggart	Shared Use Path	ODOT	**
West	Westhaven Avenue NW/Harritt Drive NW Connector	Northern terminus of Westhaven Avenue NW	SE corner of Harritt Loop NW	Shared Use Path	City of Salem	\$42,000

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-6
Recommended Tier 2 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	17th Street NE	Sunnyview Road NE	Silverton Road NE	New Sidewalks or Sidewalk Infill	City of Salem	\$320,000
Northeast	35th Place NE	Southern Terminus	Fisher Road NE	New Sidewalks or Sidewalk Infill	Marion County	\$143,000
Northeast	Bill Frey Drive NE Extension	Kroc Center	Hyacinth Street NE	New Sidewalks or Sidewalk Infill	City of Salem	**
Northeast	Cherry Avenue NE	Pine Street NE	City Limits	New Sidewalks or Sidewalk Infill	City of Salem	**
Northeast	Dean Street NE/ Scepter Court NE Connector	Dean Street NE	Scepter Court NE	Shared Use Path	City of Salem	\$48,000
Northeast	Fairgrounds Path	Garfield Street NE	Silverton Road NE	Shared Use Path	City of Salem, Oregon State Fairgrounds	\$869,000
Northeast	Fairgrounds Path/Evergreen Avenue NE Connector	Fairgrounds Path	Evergreen Avenue NE	Shared Use Path	City of Salem, Oregon State Fairgrounds	\$37,000
Northeast	Hawthorne Avenue NE/ Fisher Road NE Connector (including grade- separated crossing of Interstate 5)	Rockingham Court NE	35th Place NE	Shared Use Path	City of Salem, Marion County, ODOT	\$2,453,000
Northeast	Herrin Road NE	45 <sup>th</sup> Avenue NE	Cordon Road NE	New Sidewalks or Sidewalk Infill	Marion County	**
Northeast	Johnson Street NE/ McDonald Street NE	Pine Street NE	Eastern Terminus of McDonald Street NE	New Sidewalks or Sidewalk Infill	City of Salem	\$518,000

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.

<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-6 Recommended Tier 2 Pedestrian Projects—By Quadrant

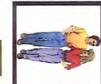
Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	Salem Parkway NE Path	Liberty Street NE	Cherry Avenue NE	Shared Use Path	City of Salem, ODOT	\$623,000
Northeast	Sunnyview Road NE	Walker Road NE	Cordon Road NE	New Sidewalks or Sidewalk Infill	Marion County	**
Northeast	Sunnyview Road NE	Evergreen Avenue NE	Byram Street NE	New Sidewalks or Sidewalk Infill	City of Salem	**
Northeast	Swegle Road NE	Walker Road NE	Cordon Road NE	New Sidewalks or Sidewalk Infill	Marion County	**
Northeast	Yoshikai/Adam Stephens Path	Jade Street NE	Hayesville Drive NE	Shared Use Path	City of Salem, Salem-Keizer School Dist.	\$338,000
South	Browning Avenue S	Kurth Street S	Liberty Road S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Cunningham Lane S	West of High Ridge Court S	Barrett Street S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Kuebler Boulevard S	Urban Growth Boundary	Croisan Creek Road S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Kuebler Boulevard S	Skyline Road S	Liberty Road S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Kurth Street S	Cunningham Lane S	Browning Avenue S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Liberty Road S	Urban Growth Boundary	Davis Road S	New Sidewalks or Sidewalk Infill	Marion County	**
South	Lone Oak Road S	Mildred Lane S	Kuebler Boulevard S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Madrona Avenue S	Croisan Creek Road S	Crestview Drive S	New Sidewalks or Sidewalk Infill	City of Salem	\$757,000
South	Mildred Lane SE	Lone Oak Road SE	Sunnyside Road SE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-6
Recommended Tier 2 Pedestrian Projects—By Quadrant
Quadrant Corridor From



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Owens Street S/SE	River Road S	Liberty Road S	New Sidewalks or Sidewalk Infill	City of Salem	\$242,000
South	River Road S	Acacia Drive S	Minto Island Road S	New Sidewalks or Sidewalk Infill	City of Salem	\$583,000
South	River Road S	Homestead Road S	Acacia Drive S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	River Road S/ RailRoad Corridor Path	Minto Island Road S	Bush Street S	Shared Use Path	City of Salem	\$1,222,000
South	Rural Avenue SE	Summer Street SE	12th Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$251,000
South	Rural Avenue SE	John Street S	Commercial Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$323,000
South	Rural Avenue SE/ Hoyt Connector	Hoyt Street SE	Rural Avenue SE	Shared Use Path	City of Salem	\$144,000
South	Salem Heights Avenue SE	6th Avenue S	Commercial Street SE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Sunnyside Road SE	Rees Hill Road SE	Cayuse Circle SE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Sunnyside Road SE	Mildred Lane SE	Boone Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	22 <sup>nd</sup> Street SE	McGilchrist Street SE	Hoyt Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$144,000
Southeast	Battle Creek Road SE	Boone Road SE	Kuebler Boulevard SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Commercial Street SE	Robins Lane SE	Fabry Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Connecticut Street SE	Rickey Street SE	Witten Street SE	New Sidewalks or Sidewalk Infill	Marion County	**

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.

<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-6 Recommended Tier 2 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Fabry Road SE	Commercial Street SE	Reed Lane SE	New Sidewalks or Sidewalk Infill	City of Salem	\$322,000
Southeast	Hilfiker Lane SE/ Hillrose Street SE	Commercial Street SE	Pringle Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Madrona Avenue SE	Pringle Road SE	25th Street SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Miller Elementary/ Bill Riegel Park Connector	Campbell Drive SE	46 <sup>th</sup> Place SE	Shared Use Path	City of Salem, Marion County, ODOT	\$1,973,000
Southeast	Pringle Road SE	McGilchrist Street SE	Hoyt Street SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	State Street	Lancaster Drive NE/SE	Cordon Road NE/SE	New Sidewalks or Sidewalk Infill	Marion County	30.0
Southeast	Turner Road SE/ Airport Road SE	Airway Drive SE	State Street	New Sidewalks or Sidewalk Infill	City of Salem	**
West	BPA Corridor Trail	Urban Growth Boundary	Gehlar Road NW	Shared Use Path	City of Salem	\$414,000
West	BPA Corridor Trail	Glen Creek Road NW	Michigan City Lane NW	Shared Use Path	City of Salem	\$1,861,000
West	Chandler Park Path	Eastern Terminus of Ptarmigan	Lupin Lane NW	Shared Use Path	City of Salem	\$272,000
West	Chapman Hill Elementary Connector	Doaks Ferry Road NW	Chapman Hill Drive NW	Shared Use Path	City of Salem, Salem-Keizer School Dist.	\$145,000
West	Doaks Ferry Road NW	Glen Creek Road NW	Orchard Heights Road NW	New Sidewalks or Sidewalk Infill	City of Salem, Polk County	\$564,000
West	Donkey Trail	East of Cascade Drive NW	Piedmont Avenue NW	Shared Use Path	City of Salem	\$53,000
West	Harritt Drive NW	SE Corner of Harritt Loop NW	Woodhill Street NW	New Sidewalks or Sidewalk Infill	City of Salem	\$106,000

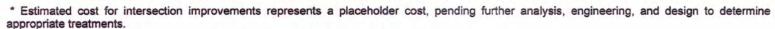
<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-6
Recommended Tier 2 Pedestrian Projects—By Quadrant





<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.



TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Downtown	Commercial Street NE at Mill Creek	-	-	Shared Use Path	City of Salem	TBD
Downtown	Front Street NE at Court Street NE	-03	( ) <del>=</del> (	Shared Use Path	City of Salem	TBD
Downtown	Willamette University Cross-Campus Path	Cottage Street SE	Mill Street SE	Shared Use Path	City of Salem, Willamette University	\$356,000
Northeast	12 <sup>th</sup> Street Promenade Extension	Existing northern terminus	D Street NE	Shared Use Path	City of Salem	\$199,000
Northeast	12th Street Promenade/14th Street NE Connector	Olinger Pool	14th Street NE	Shared Use Path	City of Salem, Salem-Keizer School Dist.	\$38,000
Northeast	49th Avenue NE	Kale Street NE	Hazelgreen Road NE	New Sidewalks or Sidewalk Infill	City of Salem	**
Northeast	Astoria Street NE	Portland Road NE	Blossom Drive NE	New Sidewalks or Sidewalk Infill	City of Salem	\$404,000
Northeast	Auburn Road NE	46 <sup>th</sup> Avenue NE	Cordon Road NE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
Northeast	Beverly Avenue NE/ Phipps Lane NE	East of Lancaster Drive NE	Carolina Avenue NE	New Sidewalks or Sidewalk Infill	Marion County	\$176,000
Northeast	Blossom Drive NE	East of Astoria Street NE	Portland Road NE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
Northeast	Byram Street NE Connector	Chester Avenue NE	Kathleen Avenue NE	Shared Use Path	City of Salem	\$42,000
Northeast	Chemawa Road NE/ Hazelgreen Road NE	Interstate 5	Cordon Road NE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	Claggett Creek Greenway	Portland Road NE	Salem Parkway NE	Shared Use Path	City of Salem	TBD
Northeast	Cooley Drive NE	Fisher Road NE	Lancaster Drive NE	New Sidewalks or Sidewalk Infill	Marion County	\$208,000
Northeast	Ellis Avenue NE	Park Avenue NE	Savage Road NE	New Sidewalks or Sidewalk Infill	City of Salem	\$153,000
Northeast	Evergreen Avenue NE	Market Street NE	Sunnyview Road NE	New Sidewalks or Sidewalk Infill	City of Salem	*i
Northeast	Florence Avenue NE/ Chester Avenue NE	Park Avenue NE	Lansing Avenue NE	New Sidewalks or Sidewalk Infill	City of Salem	\$143,000
Northeast	Front Street NE	Pine Street NE	Riviera Drive NE	New Sidewalks or Sidewalk Infill	City of Salem	**
Northeast	Front Street NE	D Street NE	South Street NE	New Sidewalks or Sidewalk Infill	City of Salem	***
Northeast	Geer Line Trail (east segment)	Lancaster Drive NE	Cordon Road NE	Shared Use Path	City of Salem, Marion County	\$998,000
Northeast	Geer Line Trail (west segment, including grade-separated crossing of Interstate 5)	Geer Park	Lancaster Drive NE	Shared Use Path	City of Salem, Marion County, ODOT	\$2,154,000
Northeast	Greencrest Street NE	State Street	Auburn Road NE	New Sidewalks or Sidewalk Infill	Marion County	**
Northeast	Harold Drive NE	Silverton Road NE	Southern Terminus	New Sidewalks or Sidewalk Infill	Marion County	\$97,000
Northeast	Harold Drive NE	Existing Southern Terminus	Devonshire Avenue NE	New Sidewalks or Sidewalk Infill	City of Salem	*1
Northeast	Indian School Road NE/ Blossom Drive NE	Niles Avenue NE	Chemawa Road NE	New Sidewalks or Sidewalk Infill	City of Salem	**

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.

<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	Kale Street NE	Portland Road NE	Cordon Road NE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
Northeast	Keen Avenue NE	Lansing Avenue NE	Byram Street NE	New Sidewalks or Sidewalk Infill	City of Salem	\$155,000
Northeast	Kuebler Boulevard SE/ Cordon Road NE/SE	Interstate 5	Hazelgreen Road NE	Shared Use Path	City of Salem, Marion County	**
Northeast	Lana Avenue NE	Portland Road NE	Silverton Road NE	New Sidewalks or Sidewalk Infill	City of Salem	\$225,000
Northeast	Livingston Park Path	Keen Avenue NE	Hawthorne Avenue NE	Shared Use Path	City of Salem	\$95,000
Northeast	Livingston Park/Fisher Road NE Connector (east segment, including grade- separated crossing of Interstate 5)	Livingston Park	Fisher Road NE	Shared Use Path	City of Salem, ODOT	\$2,266,000
Northeast	Livingston Park/Fisher Road NE Connector (west segment)	Livingston Park	Future grade- separated crossing of Interstate 5	Shared Use Path	City of Salem	\$29,000
Northeast	Maple Avenue NE	Hickory Street NE	Bliler Avenue NE	New Sidewalks or Sidewalk Infill	City of Salem	\$233,000
Northeast	Mill Creek Path (downtown)	Willamette River	12th Street NE	Shared Use Path	City of Salem	\$1,072,000
Northeast	Northgate Avenue NE/ Wooddale Avenue NE Connector	Northgate Avenue NE	Wooddale Avenue NE	Shared Use Path	City of Salem	\$40,000
Northeast	Park Avenue NE	Center Street NE	D Street NE	New Sidewalks or Sidewalk Infill	City of Salem	**

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<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Northeast	Portland Road NE	North of Lancaster Drive NE	Hazelgreen Road NE	New Sidewalks or Sidewalk Infill	ODOT	\$618,000
Northeast	Reimann Street NE	Jade Street NE	Hayesville Drive NE	New Sidewalks or Sidewalk Infill	Marion County	\$231,000
Northeast	Riverfront Path	Union Street NE	Delmar Drive N	Shared Use Path	City of Salem	\$34,690,000
Northeast	Salem Industrial Drive NE	Western Terminus	Cherry Avenue NE	New Sidewalks or Sidewalk Infill	City of Salem	\$194,000
Northeast	Satter Drive NE	Western Terminus	45th Avenue NE	New Sidewalks or Sidewalk Infill	Marion County	\$117,000
Northeast	Satter Drive NE	45 <sup>th</sup> Avenue NE	Trapper Drive NE	New Sidewalks or Sidewalk Infill	Marion County	\$494,000
Northeast	Ward Drive NE	Hearth Drive NE	Cordon Road NE	New Sidewalks or Sidewalk Infill	City of Salem	\$112,000
Northeast	Weathers Street NE	Clay Street NE	Eastern Terminus	New Sidewalks or Sidewalk Infill	City of Salem	\$307,000
Northeast	Weathers Street NE/45 <sup>th</sup> Avenue NE Connector	Eastern Terminus of Weathers Street NW	45 <sup>th</sup> Avenue NE	Shared Use Path	City of Salem	\$43,000
Northeast	Yoshikai/Adam Stephens Path	Plow Court NE/Log Drive NE	Jade Street NE	Shared Use Path	City of Salem, Salem-Keizer School Dist.	\$155,000
South	Acacia Drive S	River Road S	Sumac Drive S	New Sidewalks or Sidewalk Infill	City of Salem	\$93,000
South	Bush's Pasture Park- Waller Street SE Connector	Bush's Pasture Park Path	Western Terminus of Waller Street SE	Shared Use Path	City of Salem	\$400,000
South	Cottage Street SE	Vista Avenue SE	Fairview Avenue SE	New Sidewalks or Sidewalk Infill	City of Salem	\$105,000

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<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant

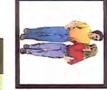
Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Crestview Drive S	Southern Terminus	Madrona Avenue S	New Sidewalks or Sidewalk Infill	City of Salem	\$100,000
South	Crestview Drive S	Salem Heights Avenue S	Schurman Road S	New Sidewalks or Sidewalk Infill	City of Salem	\$491,000
South	Croisan Creek Road S	Heath Street S	River Road S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Croisan Creek Road S	Skyline Road S	Kuebler Road S	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Croisan Ridge Way S	Existing Northern Terminus	Heath Street S	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Croisan Scenic Way S	Spring Street S	North of Roberta Avenue S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Croisan Scenic Way S	North of Roberta Avenue S	South of Hillwood Court S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Croisan Scenic Way S	North of Brock Loop S	Spring Street S	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Cunningham Lane Park Connector	Croisan Scenic Way S	Cunningham Lane S	Shared Use Path	City of Salem	\$62,000
South	Davis Road S	Skyline Road S	Liberty Road S	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Deer Run Avenue S	Viewcrest Road S	Northern Terminus	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Ewald Avenue SE	Helen Avenue SE	11th Avenue SE	New Sidewalks or Sidewalk Infill	City of Salem	\$90,000

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<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Fairmount Park Connector	Crestview Drive S	Rural Avenue S	Shared Use Path	City of Salem	\$208,000
South	Felton Street S-Winola Avenue S Connector	Felton Street S	Southern terminus of Winola Avenue S	Shared Use Path	City of Salem	\$87,000
South	Fern Drive S	Heath Street S	River Road S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Fircrest Park Connector	Luradel Avenue S	Crestview Drive S	Shared Use Path	City of Salem	\$126,000
South	Future Unnamed Street	Heath Street S	Homestead Road S	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Hansen Avenue S	Acacia Drive S	Crestview Drive S	New Sidewalks or Sidewalk Infill	City of Salem	\$235,000
South	Heath Street S	Deer Run	Existing Western Terminus	New Sidewalks or Sidewalk Infill	Marion County	w.A
South	Holder Lane SE	Liberty Road S	Lone Oak Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Homestead Road S	Southern Terminus	River Road S	New Sidewalks or Sidewalk Infill	City of Salem	\$193,000
South	Hoyt Street S	Skopil Avenue S	Commercial Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$229,000
South	Hrubetz Road SE	Liberty Road S	Lone Oak Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Judson Middle School/Woodmansee Connector	Lone Oak Road SE	Woodmansee Street SE	Shared Use Path	City of Salem, Salem-Keizer School Dist.	\$339,000
South	Lone Oak Road SE	Trillium Lane SE	Muirfield Avenue SE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**

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<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Lone Oak Road SE/ Rees Hill Road SE	Trillium Lane SE	Sunnyside Road SE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Madrona Avenue SE	Peck Avenue SE	12th Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$140,000
South	Madrona Avenue SE	Crestview Drive S	Commercial Street SE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Marietta Street SE	Coloma Drive SE	Lone Oak Road SE	New Sidewalks or Sidewalk Infill	City of Salem	\$100,000
South	Marietta Street SE Connector	2 <sup>nd</sup> Way SE	Pullman Court SE	Shared Use Path	City of Salem	\$68,000
South	Mildred Lane SE	Skyline Road S	Liberty Road S	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Neelon Drive S	Browning Avenue S	South of Garlock Avenue S	New Sidewalks or Sidewalk Infill	City of Salem	\$102,000
South	Oakhill Avenue SE	Commercial Street SE	Courtney Lane SE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Peck Avenue SE/ Morningside Street SE/ Hulsey Avenue SE/ Norwood Street SE	Harris Avenue SE	Clark Creek Park	New Sidewalks or Sidewalk Infill	City of Salem	\$629,000
South	River Road S	Urban Growth Boundary	Homestead Road S	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Rural Avenue S	Commercial Street SE	Summer Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$252,000
South	Saginaw Street S	Lincoln Street S	Rural Avenue S	New Sidewalks or Sidewalk Infill	City of Salem	\$229,000

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<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
South	Salem Heights Avenue S	Sunridge Drive S	6th Avenue S	New Sidewalks or Sidewalk Infill	City of Salem	***
South	Skyline Road S	Mildred Lane SE	North of Maplewood Drive S	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**
South	Sunnyside Road SE	Urban Growth Boundary	Rees Hill Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**
South	Woodmansee Street SE	Western Terminus	Sunnyside Road SE	New Sidewalks or Sidewalk Infill	City of Salem	\$65,000
Southeast	12th Street SE	Hilfiker Lane SE	Albert Drive SE	New Sidewalks or Sidewalk Infill	City of Salem	\$184,000
Southeast	23rd Street SE	McGilchrist Street SE	Hoyt Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$144,000
Southeast	23rd Street SE	Mission Street SE	Hyde Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$148,000
Southeast	25th Street SE	Turner Road SE	Madrona Avenue SE	Shared Use Path	City of Salem	**
Southeast	27th Avenue SE/ Marietta Street SE	Kuebler Boulevard SE	West of Fairview Industrial Drive SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	36th Avenue SE	Wiltsey Road SE	Kuebler Boulevard SE	New Sidewalks or Sidewalk Infill	Marion County	**
Southeast	Airway Drive SE	South of Madrona Avenue SE	Madrona Avenue SE	New Sidewalks or Sidewalk Infill	City of Salem	\$623,000
Southeast	Aumsville Highway SE	Urban Growth Boundary	North of Deer Park Drive SE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	\$797,000
Southeast	Battle Creek Road SE	Wiltsey Road SE	Boone Road SE	New Sidewalks or Sidewalk Infill	City of Salem, Marion County	**

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.

<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Baxter Road SE	Sunnyside Road SE	Eastern Terminus	New Sidewalks or Sidewalk Infill	City of Salem	*1
Southeast	Boone Road SE	Sunnyside Road SE	Commercial Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$239,000
Southeast	Boone Road SE/27th Avenue SE	Battle Creek Road SE	Kuebler Boulevard SE	New Sidewalks or Sidewalk Infill	City of Salem	\$411,000
Southeast	Boone Road SE/ Stroh Lane SE/Barnes Road SE	Commercial Street SE	Reed Lane SE	New Sidewalks or Sidewalk Infill	City of Salem	\$746,000
Southeast	Brentwood Drive SE	East of Genesis Street SE	Battle Creek Road SE	New Sidewalks or Sidewalk Infill	Marion County	**
Southeast	Cascades Gateway Park	Turner Road SE	Eastern Terminus	New Sidewalks or Sidewalk Infill	City of Salem	\$347,000
Southeast	Cascades Gateway Park/SE Salem Connector (east segment)	East of Interstate 5	Lancaster Drive SE	Shared Use Path	City of Salem	\$331,000
Southeast	Cascades Gateway Park/SE Salem Connector (west segment, including grade-separated crossing of Interstate 5)	Cascades Gateway Park	East of Interstate 5	Shared Use Path	City of Salem	\$1,962,000
Southeast	Crowley Avenue SE/ Chaparral Drive SE	Eastern Terminus	Anneka Loop SE	New Sidewalks or Sidewalk Infill	City of Salem	\$121,000
Southeast	Deer Park Drive SE	Turner Road SE	Aumsville Highway SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Electric Street SE	East of 23rd Street SE	25th Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$736,000
Southeast	Fabry Road SE	Reed Lane SE	Battle Creek Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Future Path Along Unnamed Street #3	Future Unnamed Street 2	Old Strong Road SE	Shared Use Path	City of Salem	\$142,000
Southeast	Future Path Along Unnamed Street #4	Pringle Road SE	Future Unnamed Street 1	Shared Use Path	City of Salem	\$480,000
Southeast	Future Unnamed Street	Madrona Avenue SE	22 <sup>nd</sup> Street SE	New Sidewalks or Sidewalk Infill	City of Salem	\$644,000
Southeast	Future Unnamed Street	Turner Road SE	Lancaster Drive SE	New Sidewalks or Sidewalk Infill	City of Salem	<b>始</b> ··
Southeast	Gaffin Road SE	Urban Growth Boundary (south)	Urban Growth Boundary (north)	New Sidewalks or Sidewalk Infill	Marion County	**
Southeast	Gath Road SE/Turner Road SE	Urban Growth Boundary	Airway Drive SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Genesis Street SE	Robins Lane SE	Northern Terminus	New Sidewalks or Sidewalk Infill	City of Salem	\$143,000
Southeast	Interstate 5 Path (including grade- separated crossing of Highway 22)	South of Highway 22	South of Market Street NE	Shared Use Path	City of Salem, Marion County, ODOT	\$3,369,000
Southeast	Kashmir Way SE	36th Avenue SE	Eastland Avenue SE	New Sidewalks or Sidewalk Infill	Marion County	\$311,000
Southeast	Landan Street SE/ Tanglewood Way SE Connector (including grade-separated crossing of Interstate 5)	Landon Street SE	Serenity Drive SE	Shared Use Path	City of Salem, ODOT	\$2,070,000
Southeast	Mary Eyre Elementary Connector	Jenah Street SE	Buffalo Drive SE	Shared Use Path	City of Salem, Marion County, Salem-Keizer School Dist.	\$87,000

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TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
Southeast	Mill Creek Path (including grade- separated railRoad crossing)	Kashmir Way SE	Turner Road SE	Shared Use Path	City of Salem, Marion County	\$2,162,000
Southeast	Mistymorning Avenue SE/Genesis Street SE Connector	Mistymorning Avenue SE	Genesis Street SE	Shared Use Path	City of Salem	\$75,000
Southeast	Oxford Street SE/14th Street SE	22 <sup>nd</sup> Street SE	Wilbur Street SE	New Sidewalks or Sidewalk Infill	City of Salem	***
Southeast	Path along Future Unnamed Street 1	Reed Road SE	West of Reed Road SE	Shared Use Path	City of Salem	***
Southeast	Path along Future Unnamed Street 2	Reed Road SE	West of Reed Road SE	Shared Use Path	City of Salem	**
Southeast	Pikes Pass Street SE	South of Soapstone Avenue SE	Mistymorning Avenue SE	New Sidewalks or Sidewalk Infill	City of Salem	\$194,000
Southeast	Reed Lane SE	Soapstone Avenue SE	Fabry Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Reed Road SE	Baxter Road SE	Barnes Road SE	New Sidewalks or Sidewalk Infill	City of Salem	\$262,000
Southeast	Reed Road SE	Wiltsey Road SE	Soapstone Avenue SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Reed Lane SE/Boone Road SE	Barnes Road SE	Battle Creek Road SE	New Sidewalks or Sidewalk Infill	City of Salem	**
Southeast	Saddle Club Street SE	Lancaster Drive SE	Campbell Drive SE	New Sidewalks or Sidewalk Infill	City of Salem	\$460,000
Southeast	Strong Road SE	Marietta Street SE	Reed Road SE	New Sidewalks or Sidewalk Infill	City of Salem	44

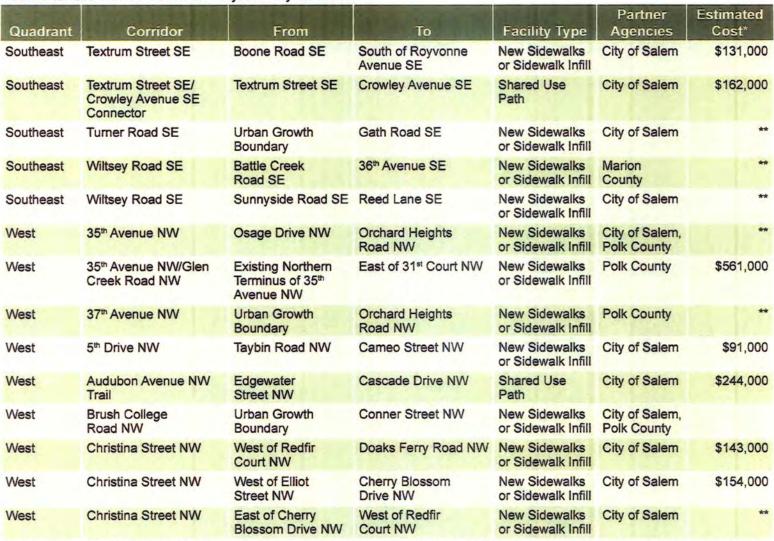
<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

PEDESTRIAN SYSTEM ELEMENT—8-49

TABLE 8-7 Recommended Tier 3 Pedestrian Projects—By Quadrant



<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant

Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
West	Christina Street NW	West of Elliot Street NW	Michigan City Lane NW	New Sidewalks or Sidewalk Infill	City of Salem	**
West	Crestbrook Drive NW- Dalke Ridge Drive NW Connector	Crestbrook Drive NW	Dalke Ridge Drive NW	Shared Use Path	City of Salem	\$64,000
West	Doaks Ferry Road NW	Urban Growth Boundary	Glen Creek Road NW	New Sidewalks or Sidewalk Infill	City of Salem	**
West	Eola Drive NW	Edgewater Street NW	Cascade Drive NW	New Sidewalks or Sidewalk Infill	City of Salem	**
West	Eola Drive NW	Urban Growth Boundary	Eagle Ridge Avenue NW	New Sidewalks or Sidewalk Infill	City of Salem, Polk County	**
West	Future Unnamed Street	37th Avenue NW	35th Avenue NW	New Sidewalks or Sidewalk Infill	Polk County	**
West	Grice Hill Road NW	Orchard Heights Road NW	Urban Growth Boundary	New Sidewalks or Sidewalk Infill	Polk County	\$291,000
West	Hidden Valley Drive NW	34th Avenue NW	Doaks Ferry Road NW	New Sidewalks or Sidewalk Infill	City of Salem	\$190,000
West	Hillcrest Drive NW/ Altimont Drive NW	Kingwood Drive NW	East of Cascade Drive NW	New Sidewalks or Sidewalk Infill	City of Salem	\$211,000
West	Islander Avenue NW	Horseclover Drive NW	West Meadows Drive NW	New Sidewalks or Sidewalk Infill	City of Salem	**
West	Islander Avenue NW	35th Avenue NW	Horseclover Drive NW	New Sidewalks or Sidewalk Infill	City of Salem	desk
West	Kingwood Drive NW	Lowen Street NW	Glen Creek Road NW	New Sidewalks or Sidewalk Infill	City of Salem	\$574,000
West	Landaggard Drive NW	Orchard Heights Road NW	Northern Terminus	New Sidewalks or Sidewalk Infill	Polk County	\$187,000
West	Linwood Street NW	South of Goldcrest Avenue NW	River Bend Road NW	New Sidewalks or Sidewalk Infill	City of Salem	\$298,000

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.



<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

TABLE 8-7
Recommended Tier 3 Pedestrian Projects—By Quadrant



Quadrant	Corridor	From	То	Facility Type	Partner Agencies	Estimated Cost*
West	Marine Drive NW	Glen Creek Road NW	River Bend Road NW	New Sidewalks or Sidewalk Infill	City of Salem, Polk County	**
West	Michigan City Lane NW	Western Terminus	Wallace Road NW	New Sidewalks or Sidewalk Infill	Polk County	**
West	Mousebird Lane NW	Royal Crown Avenue NW	Macaw Street NW	New Sidewalks or Sidewalk Infill	City of Salem	**
West	Orchard Heights Road NW	Urban Growth Boundary	Future Roadway Alignment west of Grice Hill Road NW	New Sidewalks or Sidewalk Infill	Polk County	**
West	Orchard Heights Road NW	West of Titan Drive NW	Parkway Drive NW	New Sidewalks or Sidewalk Infill	City of Salem, Polk County	**
West	Orchard Heights Road NW	Existing Roadway Alignment west of Grice Hill Road NW	Grice Hill Road NW	New Sidewalks or Sidewalk Infill	City of Salem	**
West	Orchard Heights Road NW	Grice Hill Road NW	Existing Roadway Alignment east of Grice Hill Road NW	New Sidewalks or Sidewalk Infill	City of Salem	**
West	Patterson Street NW Trail	9th Street NW	South of Glen Creek Road NW	Shared Use Path	City of Salem	\$120,000
West	Ptarmigan Street NW	East of Moonbeam Court NW	Eastern Terminus	New Sidewalks or Sidewalk Infill	City of Salem	\$128,000
West	Rosemont Avenue NW	Cascade Drive NW	Glen Creek Road NW	New Sidewalks or Sidewalk Infill	City of Salem	\$242,000
West	Titan Drive NW	North of Old Farm Avenue NW	Orchard Heights Road NW	New Sidewalks or Sidewalk Infill	City of Salem	\$184,000
West	Vickery/Colorado Way/ Drive NW	Urban Growth Boundary	Eastern Terminus	New Sidewalks or Sidewalk Infill	Polk County	**

<sup>\*</sup> Estimated cost for intersection improvements represents a placeholder cost, pending further analysis, engineering, and design to determine appropriate treatments.

<sup>\*\*</sup> The estimated cost for these projects are already included in the Street System Element.

City of Salem
Tublic Works Department
S5 LIBERTY STREET SE ROOM 325
LEM, OR 97301-3513



ATTENTION: PLAN AMENDMENT SPECIALIST DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT 635 CAPITAL STREET NE SUITE 150 SALEM OR 97301-2540