Eugene Pedestrian and Bicycle Master Plan

March 2012

CH2MHILL Angelo planning group alta PLANNING + DESIGN

Project Staff

City of Eugene

Reed Dunbar
Rob Inerfeld, Project Manager (from April 2011)
Briana Orr
David Roth, Project Manager (until April 2011)
Lindsay Selser

Oregon Department of Transportation

David Helton, Project Manager

Alta Planning and Design

Mia Birk
Cathy Cibor
Dana Dickman
Jessica Roberts, Project Manager
Elliot Akwai-Scott

CH2M Hill

Theresa Carr, AICP
Brandy Steffen

Angelo Planning Group

Matt Hastie, AICP
Serah Breakstone, AICP

Technical Advisory Committee

Bill Almquist, City of Eugene Planning and Development
Mary Archer, Lane Transit District
Neil Bjorklund, City of Eugene Parks and Open Spaces
Karen Brack, City of Eugene Emergency Services
Emily Eng, University of Oregon
Steve Gallup, City of Eugene Traffic Operations
Joe McCormack, Lane Transit District
Lydia McKinney, Lane County
Lee Shoemaker, City of Eugene Transportation Planning
Philip Richardson, City of Eugene Parks and Open Spaces
Fred Tepfer, University of Oregon
Kurt Yeiter, City of Eugene Transportation Planning

Project Advisory Committee

Kent Fleming, Greater Eugene Area Riders (GEARs)
Leslie Gilbert, Disability Services Advisory Council
David Gizara, City of Eugene Bicycle and Pedestrian Advisory Committee (BPAC)
Judi Horstmann, BPAC
Rachel Jensen, Bethel School District/Communities and Schools Together (CAST)
Lorraine Kerwood, Accessibility Committee of the City of Eugene Human Rights Commission
Michael Levick, Lane Community College
Sasha Luftig
Shane MacRhodes, Eugene School District 4J
Molly Markarian, BPAC (until January 2011)
Holly McRae, BPAC
Hugh Prichard
Rex Redmon, BPAC
Jolene Siemsen, Neighborhood Leaders Council
Joshua Skov, Sustainability Commission
Ted Sweeney, BPAC

The Eugene Pedestrian and Bicycle Master Plan was partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), local government, and State of Oregon funds.

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Table of Contents

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Introduction

The Eugene Pedestrian and Bicycle Master Plan ("the Plan") provides the City of Eugene with the projects and policies necessary to create a first-class city for bicycling and walking, reduce overall carbon emissions, and provide for a well-designed, integrated, safe, and efficient multi-modal transportation system. The City of Eugene currently has a total of 157 miles of bikeways (41 miles of shared-use paths, 81 miles of bike lanes, and 35 miles of signed routes). This Plan proposes that the City of Eugene develop 25.2 miles of sidewalks, 12.1 miles of shared-use facilities, and 110.9 miles of bikeways within the next 20 years.

The Eugene Pedestrian and Bicycle Master Plan serves as the basis for the Pedestrian and Bicycle elements of the City's Transportation System Plan (TSP). The Project Study Area consists of the outer extent of the Eugene city limits and Urban Growth Boundary.

The Plan was funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development (DLCD), and by the City of Eugene. Working with the TGM program, the City of Eugene hired the consulting team of Alta Planning + Design, CH2M Hill, and Angelo Planning Group to prepare the Plan. The project began in May 2010 and was accepted by Council on March 12, 2012.

This document is Volume I of the Eugene Pedestrian and Bicycle Master Plan. Volume II contains all final project memoranda that document the planning process used to complete the Plan, and is intended to serve as a technical reference for implementation.

Photo: Wind Home Photography

Photo credit: Fred Sproat

Planning Process

This section summarizes the process used to develop the Eugene Pedestrian and Bicycle Master Plan.

Project Management

The project management team consisted of representatives from the City of Eugene, the Oregon Department of Transportation, and the consulting team. The project management team met regularly throughout the project to guide the technical work and review project deliverables.

The City of Eugene invited representatives from Lane County, the Lane Transit District, the University of Oregon, and departments within the City of Eugene (Emergency Services, Parks and Open Space, Planning and Development, and Traffic Operations) to form a Technical Advisory Committee (TAC) to represent their organizational perspective on the Pedestrian and Bicycle Master Plan effort. TAC members were invited to comment on each draft project deliverable. The TAC also met in person in January 2011 to discuss the system recommendations and the Design Toolkit, in February 2011 to discuss policies and implementation, and in July 2011 to further discuss the policies.

Public Involvement

The City of Eugene identified members of the public who could represent a variety of groups and populations, including liaisons to neighborhood groups, accessibility groups, the Sustainability Commission, school districts, higher education institutions, and the Bicycle and Pedestrian Advisory Committee (BPAC). These representatives were invited to join the Project Advisory Committee (PAC). The PAC reviewed all draft project deliverables. They also met seven times throughout the project to advise the project management team about goals, policies, existing conditions, the Design Toolkit, system recommendations, prioritization, and funding. All PAC meetings were open to the public and were well-attended.

Members of the Public Advisory Committee met throughout the project.

Materials prepared for public meetings allowed participants to give feedback on the evolution of the Plan.

Three public open houses were hosted as part of the project. They occurred in October 2010, and in March and September 2011. The first open house invited members of the public to comment on goals and objectives, existing conditions analysis, and concepts from the design toolkit. Attendees were also asked to share their ideas for bicycle and pedestrian facilities recommendations. The second open house offered community members the chance to give feedback on the draft recommendations for both pedestrian and bicycle system improvements. Approximately 70 and 100 community members attended the first and second open houses, respectively. The third open house was held to unveil the draft plan. It was attended by 80 community members.

A project website, www.eugenepedbikeplan.org, was created and then updated throughout the project. The website offered three different input tools: an interactive

map of the project area, an online comment form, and an online survey tool. The online interactive map generated over 600 comments from the public on existing conditions and project ideas. The online survey generated an additional 200 responses and over the life of the project an additional 160 comments were submitted to the project team via an online comment form.

Additional methods of outreach included electronic and print newsletters, postings on local pedestrian and bicycle-related blogs, outreach material at other community events, meetings with neighborhood groups, and a survey distributed to the city's 20 neighborhood associations.

Plan and Policy Review

At the beginning of the project, project staff reviewed numerous local planning documents to inform the goals, policies, and projects developed in this Plan. Documents reviewed include TransPlan, the Central Lane Metropolitan Planning Organization Regional Transportation Plan, the Eugene-Springfield Metro Plan, the Arterial and Collector Street Plan, the Central Area Transportation Study, the Eugene Growth Management Ordinance, the Eugene Pedestrian and Bicycle Strategic Plan, the Eugene Parks, Recreation and Open Spaces Comprehensive Plan, and the May 2010 draft of the Community Climate and Energy Action Plan.

Policies in the Eugene-Springfield Metro Plan and TransPlan were reviewed and found to be consistent with the policies recommended in this Plan. Therefore, no policy amendments to these documents are recommended. The policies recommended in this plan will become official when the City of Eugene adopts a new Transportation System Plan.

Goals, Objectives, and Policies

The following goals, objectives, and policies were developed with input from the Project Advisory Committee and the Technical Advisory Committee. These policies are recommended to be adopted as part of the Eugene Transportation System Plan development that is currently underway. Recommended actions to support proposed goals and policies can be found in Project Memorandum 9 – Implementation (see Volume II).

Policies play an important role in creating a walking- and bicycling-friendly city.

The Plan has four levels in its framework:

Goal: Pursuit of this statement underpins all of the Plan's objectives and projects.

Objectives: The City has identified three principal objectives for achieving the goals of the Plan.

Policies: A guide to the City and community members on how to achieve each objective.

Performance measures: How the City will track the progress of our goal and objectives. These measures should be tracked and reported on annually in order to evaluate the progress towards achieving our goal and objectives.

"Eugene is a place where walking and biking are integral to the community's culture, where the city's livability, sustainability, and overall quality of life are enhanced by more people walking and biking, and where these activities are safe, convenient, and practical options for everyone."

Vision statement from the Eugene Pedestrian and Bicycle Strategic Plan 2008

Goal: By the year 2031 Eugene will double the percentage of trips made on foot and by bicycle from 2011 levels.

Performance Measures:

- Percentage of trips to work in Eugene made by walking and bicycling as measured by the Census Bureau's American Community Survey.
- Annual bicycle and pedestrian counts performed by the City of Eugene.

Objective 1—Network: Create 20-minute neighborhoods by providing accessible, efficient, and convenient methods for pedestrians and bicyclists to travel to the places where they live, shop, work and play by expanding and improving Eugene's bicycle and pedestrian network.

The pedestrian and bicycle network should provide continuous direct routes and convenient connections between destinations, including homes, schools, parks, shopping areas, public services, recreational opportunities and transit. Walking and bicycling should be appealing modes of transportation, which means that infrastructure must be in place to make these modes convenient and enjoyable.

- Policy 1.1: Make bicycling and walking more attractive than driving for trips of two miles or less.
- Policy 1.2: Increase pedestrian and bicycle connectivity between existing residential neighborhoods and nearby commercial areas, parks, and schools.
- Policy 1.3: Require implementation of pedestrian and bicycle facilities as part of redevelopment and new development.
- Policy 1.4: Improve connections to transit for pedestrians and bicyclists.
- Policy 1.5: Construct high-quality pedestrian and bicycle infrastructure to provide safer, more appealing and well-connected facilities.
- Policy 1.6: Build pedestrian and bicycle facilities on new roadways, and retrofit older roadways to complete the pedestrian and bicycle system, using routes and facility designs identified in this plan.
- Policy 1.7: Construct bikeways along new and reconstructed arterial and major collector streets.
- Policy 1.8: Provide a continuous sidewalk network along all city streets that have been upgraded to urban standards.
- Policy 1.9: Develop diversified financial resources to implement this plan.

Walking and bicycling facilities must address the needs of a wide range of users to be truly successful.

Performance Measures:

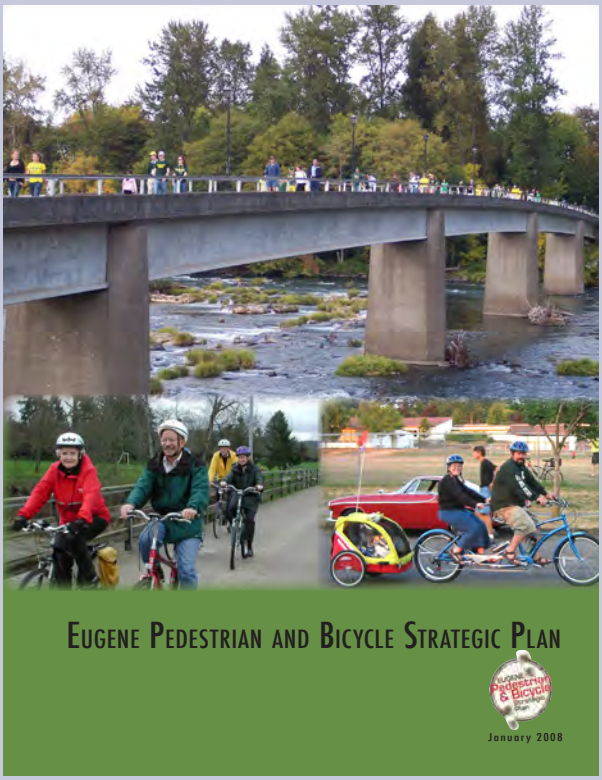
- Number of miles of sidewalk.
- Number of miles of all bikeways.
- Percentage of arterial and collector streets served by sidewalks.
- Progress towards implementing the total number of miles of new sidewalks proposed in this plan.
- Progress towards implementing the total number of miles of bikeways proposed in this plan.

Objective 2—Safety and Equity: Build a system that addresses the needs and safety of all users, including youth, the elderly, people with disabilities, and people of all races, ethnicities and incomes.

The City recognizes the great diversity in abilities, ages, races, ethnicities and incomes within the community as well as the great number of neighborhoods within the City. Sidewalks, pathways, crossings and bicycle routes should be designed so people, including those with mobility and sensory impairments, can easily find a direct route to a destination and so delays are minimized. Sidewalks, pathways, crossings and bicycle routes should be designed and built to be free of hazards and to minimize conflicts with external factors such as vehicles and buildings. These facilities should permit the mobility of residents of all ages and abilities. Bicyclists have a range of skill levels, and facilities should be designed with a goal of providing for the widest range of ages, ability, and experience possible.

Coordination with Other Plans

Eugene Pedestrian and Bicycle Strategic Plan is a 5-year plan that was adopted administratively by the City Manager. It is a guide for City staff, community members, and organizations to help them develop a more walkable and bikeable city. Whereas the Pedestrian and Bicycle Master Plan directs pedestrian and bicycle infrastructure, the Strategic Plan outlines how to improve education, marketing, and outreach to encourage people to walk and bicycle more, using the infrastructure.



- Policy 2.1: Continually improve bicycling and walking comfort and safety through design, operations and maintenance including development of "low stress" bikeways to attract new cyclists.
- Policy 2.2: Ensure that the transportation system is accessible to people with disabilities, and that an ADA Transition Plan is completed to identify obstacles to access, develop a work plan to remove those obstacles, and identify responsible parties.
- Policy 2.3: Ensure that bicycling and walking facilities are provided for all demographics, including people of different ages, races, ethnicities, incomes, and different neighborhoods.

Performance Measures:

- Number of traffic signals without Accessible Pedestrian Devices.
- List of completed projects from the ADA Transition Plan (once it is completed).
- Annual pedestrian and bicycle crash statistics.
- Density of pedestrian and bicycle facilities in areas with higher concentrations of racial and ethnic minorities and low-income households compared to other parts of Eugene (based on the population definitions established in the Eugene-Springfield 2010 Consolidated Plan).
- Bicycle and pedestrian level of service (LOS) and quality of service (QOS) models.

Objective 3—Support Facilities: Provide support facilities in addition to the pedestrian and bicycle network that encourage walking and bicycling.

In order for walking and bicycling to be fully viable forms of transportation in Eugene, facilities are needed to complement an improved network. These facilities should enhance the convenience of these modes. Partnerships among city departments and with transit agencies, private developers, and companies will be necessary to achieve this objective.

- Policy 3.1: Ensure high quality, flexible and secure bicycle parking at all destinations, and ensure that bicycle parking is considered when parks, schools, and other public facilities are planned.
- Policy 3.2: Provide support facilities for employees who are commuting by walking or bicycling (such as showers, lockers, and bike parking).

- Policy 3.3: Provide bicycle parking facilities near transit stations, on-board bicycle storage, and ensure transit stop design and compatibility with surrounding streetscape.
- Policy 3.4: Provide incentives for existing businesses and other entities to add bicycle parking facilities and pedestrian amenities.
- Policy 3.5: Provide wayfinding tools for pedestrians and bicyclists.
- Policy 3.6: Improve the quality of the pedestrian environment by including facilities such as planter strips and street trees in the design or reconstruction of streets and consider preservation of existing trees whenever practicable.

Performance Measures:

- Number of bike racks or other bicycle parking infrastructure installed in the public right-of-way.
- Number of bike racks or other bicycle parking infrastructure permitted for private development.
- Number of wayfinding signs and markings installed.
- Miles of arterial and collector streets where street trees and planter strips have been added.

The Transportation System Plan (TSP) is a 20-year comprehensive transportation plan that is adopted as policy by the Eugene City Council and serves as the transportation element of the city's comprehensive plan. Recommendations of the Pedestrian and Bicycle Master Plan will be incorporated into the TSP as the pedestrian and bicycle elements.

Benefits of Walking and Bicycling

Helping more Eugene residents and visitors shift their travel to walking and bicycling will provide many benefits to individuals and the community, including:

- Higher levels of individual health and wellness
- Reduced traffic congestion and exposure to crashes
- Healthy business districts and more dollars staying in the local economy
- Better air quality and lower levels of carbon and noxious emissions
- Higher quality of life
- Lower costs for roadway maintenance
- More equitable access to community resources for all

Existing Conditions

Project staff evaluated existing conditions for walking and bicycling in Eugene as a basis for creating recommendations for future facilities. The existing conditions analysis was based on a field review by the technical team of the existing facilities within the study area; data made available through the City's Geographic Information System (GIS), planning, and public works units; crash data provided by the Oregon Department of Transportation (ODOT); existing local, regional, and state plans and policies; and extensive public input provided through the project website (www.eugenepedbikeplan.org) and past Walking and Biking Summits.

Central Eugene offers pedestrians, including many University of Oregon students, many sidewalks.

The team considered existing conditions, deficiencies, and needs for walking and bicycling in each of five sectors that were defined for this project. Highlights from the existing conditions report are below, while the full report can be found in Project Memorandum 3 - Existing Conditions, Deficiencies, and Needs in Volume II of this Plan.

Central Eugene – Central Eugene's street grid, complete sidewalk network, existing bike lanes and routes, and access to the South Bank Path, the Fern Ridge Path and the Amazon Path make walking and bicycling relatively easy. While traffic volumes in the downtown core can be intimidating to less-experienced bicyclists, traffic speeds are lower than on larger suburban roadways. The presence of many bicyclists (especially traveling to and from the University) results in a sense of "safety in numbers." Many people asked for the development of bicycle facilities in central Eugene that provide more separation from auto traffic, particularly to facilitate travel by families and seniors.

South Hills – South of downtown and central Eugene, the South Hills rise sharply and challenge people who walk and bicycle with steep slopes, a non-grid street network, and fast-moving vehicle traffic on some roads. Many roadways have a rural cross-section of two lanes and minimal shoulders that provide little or no accommodation for bicycling or walking. Several roadways have been improved with bike lanes reaching parts of the hills. Curb ramps and marked crosswalks are largely absent from the South Hills.

Roadways in Eugene's South Hills have steep climbs and often lack sidewalks and/or bike lanes.

West Eugene/Bethel/Danebo – West Eugene has flat topography that facilitates walking and bicycling, but the development patterns have left a legacy of cul-de-sac housing developments, disconnected streets, and high-speed/high-volume thoroughfares that make walking and bicycling challenging and, in many cases, unpleasant. Major streets offer sidewalks, but some local streets in this sector of Eugene are missing sidewalks entirely, or have inconsistent sidewalk coverage. Most major streets have bike lanes, but there are few low-traffic bikeways that may be more comfortable for less-experienced bicyclists. In addition, physical barriers including Highway 99, the rail yards, and the Randy Papé Beltline force people traveling by foot and by bicycle to travel out of direction to access a crossing. People value and use the Fern Ridge Path, though they have requested improvements at street crossings and at underpasses where seasonal flooding can occur.

The Fern Ridge Path is well-used for walking and bicycling.

River Road/Santa Clara – The defining factor for pedestrians and cyclists in this part of town is the legacy of a patchwork of streets under city and county jurisdiction, which means that many roads in this part of town are not improved to city standards. As a result, River Road/Santa Clara has the lowest percentage of streets served by sidewalks in Eugene (though many residents on quiet local streets use the roadway for walking and bicycling without difficulty). People traveling by bicycle in River Road/Santa Clara have only six streets with bike lanes available to them (Maxwell Road, Irvington Drive, Irving Road, River Road and parts of River Avenue and Division Avenue), and few signed bicycle routes exist. River Road is the only north-south roadway that crosses the Randy Papé Beltline, and it is uncomfortable for most pedestrians and cyclists. The West Bank Path is well used, but access to the path can be challenging, particularly for Santa Clara residents

Spring Creek Drive is one of many roads in Santa Clara without bike lanes or sidewalks.

NE Eugene-Willakenzie/Ferry Street Bridge – Most streets in NE Eugene are served by sidewalks, and confident bicyclists have many bike lane choices to traverse this part of town, as every minor arterial roadway as well as Coburg Road (a major arterial) has been provided with bike lanes. Many lower-traffic streets in this part of Eugene do not connect to other lower-traffic streets, forcing pedestrians and bicyclists to use busier streets for longer trips. People report that Coburg Road, in particular, is not conducive to walking and bicycling due to its busy intersections and high vehicle speeds and volumes.

Photo: Fred Sproat

The new I-5 bridge is a portal between Springfield and northeast Eugene.

Photo credit: Fred Sproat

Recommendations

Recommendations for pedestrian and bicycle facilities were created to complete gaps in the existing system and create new facilities that meet the goals of this Plan. Particular attention was paid to completing the sidewalk network along major streets and developing a family-friendly bicycle boulevard network.

Methodology for Development of Pedestrian and Bicycle System

Pedestrian and bicycle system recommendations were developed by:

- Reviewing previously-proposed plans
- Reviewing public input from previous processes
- Considering recommendations and feedback from the Project Advisory Committee, the Technical Advisory Committee, and the general public (from open houses and online comments)
- Conducting field work, and reviewing GIS data, field work notes and photographs, and
- Refining draft proposals based on City staff input

Facility Types

The recommended projects (following) refer to pedestrian and bicycle facility types that are fully defined in Project Memorandum 4 – Best Practices and Design Toolkit (see Volume II). A brief definition of each facility type and purpose is provided below for reference.

Table 1: Facility Types

Sidewalks: Sidewalks are paved walkways adjacent to roadways. Sidewalks are particularly important for basic mobility of people with disabilities. A buffer (whether parked cars or a planted parking strip) between the sidewalk can create more comfort and safety for people walking.

Accessways: These connectors provide direct routes between residential areas, retail and office areas, institutional facilities, industrial parks, transit streets, and neighborhood activity centers.

Photo: David Roth

Bicycle Boulevards: Low-volume and low-speed streets that have been optimized for bicycle travel. Bicycle Boulevard treatments can be applied at several different intensities. The City will determine the exact treatments needed for each corridor during project design, but it is assumed that all Bicycle Boulevards in Eugene will at a minimum have wayfinding signs, pavement markings, traffic calming (if needed to keep vehicle speeds low), and some type of intersection crossing treatments.

Shared Use Paths: Shared-use paths are paved paths separate from the roadway network that are designed for both walking and bicycling. Where space allows and if sufficient additional maintenance funding can be dedicated, an additional unpaved path may be provided alongside the paved path.

Table 1: Facility Types

Bike Lane: Marked space along a length of roadway designated for use by bicyclists. Wheelchair users and some motorized scooters are allowed in bike lanes.

Buffered Bike Lane: A bike lane with additional buffer space between the bike lane and the auto lane or parked cars, used on high volume or high-speed roads, especially with freight or large vehicle traffic.

Cycle Track: Exclusive bicycle facility adjacent to, but separated from, the roadway. Best on roads with few cross streets and driveways, particularly when there are high volumes and speeds.

Shared Lane Marking: Also called "sharrows," shared lane markings are pavement markings used to indicate shared space for bicyclists and motorists on low and medium volume streets that don't have room for bike lanes.

Photo: Shane MacRhodes

Grade-Separated Crossing: When an intersection crossing is not safe, a below- or above-grade crossing for pedestrians and bicyclists may be needed. Grade separated crossings include bridges and tunnels that bypass a river, railroad tracks, a highway, or another large roadway.

Intersection Improvements: Intersection improvements can take many forms (see Project Memorandum 4 – Best Practices and Design Toolkit), but all improve the ease, comfort, and safety of bicyclists and pedestrians at intersections.

Street and Facility Standards

The Design Standards and Guidelines for Eugene Streets, Sidewalks, Bikeways and Accessways contain Eugene's current design standards for bicycle and pedestrian facilities. This project recommends updated design standards intended to provide clear guidance for City staff and the public about the City's desired standard dimensions for walking and bicycling facilities. For complete details of recommended design standards, see Project Memorandum 6 – Pedestrian and Bicycle System (in Volume II).

Proposed Pedestrian and Bicycle System

See Appendix B for maps of recommended pedestrian and bicycle facilities:

- Map 1: Proposed Pedestrian Network - Central Eugene
- Map 2: Proposed Pedestrian Network - South Hills
- Map 3: Proposed Pedestrian Network - West Eugene/ Bethel/Danebo
- Map 4: Proposed Pedestrian Network - River Road/ Santa Clara
- Map 5: Proposed Pedestrian Network - Northeast Eugene/Willakenzie/Ferry St. Bridge
- Map 6: Proposed Bicycle Network - Central Eugene
- Map 7: Proposed Bicycle Network - South Hills
- Map 8: Proposed Bicycle Network - West Eugene/ Bethel/Danebo
- Map 9: Proposed Bicycle Network - River Road/Santa Clara
- Map 10: Proposed Bicycle Network - Northeast Eugene/ Willakenzie/Ferry St. Bridge

Sidewalk Projects

A total of 38.9 miles of sidewalk improvements were recommended for gaps on all major arterials, minor arterials, and major collectors. Because this document is a citywide plan, sidewalk recommendations were primarily made for arterial and collector level streets, which are more likely to serve longer trips and connect with transit. Sidewalk recommendations for neighborhood collectors and local streets were included where community and City input indicated that the facility would have citywide value.

Recommended sidewalk improvements are shown in Maps 1 – 5. A table showing sidewalks by street, including side of street, facility extent, length and cost estimates, can be found in Appendix A, Table A-1.[1]

The lack of sidewalks on Leo Harris Parkway results in people walking in the streets.

Accessway Projects

A total of 1.6 miles of recommended accessways are shown in Maps 1 – 5. Accessways were recommended where they would create a significantly more direct pedestrian connection, particularly between a neighborhood and a school, and as part of bicycle boulevard corridors. A table showing accessways, including facility extent, length and cost estimates, can be found in Appendix A, Table A-2.[2]

Shared-Use Path Projects

A total of 13.8 miles of recommended shared-use paths are shown in Maps 1 – 5. Shared-use paths were recommended where they could provide scenic/recreational value, take advantage of an existing corridor, or complete or expand an existing pathway network. A table showing shared-use paths, including facility extent, length and cost estimates, can be found in Appendix A, Table A-3. Annual maintenance costs for shared-use paths are shown in Appendix A, Table A-12.[3]

1 For cost estimating purposes, sidewalks were assumed to be 6 feet wide, curb tight, and have included curb and gutter costs.

2 Accessways were assumed to be 8 feet wide, with two ramps per block.

3 Shared-use paths were assumed to be 12 feet wide and constructed of concrete. Cost estimates do not include crossing treatments, potentially required bridges or retaining walls, or amenities including lighting, benches, bicycle parking, interpretive kiosks, etc.

Grade-Separated Crossing Projects

A total of seven recommended grade-separated crossings are shown in Maps 6 – 10 and listed in Appendix A, Table A-4. Grade-separated crossings are expensive projects and were only recommended where they fill a compelling community need that cannot be addressed through another facility type. Further work is needed to determine whether a bridge/overpass or tunnel/underpass is the most appropriate and feasible facility type.

Bridges and other grade-separated crossings provide for critical walking and bicycling connections.

Bike Lane Projects

A total of 36.2 miles of recommended bike lanes are shown in Maps 6 – 10. Bike lanes were recommended where they complete gaps in the existing bike lane network, where they serve streets that by City policy should have bike lanes, and/or where demand for bicycle facilities has been demonstrated.

Three specific projects recommend an uphill bike lane paired with a downhill shared-lane marking (projects on Dillard Road, Chambers Street, and Lorane Highway). A table showing bike lanes, including facility extent, length and cost estimates, can be found in Appendix A, Table A-5. Bike lanes were assumed to be 6 feet wide.[4]

4 For facilities that already have a sidewalk, no road widening was assumed, and no curb and gutter costs were included. For facilities that do not currently have a sidewalk (e.g. that have a rural two-lane cross-section), roadway widening was included in cost estimates. Curb and gutter costs were not included in bike lane cost estimates but rather were addressed through sidewalk improvement cost estimates.

Buffered Bike Lane Projects

A total of 9.3 miles of recommended buffered bike lanes are shown in Maps 6 – 10. Buffered bike lanes were recommended where City staff indicated that street width is likely to be sufficient to implement this facility type. A table showing buffered bike lanes, including facility extent, length and cost estimates, can be found in Appendix A, Table A-6. Annual maintenance costs for buffered bike lanes are shown in Appendix A, Table A-12.[5]

Cycle Track Projects

A total of 5.2 miles of recommended cycle tracks are shown in Maps 6 – 10. Cycle tracks were recommended where there is strong community demand for a separated bikeway and where the City believes a separated bikeway may be feasible and uniquely valuable.

Cycle tracks are an emerging facility type, and specific facility design details will be determined as each project is designed. Because of the wide variation in potential designs, the cost estimates shown for cycle tracks should be seen as more variable than those of other project types, and therefore a higher contingency percentage has been applied. A table showing cycle tracks, including

5 Buffered bike lanes were assumed to be 7 feet wide including a two-foot buffer; no roadway widening was included in cost estimates.

Photo: Wind Home Photography

Shared-use facilities can provide scenic and recreational value, as well as important connections in the pedestrian and bicycle networks.

facility extent, length and cost estimates, can be found in Appendix A, Table A-7. Annual maintenance costs for cycle tracks are shown in Appendix A, Table A-12.

For more information about assumptions related to the design of specific cycle track facilities, see Project Memorandum 6 - System (in Volume II).

Shared Lane Marking Projects

Projects recommended for shared lane markings are those on which no other treatment (such as bicycle boulevard treatment) is recommended. A total of 8.4 miles of shared lane markings are shown in Maps 6 – 10. Shared lane markings were recommended where the street type is inappropriate for bicycle boulevard treatment, but where cyclists will benefit from an enhanced shared roadway. Three specific projects recommend an uphill bike lane paired with a downhill shared-lane marking (projects on Dillard Road, Chambers Street, and Lorane Highway).

A table showing shared lane markings, including facility extent, length and cost estimates, can be found in Appendix A, Table A-8. Annual maintenance costs for shared lane markings are shown in Appendix A, Table A-12.

Bicycle Boulevard Projects

A total of 62.4 miles of recommended bicycle boulevards are shown in Maps 6 – 10. One of this Plan's primary goals is to create a robust bicycle boulevard network, and to that end low-traffic streets in every sector of the city were examined in detail to determine if they were appropriate for bicycle boulevards. These options were then narrowed to recommendations that provide longer corridors, are currently relatively low-traffic/low-stress, connect to community destinations such as schools and paths, and/or offer existing or potential crossings of major roadways.

Photo: Shane MacRhodes

This mid-block crossing at Bailey Hill Road creates a clear, safe crossing opportunity for pedestrians

Bicycle boulevards can vary greatly in design and cost (see Project Memorandum 4 - Design Toolkit in Volume II for a detailed discussion of bicycle boulevard levels). The cost estimates used represent a high functioning bicycle boulevard treatment (signs, pavement markings, traffic calming), but each project may vary over or under the cost shown depending on design. A table showing bicycle boulevards, including facility extent, length and cost estimates, can be found in Appendix A, Table A-9. Annual maintenance costs for bicycle boulevards are shown in Appendix A, Table A-12.

Intersections Recommended for Study

A total of 42 recommended intersection improvements are shown in Maps 1 – 5. These are intersections where public input and technical staff review indicate that a stand-alone improvement project should be considered. Further study will be needed to determine the nature of the safety/comfort problem and what types of improvements are appropriate for addressing that problem. The purpose of recording these locations is to provide a record of public input for use by the City; they should be considered high priorities for future study but are not recommended for adoption into the Transportation System Plan.

Possible intersection improvements could serve pedestrian and/or bicycle needs. The City should use engineering judgment and treatments from Project Memorandum 4 - Design Toolkit (see Volume II) to determine what facility type is appropriate.

Cost estimates have not been provided for intersection improvements because the specific design can vary widely. A table showing intersection improvements can be found in Appendix A, Table A-10.

Feasibility Studies

A number of projects were identified as important but requiring further study before a facility recommendation could be created. Feasibility projects are listed below in Table 2 and can be seen on Maps 1 – 5. Cost estimates for feasibility studies can be found in Appendix A, Table A-11.

Table 2: Recommended Feasibility Studies

Name	Description
Alton Baker Park Path Study	Develop lighting and width standards for shared use paths in East Alton Baker Park, particularly east-west routes and connections to the pedestrian and bicycle bridges.
Amazon Park Crossing Study	Examine options for creating an east-west path through Amazon Park to connect neighborhoods on either side of the park. Environmental concerns will be addressed in the study.
Coburg Road	Connect Eugene to the planned Coburg Loop Trail by providing a walking and bicycling facility on Coburg Road. The study must be coordinated with Lane County and the City of Coburg.
Franklin Boulevard	Examine options for improving bicycle and pedestrian access along Franklin Boulevard from the city limits to Alder Street and will be accomplished through planning and development of a multiway boulevard on Franklin as called for in the Walnut Station Mixed Use Center Plan.
Morse Family Farm Path Study	Create recommendations for bicycle and pedestrian circulation through Morse Family Farm to existing and planned routes that connect to the perimeter of the site.
Rail Alignment Westbound	Examine the feasibility of a rails-with-trails project for the Union Pacific (UPRR) rail line within the city limits. The study must be coordinated with UPRR and take into consideration plans for continued and expanded rail service to area businesses. The study should examine existing right-of-way, path alignment options, track crossing issues, connections to adjacent sidewalks and bikeways, and next steps for negotiating with UPRR.
West Bank Path	Examine the feasibility of extending the West Bank Path north to Hileman Landing. Right-of-way ownership and environmental concerns should be addressed in the final recommendation.
Willamette McKenzie Path	Examine options for creating a path north along the east side of the Willamette River and east along the McKenzie River as called for in the Regional Transportation Plan. The study should build on the work done by the Willamette River Open Space Vision and Action Plan and look at land ownership, alignment alternatives, environmental issues, and recreational and scenic value.
South Bank Gap	Examine options and develop a recommended facility for completing the South Bank Path gap between the Frohnmayer and Knickerbocker Pedestrian and Bicycle Bridges. The plan must consider the existing railroad line.
Westmoreland Park Paths	Examine options to create paths through Westmoreland Park to connect to existing on-street walking and bicycling routes that connect to the park.

Citywide Efforts

These are recommendations for citywide efforts, many of which are currently already underway, that would improve ability to walk and bicycle throughout the city.

Accessibility Upgrades: Continue to install ADA devices at intersections, including curb ramps and accessible pedestrian devices. The City should update its ADA Transition Plan to better identify existing transportation facility deficiencies and develop a phased plan to eliminate these deficiencies.

Bike Parking Program: Develop a program to install bicycle parking including bike corrals in the public right-of-way at the request of business owners and members of the public. Installed racks should be tracked in the City's GIS, and an inventory of existing City-installed racks should be undertaken as well. Requests to the program can be used to develop a better understanding of the demand for bicycle parking, and the number of requests and the number of installed racks can be reported on annually as a Plan performance measure.

Count Program: The City of Eugene currently performs annual pedestrian and bicycle counts at approximately 22 locations (as volunteer power permits). This effort should be expanded and stabilized to ensure that data is collected at the same points every year to allow for long-term evaluation of trends in walking and bicycling. In areas that experience a high volume of bicyclists and pedestrians (e.g. shared use paths, etc.) consider installing permanent counters. The results of these counts should be written up in an annual count report and presented to the City Council.

Maintenance Hotline and Website: The City already responds to requests for maintenance if people call or email Public Works Maintenance or enter reports on the City's website. However, many people are not aware of this option for reporting hazards such as overgrown vegetation, malfunctioning traffic signals and street lights, bicycle loop detectors in need of calibration, cracked or

heaving sidewalks, etc. Creating an official walking and bicycling hotline and website and publicizing it widely will give people a tool to share information with the City about important maintenance needs. The hotline and website should be listed on City websites, maps and brochures.

Neighborhood Transportation and Livability Program: The Neighborhood Transportation and Livability Program currently installs neighborhood traffic calming in response to resident's requests. This program is an important tool to improve the safety of walking and bicycling in Eugene, and should be continued in the future. Because certain neighborhood-level concerns cannot be addressed in this citywide plan, the Neighborhood Transportation and Livability Program creates a mechanism for identifying spot fixes that will be of high value to individual neighborhoods.

Path Lighting: Many existing Eugene paths have insufficient illumination for safe and comfortable travel during dusk and night conditions. The City will assess lighting along existing paths and upgrade lighting on an ongoing basis to address deficiencies.

Sidewalk Infill Program: The City of Eugene does not currently have a sidewalk infill program that includes a dedicated funding source. Sidewalks are currently installed where required as part of a development or redevelopment project, by property owner request, or as part of a funded transportation project.

20 Minute Neighborhoods Program: Development of a 20 Minute Neighborhoods Program is considered a key implementation step of the Climate and Energy Action Plan. 20 minute neighborhoods are places where people can easily walk or bike to key destinations such as grocery stores, other retail establishments, parks and schools. Coordination between implementation of the Pedestrian and Bicycle Master Plan and the 20 Minute Neighborhoods Program will be critical to the success of both. The 20 Minute Neighborhoods Program should be one factor that is considered when determining project funding priorities.

Wayfinding and Route Signs: The City is currently installing wayfinding signs on high-use bicycle routes and should continue this effort. Wayfinding signs can be placed along a route to reinforce to users that they are heading in the right direction, and can also be placed at decision points. The City should develop a sign plan that includes a network of wayfinding and route signs, and then bundle projects in a way that makes them grant fundable. The locations of bikeway signs should be updated in the city's GIS to improve maintenance and system enhancement efforts.

Photo credit: Mossbacks Volkssport Club

Implementation

This Plan provides a comprehensive set of pedestrian and bicycle capital improvement projects that, once constructed, will help people walk and bicycle more often for more types of trips. The order in which projects in this Plan are constructed will depend on many factors, including budget and grant availability, community support, and City policies.

The City should regularly revisit the project list to schedule near term projects. There are many factors that can and should affect project implementation, including:

- Any changes 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
- Any 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 Eugene (such as through Envision Eugene, the long-term land use planning project currently underway)
- The pace of development, which will affect which projects are implemented through System Development Charges or developer requirements
- Changes to City staff capacity to manage bicycle and pedestrian projects
- Community input (e.g. through the Bicycle and Pedestrian Advisory Committee or neighborhood groups)
- Directives (policy or otherwise) from elected officials and other governing bodies
- Interest from partners (such as Lane County and ODOT) in implementing projects that are partially or entirely within their jurisdiction

Process for Future Prioritization

The City should revisit pedestrian and bicycle project priorities on an annual basis or more often if opportunities arise. The City should assess its staff resources and available/upcoming funding sources to develop a draft list of potential near-term projects. This list should be refined with input from the Bicycle and Pedestrian Advisory Committee; it is recommended that the BPAC focus one meeting each year to address implementation priorities, and that the general public be actively invited to attend and comment on draft priorities at or in advance of the meeting. Criteria used to develop project priorities are described in Memorandum 2 – Methods for Existing Conditions in Volume II of this Plan.

Cost Estimates

The project cost estimates for recommended projects are described in Appendix A. These estimates were developed based on initial planning-level examples of similar constructed projects and industry averages. These costs were then refined with the assistance of a City of Eugene Principal Civil Engineer. More information about the development and refinement of cost estimates can be

Missing sidewalk segments can make walking much more difficult.

Creating bicycle boulevards will make bicycling easier and more appealing in Eugene.

found in Project Memorandum 6 – Pedestrian and Bicycle System in Volume II of this Plan.

Need for Agency Coordination

This Plan, including the Plan's project lists, does not have any legal or regulatory effect on land or transportation facilities that the City does not own. However, to further Objective #1 of having a pedestrian and bicycle network that provides continuous direct routes and convenient connections between destinations, the planning process evaluated some facilities that are not under the City's jurisdiction. As such, the Plan includes proposed improvements to non-City facilities. Without additional action by the governmental entity that owns the subject facility or land (i.e., Lane County or the State of Oregon), any project in this Plan that involves a non-City facility is merely a recommendation for connecting the pedestrian and bicycle network. As in most facility planning efforts, moving towards, and planning for, a well- connected network depends on the cooperation of multiple jurisdictions; the Plan is intended to facilitate discussions between the City and its governmental partners as we work together to achieve a well-connected network. The Plan does not, however, obligate its governmental partners to take any action or construct any projects.

Construction of projects that may affect state highway facilities must be coordinated with ODOT and may need to conform to applicable standards and require ODOT approval. Recommendations from this plan that may affect state highway facilities include grade-separated crossings of state highways, bike lanes and sidewalks on state highways, and improvements at intersections on state highways. Construction of facilities on or crossing state highway facilities may also require an agreement between the City and ODOT that identifies responsibility for operating and maintaining the facility. In Eugene, state highway facilities include I-5, I-105, Randy Papé Beltline, Highway 99 (including 6th and 7th Avenues west of Washington Street), and West 11th Avenue west of Randy Papé Beltline.

Construction of facilities that cross railroad facilities will require a Crossing Order from ODOT Rail, and construction of facilities crossing or adjacent to a railroad facility must be coordinated with the private railroad operator as well as ODOT Rail.

Numerous projects in this Plan are on Lane County facilities or on streets that may be affected by future high-capacity transit development. In all cases, the City of Eugene should work closely with Lane County and/or Lane Transit District to implement these recommendations.

Potential Funding Sources

Projects in the Pedestrian and Bicycle Master Plan can be funded from a variety of local, state, and federal sources. Most state funding programs specific to pedestrian and bicycle facilities are competitive grant programs, and each has different eligibility requirements. Locally-administered programs also have different guidelines for how revenues may be spent. In order to implement the projects in this Plan, the City will need to be creative and persistent about cobbling together monies from many sources or developing a dedicated funding stream altogether (e.g. sidewalk infill). Tables 3 and 4, below, summarize state/federal and local existing funding sources that may be used to implement projects in this Plan. A detailed assessment of current and potential funding sources can be found in Project Memorandum 7 – Funding for the Bicycle and Pedestrian System (in Volume II).

Table 3: State and Federal Funding Sources for Pedestrian and Bicycle Projects

Source	Description	Eligible Project Types	Managing Agency
Highway Safety Improvement Program	Projects designed to achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways.	On- or off-street projects seeking to reduce serious crashes at highway or railway crossings or on rural roads	Oregon Department of Transportation (ODOT)
New Freedom Initiative	Provides capital and operating costs for transportation services and facility improvements that exceed those required by the Americans with Disabilities Act.	Accessibility projects	US Department of Health and Human Services
ODOT Bicycle and Pedestrian Grants	Biannual competitive grant program for design and construction of pedestrian and bicycle facilities.	Primarily transportation facilities, must be in public right-of-way	ODOT
ODOT Flexible Federal Funds	The intent of this program is to fund sustainable, non-highway transportation projects, connectivity, the use and the overall operation of the transportation system.	Transit, bicycle and pedestrian, and Transportation Demand Management (TDM) projects	ODOT
Oregon Parks and Recreation Local Government Grants	Annual competitive grant program for the acquisition, development, and major rehabilitation projects for public outdoor park and recreation areas and facilities.	Recreation facilities in public parks or designated recreation areas	Oregon Parks and Recreation Department (OPRD)
Recreational Trails Program	Annual competitive grant program; provides funding to states to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses.	Recreation facilities on public property	OPRD
Safe Routes to School	Annual competitive grant program designed to reduce barriers and hazards to children walking or bicycling to school.	Transportation facilities in public right-of-way, parks, or on school property	ODOT
Transportation Enhancements	Biannual competitive grant program; pedestrian and bicycle improvements are one of four project types that are eligible for this program.	Facilities primarily designed for transportation; must be on public property or long-term easement	ODOT
Urban Trails	Designed to address funding gap for bicycling and walking transportation projects outside of roadways. One-time funding program from 2010; future funding is uncertain.	Transportation facilities primarily outside of public right-of-way; must be on public property or long-term easement	ODOT

Table 4: Local Funding Sources for Pedestrian and Bicycle Projects

Source	Description	Eligible Project Types	Managing Agency
Community Development Block Grants	City-managed federal funds from the Federal Department of Housing and Urban Development that can be used to make improvements in low and moderate income neighborhoods, eliminate barriers for people with disabilities, create jobs, and provide affordable housing.	Projects that make the existing transportation system accessible to people with disabilities and projects that improve quality of life or economic development in low income neighborhoods.	City of Eugene
Local Fuel Tax	Local fuel tax intended to provide for street operation, maintenance, and preservation activities.	Under current city policy, the local fuel tax will benefit bicycling and walking only through maintenance of existing facilities.	City of Eugene
Local Improvement Districts/ Assessments	In Eugene, when a street or alley is initially improved to City standards, adjacent property owners are assessed a portion of the costs via development of a local improvement district (LID). This mechanism has also been used in the past to fund sidewalk infill in Eugene.	Urban standards upgrades; sidewalk infill	City of Eugene
Neighborhood Transportation Livability Fund	Formerly called the Traffic Calming Program	Traffic calming projects and pedestrian and bicycle enhancements on the local street network.	City of Eugene
Privately Engineered Public Improvements	Privately Engineered Public Improvements (PEPIs) are typically provided by developers or outside agencies. Common improvements through PEPIs include streets and sidewalks.	Planned public facilities within or close to the area of a private development.	City of Eugene
State Highway Trust Fund	Eugene receives its share of state gas tax and weight mile tax receipts from the State Highway Trust Fund. These monies are currently designated by the City primarily for transportation planning and road operations and maintenance.	Under current city policy, these funds will benefit bicycling and walking through maintenance of existing facilities and through the work of transportation planning staff.	City of Eugene
Street Repair Bond Measure	A bond measure to fix city streets was approved by Eugene voters in November 2008, funding a total of $35.9 million over five years dedicated to 32 specific street projects and at least $350,000 per year allocated to rehabilitation of shared use paths.	Projects designated for repair through the bond measure	City of Eugene
Surface Transportation Program – Urban (STP-U)	Federal funding available to metropolitan areas of at least 200,000 people for transportation projects and planning that can include bicycle and pedestrian components.	A broad range of transportation plans and projects that are consistent with the Regional Transportation Plan. Under existing City policy, the City applies for STP-U funding for infrastructure preservation that can include both streets and off-street paths. The City has also applied for preservation funds with some of the money set aside of pedestrian and bicycle improvements that will be made in concert with the preservation project.	Central Lane Metropolitan Planning Organization
Transportation System Development Charges	Transportation SDCs in Eugene are charges to developers based on trip generation rates and traffic impacts from a proposed project. They can be used to pay for both on- and off-street facilities.	Onsite or offsite transportation infrastructure related to impacts on the transportation system from new development.	City of Eugene
Urban Renewal Areas (Tax Increment Financing)	Eugene has two existing URAs; of these, the Riverfront Plan Area's priorities are well aligned with this Plan, including Eugene Water and Electric Board (EWEB) site redevelopment as well as connecting downtown, the University of Oregon and the Riverfront.	Projects within the Riverfront Plan Area URA that are expected to increase property values	City of Eugene

Development Code

Changes to the City's existing development code will help the City implement the policies and projects in this Plan. This Plan recommends amendments for the City's consideration; however, it is important to note that adoption of the Plan does not obligate adoption of the recommended amendments to the development code. Complete text of recommended code amendments in a format appropriate for adoption can be found in Project Memorandum 10 – Development Code (in Volume II).

Recommended changes will:

- Streamline and improve bicycle parking requirements, including simplifying bicycle parking use categories, increasing bicycle parking for multi-family housing, and creating bicycle parking requirements for transit stations. Minimum short- and long-term bicycle parking requirements were created for simplified use categories.
- Allow bicycle parking and pedestrian amenities to be placed within required building setbacks in order to allow developers more flexibility to install bicycle and pedestrian facilities if desired.
- Ensure that preserving pedestrian and bicycle connections are considered when public right-of-way is eliminated through the vacation of existing streets or easements.
- Require additional bicycle parking installation if a developer claims an adjustment that reduces the number of required vehicle parking spaces because they can demonstrate that alternatives to driving will result in lower vehicle demand for their site.
- Require that school districts receive notification as part of the subdivision review process to ensure that Safe Routes to School staff have the ability to review and comment on impacts to bicycle and pedestrian access to schools before plans are approved.

Bicycle parking facilities make arriving by bike a more feasible option.

Photo credit: Wind Home Photography

Appendix A: System Tables

Introduction

Appendix A contains detailed information about recommended projects as shown on Maps 1 – 10 in the Master Plan (Volume I), including facility name, project extent, length of project, and cost estimate for each project. Each project has a unique identification number that corresponds to its segment ID in the GIS databases.

Project Priorities

Projects included in this Plan have been assigned one of two rankings: 20-year projects, which are projects the City intends to implement within the 20-year horizon of this plan, and future projects, which will be implemented beyond the 20-year planning horizon of this Plan. These tiers were based on the City's assessment of how much funding can realistically be obtained annually over twenty years.

Cost Estimate Development

The cost estimates provided in this Appendix A represent planning-level construction and maintenance cost estimates. They are intended to provide the City with an "order of magnitude" estimate for the project cost so that projects can be prioritized and so that next steps can be taken (including soliciting funding, preliminary and final design, etc.).

Cost estimates shown are fully burdened costs that include design/engineering, administration, construction, and contingency costs.

For more information about how these cost estimates were developed and what factors may affect final construction costs, see Project Memorandum 6 – Pedestrian and Bicycle System in Volume II of this plan.

Please note the following about project cost estimates:

- Right-of-way acquisition is not included in cost estimates.
- High cost alternatives were used to generate these estimates. For example, Volume II of this Plan identifies five levels of intensity for bicycle boulevards from less expensive Level 1 to more expensive Level 5. Estimates use the high-end to establish an expectation of future costs. Many projects will be implemented as part of a street project which may lower costs or the project scope may include fewer components than the estimates indicate.
- Where a roadway is one-way for only part of a recommended project, the entire project has been estimated assuming two-way facilities.
- Costs have been rounded to the nearest thousand dollars.
- Costs are provided in 2010 dollars.
- Adjustments were made on a project-by-project basis where known conditions exist that will increase costs such as extreme topography or bridge expansion.
- For projects that currently have a rural two-lane profile, and for which an upgrade to full urban standards can reasonably be expected to be part of the TSP update that is currently underway, no cost estimate has been provided because a stand-alone bicycle/pedestrian cost estimate does not accurately reflect how the project will be implemented. Likewise, for new extensions of roadways, like the Roosevelt Extension, no cost estimates for bike lanes were developed. These projects are identified as "See TSP" in the cost column of each table where these projects exist.

Sidewalk Improvements

A total of 38.9 miles of sidewalk projects have been recommended. Fully burdened project construction costs are listed below by project. Project costs were estimated as an "infill" installation where curb and gutter already exist.

Sidewalk infill projects are by nature piecemeal, and segments along the same street have been combined in Table 1 for clarity to represent the total length of sidewalk infill along that facility by side of the street.

Table A-1: Sidewalk Improvements

Project ID	Name/Location	Extent	Side of Street	Length (miles)	Cost	Priority Tier
533	15th Avenue	Eastern terminus to Buck Street	North side	0.09	$37,000	20-Year
516	16th Avenue	Riverview Street to Augusta Street	North side	0.05	$19,000	20-Year
519	16th Avenue	Riverview Street to Augusta Street	South side	0.05	$19,000	20-Year
532	Acorn Park Street	Acorn Park to Buck Street	West side	0.13	$77,000	20-Year
531	Acorn Park Street	Fern Ridge Trail to Acorn Park	West side	0.22	$88,000	20-Year
346	Agate Street/Kimberly Drive	E 31st Avenue to Dogwood Drive	North side	0.21	$128,000	20-Year
342	Amazon Parkway	E 20th Avenue to E 26th Avenue	West side	0.47	$189,000	Future
344	Amazon Parkway	E 27th Avenue to sidewalk north of E 29th Avenue	South side	0.21	$85,000	Future
515	Augusta Street	Gap south of 16th Avenue	East side	0.05	$22,000	20-Year
435	Avalon Street	Echo Hollow Road to eastern terminus	South side	0.23	$95,000	Future
324	Bailey Hill Road	Bertelsen Road to east of S Louis Lane	South side	0.63	See TSP	20-Year
326	Bailey Hill Road	W 5th Avenue to W 7th Avenue	East side	0.13	$54,000	Future
325	Bailey Hill Road	W 5th Avenue to W 7th Avenue	West side	0.15	$59,000	Future
295	Bertelsen Road	Roosevelt Boulevard to W 1st Avenue	East side	0.31	$127,000	Future
286	Bertelsen Road	W 18th Avenue to city limits	East side	1.26	See TSP	20-Year
285	Bertelsen Road	W 18th Avenue to city limits	West side	1.27	See TSP	20-Year
292	Bertelsen Road	W 1st Avenue to Henry Court	West side	1.11	$560,000	20-Year
293	Bertelsen Road	W 1st Avenue to W 13th Avenue	East side	0.84	$424,000	20-Year
315	Bethel Drive	Highway 99 to Roosevelt Boulevard	North side	1.01	$408,000	Future
314	Bethel Drive	Highway 99 to Roosevelt Boulevard	South side	1.60	$648,000	20-Year
322	Chambers Street	North of Em Ray Drive	East side	0.02	$8,000	Future
319	Chambers Street	Over railroad	West side	0.02	$8,000	Future
364	City View Street	W 27th Avenue to W 28th Avenue	West side	0.05	$27,000	20-Year
316	Coburg Road	North of Game Farm Road to start of Coburg Loop	East side	0.04	$17,000	20-Year
283	County Farm Road	Northern terminus to Coburg Road	East side	0.64	$258,000	Future
282	County Farm Road	Northern terminus to Coburg Road	West side	0.73	$296,000	Future
284	Crescent Avenue	Coburg Road to midblock gap	North side	0.27	$110,000	20-Year
289	Dillard Road	Amazon Drive to Hidden Meadows Drive	North side	1.43	$865,000	20-Year
354	Donald Street	E 35th Avenue to E 39th Avenue	West side	0.32	$191,000	20-Year
352	Donald Street	Gap at E 34th Avenue	West side	0.05	$30,000	20-Year
353	Donald Street	Gap south of E 34th Place	West side	0.03	$18,000	20-Year
347	E Amazon Drive	Snell Street gap	East side	0.08	$33,000	20-Year
429	E Tandy Turn/Firwood Way	East side of Tandy Turn, north side of Firwood	East side/ north side	0.13	$54,000	20-Year
290	Fir Lane	Existing to Maurie Jacobs Park	South side	0.04	$18,000	20-Year
288	Fox Hollow Road	Donald Street to Cline Road	South side	0.47	$287,000	Future
442	Friendly Street	Gap north of W 17th Avenue	West side	0.02	$9,000	20-Year
441	Friendly Street	W 17th Avenue to W 18th Avenue	West side	0.05	$19,000	20-Year
280	Gilham Road	Mirror Pond Way to Ayers Road	West side	0.53	$214,000	Future
281	Gilham Road	Mirror Pond Way to Honeywood Street	East side	0.58	$234,000	Future
340	Goodpasture Island Road	Happy Lane to Stonecrest Drive	North side	0.18	$74,000	20-Year
305	Goodpasture Island Road	West side of overpass to Happy Lane	North side	0.31	$870,000	20-Year

Project ID	Name/Location	Extent	Side of Street	Length (miles)	Cost	Priority Tier
304	Goodpasture Island Road	West side of overpass to Happy Lane	South side	0.29	$822,000	20-Year
406	Green Hill Road	Barger Drive to Firestone Drive	East side	0.30	See TSP	Future
521	Green Hill Road	Firestone Drive to Royal Avenue	East side	0.67	See TSP	20-Year
366	Hawkins Lane	Gap north of Park Forest Drive	East side	0.05	$32,000	Future
365	Hawkins Lane	Park Forest Drive to W 25th Avenue	East side	0.02	$14,000	Future
367	Hawkins Lane	S Lambert Street to W 18th Avenue	West side	0.36	$217,000	Future
313	Highway 99 Y	Roosevelt Boulevard to Garfield Street	North/East side	0.99	$804,000	20-Year
312	Highway 99 Y	Roosevelt Boulevard to Garfield Street	South/West side	1.04	$842,000	20-Year
432	Hilliard Lane	Lund Drive to River Road	South side	0.25	$100,000	20-Year
351	Hilyard Street	E 36th Place to Dillard Road	East side	0.17	$101,000	Future
428	Holly Avenue	Tabor Street to Gilham Road	South side	0.35	$141,000	Future
279	Howard Avenue	N Park Avenue to River Road	North side	0.85	$344,000	Future
278	Howard Avenue	N Park Avenue to River Road	South side	0.89	$359,000	Future
272	Hunsaker Lane	River Road to Beltline Road	South side	1.05	See TSP	20-Year
427	Hyacinth Street	Irvington Drive to Irving Road	West side	0.81	$326,000	20-Year
273	Irving Road	Across NW Expressway	North side	0.23	$92,000	20-Year
274	Irving Road	Across NW Expressway	South side	0.21	$86,000	20-Year
360	Jefferson Street	North of train tracks to 1st Avenue	East side	0.11	$44,000	20-Year
358	Jefferson Street	North of W 25th Avenue	East side	0.07	$60,000	20-Year
357	Jefferson Street	North of W 25th Place	West side	0.02	$16,000	20-Year
355	Jefferson Street	North of W 28th Avenue	West side	0.03	$23,000	20-Year
359	Jefferson Street	South of W 24th Avenue	West side	0.03	$21,000	20-Year
356	Jefferson Street	W 25th Place to W 26th Place	East side	0.05	$37,000	20-Year
433	Lake Drive	Howard Avenue to Horn Lane	West side	0.41	$132,000	20-Year
323	Lorane Highway	Chambers Street to Crest Drive	North side	0.14	$84,000	Future
275	Maxwell Road	Gap from NW Expressway bridge to Prairie Road	South side	0.16	$95,000	20-Year
276	Maxwell Road	Labona Drive to Prairie Road	North side	0.50	$1,205,000	20-Year
294	N Bertelsen Road	Cross Street to Roosevelt Boulevard	West side	0.14	$58,000	Future
438	N Danebo Avenue	Barger Drive to Souza Street	West side	0.16	$63,000	Future
436	N Danebo Avenue	Gap north of Souza Street	East side	0.11	$45,000	Future
437	N Danebo Avenue	Gap south of Barger Drive	East side	0.08	$34,000	Future
298	N Danebo Avenue	Gap south of Roosevelt Boulevard	East side	0.16	$95,000	20-Year
297	N Danebo Avenue	Gap south of Roosevelt Boulevard	West side	0.02	$8,000	20-Year
300	N Danebo Avenue	Pacific Ave to Fern Ridge Path	West side	0.42	$170,000	Future
299	N Danebo Avenue	Train tracks to Fern Ridge Path	East side	0.69	$279,000	Future
296	N Danebo Avenue	Unthank Avenue to end of gap	West side	0.06	$26,000	20-Year
541	N Garden Way	Various locations south of Harlow	West side	0.15	$60,000	20-Year
336	N Terry Street	Trevon Street to Trevon Street	East side	0.20	$80,000	Future
341	Norkenzie Road	Linda Avenue to Donovan Drive	West side	0.04	$14,000	Future
434	Park Avenue	Howard Avenue to Northwest Expressway	East side	0.49	$199,000	20-Year
362	Polk Street	South of W 2nd Avenue	East side	0.03	$13,000	20-Year
337	Prairie Road	Irving Road to Highway 99	East side	0.92	$370,000	Future
338	Prairie Road	Kaiser Avenue to Federal Lane	East side	0.30	$120,000	20-Year
277	Prairie Road	Maxwell Road to Highway 99	West side	0.04	$14,000	Future
535	Queens Way	Cal Young Road to Buena Vista Elem.	East side	0.06	$23,000	20-Year
320	River Road	Chambers Connector	West side	0.04	$16,000	Future
518	Riverview Street	Gap north of 16th Avenue	West side	0.01	$7,000	20-Year
330	Roosevelt Boulevard	Gap west of Maple Street	South side	0.05	$22,000	Future
328	Roosevelt Boulevard	N Danebo Avenue to N Bertelsen Road	South side	0.72	$290,000	Future
334	Seneca Road	Gap south of 5th Avenue	East side	0.31	$126,000	20-Year

Project ID	Name/Location	Extent	Side of Street	Length (miles)	Cost	Priority Tier
335	Seneca Road	North of W 7th Place	West side	0.06	$23,000	20-Year
331	Seneca Road	Roosevelt Boulevard to railroad	East side	0.19	$78,000	Future
332	Seneca Road	W 1st Avenue to gap south of W 5th Avenue	West side	0.36	$256,000	20-Year
333	Seneca Road	W 1st Avenue to railroad	East side	0.07	$29,000	20-Year
267	Spring Creek Drive	River Road to Scenic Drive	South side	0.39	$157,000	20-Year
339	Valley River Drive	Valley River Way to Goodpasture Island Road	South side	0.23	$743,000	Future
431	Valley River Path connector	East Bank Trail to Valley River Drive	N/A	0.05	$31,000	20-Year
430	Valley River Way	Valley River Drive to North Bank Path	East side	0.12	$70,000	20-Year
309	W 11th Avenue	Gap between Commerce Street and Bertelsen Road	South side	0.15	$60,000	20-Year
327	W 11th Avenue	Gap west of Bailey Hill Road	North side	0.03	$13,000	20-Year
310	W 11th Avenue	Green Hill Road to Terry Street	North side	1.01	$407,000	20-Year
311	W 11th Avenue	Green Hill Road to Terry Street	South side	1.03	$417,000	20-Year
308	W 11th Avenue	Near Bertelsen Road	North side	0.18	$74,000	20-Year
307	W 11th Avenue	West of Obie Street	North side	0.24	$99,000	20-Year
306	W 11th Avenue	West of Obie Street	South side	0.03	$13,000	20-Year
440	W 15th Avenue	Chambers Alley to Chambers Street	North side	0.03	$12,000	20-Year
287	W 18th Avenue	Bertelsen Road to Wester Drive	South side	1.00	$403,000	Future
271	W 24th Avenue	Friendly Street to Madison Street	North side	0.13	$77,000	20-Year
270	W 24th Avenue	Monroe Alley to Monroe Street	South side	0.03	$19,000	20-Year
363	W 24th Avenue	West of Jefferson Street	South side	0.04	$22,000	20-Year
268	W 24th Street	Gap at Adams Street	South side	0.07	$42,000	20-Year
301	W 29th Avenue	Washington Street to Lincoln Street	North side	0.06	$29,000	20-Year
302	W 29th Avenue	Washington Street to Lincoln Street	South side	0.08	$38,000	20-Year
269	W 2nd Avenue	Gap west of Chambers Street	South side	0.05	$19,000	Future
349	W Amazon Drive	Snell Street to Larch Street	West side	0.09	$35,000	20-Year
348	W Amazon Drive	Snell Street to Martin Street	West side	0.33	$135,000	20-Year
530	Warren Street	Timberline Drive to Summit Terrace Drive	East side	0.31	$247,000	20-Year
439	Westleigh Street	Gap between Bailey Hill Road and accessway	South side	0.03	$13,000	20-Year
350	Willamette Street	W 39th Avenue to UGB	West side	1.22	$737,000	20-Year
			Grand Total	**38.86**	**$19,106,000**	
			20-Year Total	**25.15**	**$12,794,000**	

Accessway Improvements

A total of 1.6 miles of accessway projects have been recommended. Cost estimates include clearing and grading a 12' corridor, concrete paving (8'), and ADA curb ramps (2 every 400') plus 25% contingency. Fully burdened project construction costs are listed below by project.

Table A-2: Accessway Improvements

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
536	28th Avenue Connector	Lincoln Street across Willard School	0.13	$103,000	Future
263	Avalon Street	N Terry Street to eastern terminus	0.23	$187,000	20-Year
261	Awbrey Park Elementary School	Lynbrook Drive to Spring Creek Drive	0.21	$166,000	20-Year
522	Bristol Street Connector	Sylvan Street to Augusta Street	0.15	$119,000	20-Year
265	Central Boulevard Connector	Between Laurelwood Golf Course and E 29th Avenue	0.05	$40,000	20-Year
387	Deertrail Path Connector	Dellwood Drive to Lawrence Street	0.06	$49,000	Future
472	E 25th Avenue Connector	Gap east of University Street	0.01	$9,000	20-Year
254	Ellen Avenue Connector	Greinier Street to Lambert Street	0.03	$25,000	20-Year
477	Hendricks Park Connector	Elk Avenue to Hendricks Park	0.03	$27,000	Future
259	Holly Avenue Connector	Delta Oaks Drive to Holly Avenue	0.02	$17,000	Future
478	Hyacinth Street	Northern terminus to Argon Avenue	0.08	$65,000	Future
256	Lincoln Street	W 30th Avenue to W 31st Avenue	0.08	$62,000	20-Year
373	Polk/Grand Connector	Polk Street to Grand Street	0.11	$86,000	Future
537	Ruth Bascom Connector	Coburg Road to High Street (along RR)	0.07	$58,000	Future
260	Sheldon Park Connector	Gilham Road to Benson Lane	0.17	$133,000	20-Year
258	Spyglass Connector	Spyglass Drive to Greenview Street	0.06	$49,000	Future
255	W 27th Avenue	Madison Street to Jefferson Street	0.07	$53,000	20-Year
		Grand Total	**1.56**	**$1,248,000**	
		20-Year Total	**1.19**	**$955,000**	

Shared-Use Path Improvements

A total of 13.8 miles of shared-use projects have been recommended. Cost assumptions include site demolition, clearing (25' width), excavating (16' width), erosion controls, base course (13' width), concrete (12' width), and shoulder treatments including lighting plus 40% contingency. Fully burdened project construction costs are listed below by project.

Table A-3: Shared-Use Path Improvements

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
228	12th Avenue connector	Olive Street to Oak Street	0.15	$339,000	20-Year
403	15th Avenue Connector	15th Avenue to Franklin Boulevard	0.04	$98,000	20-Year
500	30th Avenue to Amazon Path Connector	Gap south of Amazon Parkway	0.02	$36,000	20-Year
249	Amazon Drive footbridge	Replacing existing footbridge	0.01	$28,000	20-Year
529	Amazon Path Connector	Amazon Path to 28th Street	0.09	$200,000	20-Year
221	Arbor Drive	Western terminus to West Bank Path	0.05	$118,000	20-Year
196	Avalon Street	Candlelight Drive to N Danebo Avenue	0.11	$240,000	20-Year
225	Avalon Street connector	Legacy Street to Amazon Channel	0.15	$346,000	20-Year
243	Beltline Path	Roosevelt Boulevard south to 11th Ave	1.11	$1,684,000	20-Year
462	Chad Drive to I-5 connector	Chad Drive western terminus to I-5 Path	0.47	$894,000	20-Year
368	Deertrail Path	Sundial Street to Monroe Street	0.34	$651,000	Future
481	Division Avenue	Edgewood Drive to Beaver Street	0.54	$1,015,000	20-Year
17	E 30th Avenue	Agate Street to LCC	1.63	$2,465,000	Future

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
21	E 30th Avenue	Hilyard Street to Agate Street	0.72	$1,354,000	20-Year
232	Fern Ridge Path #2	Amazon Channel from Green Hill Road to Royal Avenue	0.27	$502,000	20-Year
199	Fern Ridge Path #3	West of Green Hill Road along Amazon Channel	0.95	$1,789,000	20-Year
246	Fern Ridge Path channel crossing 1	Crossing Amazon Channel south of Royal Avenue	0.01	$34,000	20-Year
247	Fern Ridge Path channel crossing 2	Crossing south of 11th Avenue and east of Greenhill Road	0.02	$56,000	20-Year
248	Fern Ridge Path channel crossing 3	Crossing Amazon Channel north of UPRR tracks	0.03	$70,000	20-Year
229	Fern Ridge Path Connector	Arthur Street to Fern Ridge Path	0.11	$239,000	20-Year
217	Fern Ridge Path Connector #2	Grant Street to Fern Ridge Path connector	0.02	$50,000	20-Year
216	Fern Ridge Path Connector #3	Buck Street northern terminus to Fern Ridge Path	0.04	$92,000	20-Year
230	Fern Ridge Path connector #4	Murin Street to Fern Ridge Path	0.05	$106,000	20-Year
250	Fern Ridge Path Connector #5	Fern Ridge Path to 11th Avenue	0.07	$148,000	20-Year
233	Fern Ridge Path extension to Avalon/ Green Hill Road	Green Hill Road to Royal Avenue	0.70	$1,319,000	20-Year
245	Fern Ridge Path to Commerce Street Connector	Northern corner of Commerce Street to Fern Ridge Path	0.10	$1,000,000*	20-Year
448	Fern Ridge Path to Jefferson Alley Path	Fern Ridge Path to Jefferson Alley	0.05	$121,000	20-Year
508	Franklin Boulevard	Alder Street to Onyx Street	0.40	$756,000	20-Year
376	Franklin Boulevard Path	Riverview Street to South Bank Path	0.35	$663,000	20-Year
218	Hansen Lane Connector	River Road to West Bank Path	0.11	$258,000	20-Year
224	Jessen Path	Beltline Path to Green Hill Road	1.85	$2,795,000	20-Year
223	Maynard Avenue Connector	Maynard Avenue eastern terminus to West Bank Path	0.14	$308,000	20-Year
220	McClure Lane Connector	McClure lane eastern terminus to West Bank Path	0.08	$173,000	20-Year
222	Merry Lane	Terminus to West Bank Path	0.18	$408,000	20-Year
197	Monroe/Friendly fairgrounds connector	13th Avenue to 16th Avenue	0.25	$560,000	20-Year
242	Moon Mountain Drive	E 30th Avenue to existing Moon Mountain southern terminus	0.77	$1,455,000	Future
227	North Bank Path Connector	Valley River Way to North Bank Path	0.01	$32,000	20-Year
454	Oakmont Way to I-105 Crossing connector	Oakmont Way to I-105 Crossing	0.12	$278,000	Future
501	Rasor Park Connector	River Road to West Bank Path	0.12	$270,000	20-Year
377	South Bank Path	Garden Avenue to railroad underpass	0.26	$500,000	20-Year
211	Spring Connector	Central Boulevard to E 30th Avenue	0.22	$495,000	20-Year
219	Stephens Avenue Connector	River Road to Stephens Drive	0.08	$180,000	20-Year
513	Stults Gap Connector	Stults Gap	0.13	$304,000	20-Year
475	W Amazon Drive	Ridgeline Trail to north of Martin Street	0.36	$677,000	20-Year
213	West Bank Path	Owosso Bike Bridge to Formac Avenue	0.37	$707,000	20-Year
231	Wilson Street to Fern Ridge Path	Wilson Street to Fern Ridge Path	0.13	$284,000	20-Year
		Grand Total	**13.78**	**$25,097,000**	
		20-Year Total	**10.91**	**$20,248,000**	

**Cost based on previous scoping work.*

Grade-Separated Crossing Improvements

A total of seven grade-separated projects have been recommended, with an approximate total length of 0.9 miles. For the purposes of cost estimation, grade-separated crossings were assumed to be for pedestrian/bicycle use only, and 14' in width. Cost estimates were based on similar local projects and industry standard rates, and were then compared against several Eugene-area projects. Annual maintenance cost estimates have not been provided because the specific designs vary.

Table A-4: Grade-Separated Crossings

Project ID	Name/Location	Length (miles)	Cost	Priority Tier
14	Avalon Street over Randy Pape Beltline	0.09	$3,756,000	Future
463	Beltline crossing at I-5	0.24	See TSP	20-Year
13	Bethel Drive to N Park Avenue over train tracks	0.23	$8,826,000	Future
15	I-105 crossing at Sorrel Way City Park	0.13	$4,996,000	Future
12	Park Avenue overpass over Randy Pape Beltline	0.09	$4,110,000	20-Year
8	Rail crossing at Alder Street	0.11	$3,646,000	20-Year
			Grand Total: $25,334,000	
			20-Year Total: $7,756,000	

Bike Lanes

A total of 36.2 miles of bike lane projects have been recommended. Bike lane costs assume installation on both sides of the roadway and no road widening. Removal of striping, re-striping, and installing pavement markings and wayfinding signs are all included in the estimate as is a 25% contingency. Fully burdened project construction costs are listed below by project.

Table A-5: Bike Lanes

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
506	13th Avenue	Chambers Street to Jefferson Street	0.81	$104,000	20-Year
28	Bailey Hill Road	S Bertelsen Road to UGB	0.88	See TSP	20-Year
70	Bailey Hill Road	W 5th Avenue to W 7th Avenue	0.15	$23,000	20-Year
71	Bailey Hill Road	W 7th Avenue to W 11th Avenue	0.27	$35,000	20-Year
42	Beaver Street	Lone Oak Avenue to West Bank Path	0.23	See TSP	20-Year
45	Bertelsen Road	W 18th Avenue to Bailey Hill Road	0.57	See TSP	20-Year
61	Bethel Drive	Highway 99 to Roosevelt Boulevard	1.66	See TSP	20-Year
48	Broadway	High Street to Alder Street	0.40	$51,000	Future
30	Chambers Street	Graham Drive to Crest Drive	0.64	$83,000	20-Year
445	City View Street	W 11th Avenue W 18th Avenue	0.50	$65,000	20-Year
27	Coburg Road	North of N Game Farm Road to UGB	0.19	See TSP	20-Year
62	Coburg Road	UGB to start of Coburg Loop	0.58	$74,000	20-Year
66	Dillard Road*	Amazon Drive to Skyhawk Way	2.21	$114,000	20-Year
32	E 20th Avenue	Willamette Street to Amazon Parkway	0.14	$21,000	20-Year
38	Fox Hollow	Donald Street to Cline Road	0.49	$63,000	20-Year
538	Garfield Street	Roosevelt Boulevard to W 6th Avenue	0.54	$70,000	20-Year
41	Garfield Street	W 6th Avenue to W 14th Avenue	0.68	$88,000	Future
482	Gilham Road	Ayres Road to terminus	0.61	See TSP	Future
56	Goodpasture Island Road	West side of overpass to Happy Lane	0.34	$44,000	20-Year
58	Green Hill Road	Airport Road to Crow Road	4.48	See TSP	20-Year
63	Highway 99	Roosevelt Boulevard to Garfield Streeet	1.60	$165,000	20-Year
447	Highway 99N	Prairie Road to Barger Drive	0.33	$42,000	20-Year
459	Hilyard Street	E 34th Avenue to Dillard Road	0.44	$57,000	20-Year

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
539	Howard Avenue	N Park Avenue to River Road	0.96	$124,000	20-Year
43	Hunsaker Lane	River Road to Lone Oak Avenue	0.91	See TSP	20-Year
51	Jefferson Sreet	W 5th Avenue to W 28th Avenue	1.90	$196,000	Future
36	Lincoln Street	W 11th Avenue to W 13th Avenue	0.15	$23,000	20-Year
29	Lorane Highway*	Chambers Street to W 29th Avenue	1.35	$70,000	20-Year
455	Oak Patch Road	W 11th Avenue to W 18th Avenue	0.46	$60,000	20-Year
33	Oak Street	E 20th Avenue to E 18th Avenue	0.15	$12,000	20-Year
544	Oakmont Way	Coburg Road to Vernal Street	0.16	$24,000	20-Year
523	Polk Street	W 6th Avenue to W 20th Avenue	1.07	$110,000	20-Year
59	Prairie Road	Maxwell Road to Highway 99	0.11	$17,000	20-Year
502	Roosevelt Extension	Legacy Street to Roosevelt Boulevard	1.38	See TSP	20-Year
400	Royal Avenue	Green Hill Road to existing bike lane	0.88	See TSP	Future
52	Silver Lane	Grove Street to River Road	0.51	$66,000	20-Year
55	Valley River Way**	Valley River Drive to southern terminus	0.36	$46,000	20-Year
39	W 11th Avenue	Green Hill Road to Terry Street	1.05	See TSP	Future
4	W 24th Avenue***	Chambers Street to Jefferson Street	0.83	$107,000	20-Year
404	W 5th Avenue	Bailey Hill Road to Seneca Road	0.36	$47,000	20-Year
57	W 5th Avenue	Seneca Road to W 7th Avenue	0.63	$81,000	Future
54	W 7th Place	Bailey Hill Road to Garfield Street	1.26	$130,000	20-Year
50	Washington Street	W 5th Avenue to W 13th Avenue	0.61	$79,000	20-Year
44	Wilkes Drive	River Road to River Loop 1	1.00	See TSP	20-Year
31	Willamette Street	17th Avenue to 32nd Avenue	1.33	$137,000	20-Year
		Grand Total	**36.16**	**$2,428,000**	
		20-Year Total	**30.01**	**$2,012,000**	

**The recommended treatment for these segments is a bike lane in one direction (uphill) and a shared lane marking in the other direction (downhill). Costs have been adjusted accordingly.*

***Or consider a shared use path*

****Bike lanes from Chambers to Friendly; climbing lane (eastbound) Friendly to Jefferson*

Buffered Bike Lanes

A total of 9.3 miles of buffered bike lane projects have been recommended. Buffered bike lane costs assume installation on both sides of the roadway and no road widening. Removal of striping, re-striping, and installing pavement markings and wayfinding signs are all included in the estimate as is a 25% contingency. Facility is assumed to be 7' wide including a 2' buffer. Fully burdened project construction costs are listed below by project.

Table A-6: Buffered Bike Lanes

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
527	18th Avenue	Chambers Street to Friendly Street	0.61	$106,000	20-Year
484	Coburg Road	Oakmont Way to Oakway Road	0.30	$52,000	20-Year
26	E Amazon Drive*	Hilyard Street to Snell Street	1.28	$178,000	20-Year
23	Harlow Road	Coburg Road to I-5	1.08	$150,000	20-Year
526	River Road	Northwest Expressway to Beacon Drive	4.80	$668,000	20-Year
46	W Amazon Drive*	Hilyard Street to Snell Street	1.21	$168,000	20-Year
		Grand Total	**9.28**	**$1,322,000**	
		20-Year Total	**9.28**	**$1,322,000**	

**Or cycle track*

Cycle Tracks

A total of 5.2 miles of cycle track projects have been recommended. Due to the wide variation in potential designs, cost estimates include standard concrete curb and gutter (both sides), concrete bikeway (9'), wayfinding signs, custom pavement markings, intersection treatments, and a 60% contingency due to potential variation. Fully burdened project construction costs are listed below by project.

Table A-7: Cycle Tracks

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
18	High Street*	E 5th Avenue to E 19th Avenue	1.06	$1,853,000	20-Year
19	Martin Luther King Jr. Boulevard**	Coburg Road to I-5	1.56	$1,360,000	Future
20	Northwest Expressway	Maxwell Road to River Road	2.57	$3,443,000	Future
		Grand Total	**5.19**	**$6,656,000**	
		20-Year Total	**1.06**	**$1,853,000**	

**Project assumed to be a separated, two-way facility on one side of street*

***Project may be a cycle track or a shared use path. Project cost is for cycle track.*

Shared Lane Markings

A total of 8.4 miles of shared lane marking projects have been recommended. Costs estimates include a shared lane marking (every 250') and wayfinding signs (every 400'). A 25% contingency is also included. Fully burdened project construction costs are listed below by project.

Table A-8: Shared Lane Markings

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
369	10th Avenue	Lincoln Street to High Street	0.46	$19,000	20-Year
507	13th Avenue	Jefferson Street to Lincoln Street	0.20	$10,000	20-Year
5	Crocker Road	Irvington Drive to Irving Road	0.86	$36,000	20-Year
409	Dillard Road*	Amazon Drive to Skyhawk Way	2.21	$37,000	20-Year
509	Franklin Boulevard	Onyx Street to Walnut Street	0.60	$25,000	20-Year
456	Friendly Street	W 28th Avenue to Lorane Highway	0.29	$12,000	20-Year
503	High Street	5th to Cheshire Street	0.28	$12,000	20-Year
3	Lorane Highway*	Chambers Street to W 29th Avenue	1.35	$23,000	20-Year
512	Moon Mountain Road	Accessway to Brackenfern Boulevard	0.10	$5,000	20-Year
35	Polk Street	W 20th Avenue to W 24th Avenue	0.33	$14,000	20-Year
540	Quaker Street	W 18th Avenue to Fern Ridge Path	0.38	$16,000	20-Year
505	Stephens Avenue	Stephens Connector to West Bank Path	0.08	$4,000	20-Year
169	Stewart Road	S Bertelsen Road to Bailey Hill Road	0.72	$30,000	20-Year
486	Willamette Street	7th Avenue to 13th Avenue	0.46	$19,000	20-Year
109	Willamette Street	Amtrak Station to E 6th Avenue	0.12	$6,000	20-Year
		Grand Total	**8.43**	**$268,000**	
		20-Year Total	**8.43**	**$268,000**	

**The recommended treatment for these segments is a bike lane in one direction (uphill) and a shared lane marking in the other direction (downhill). Costs have been adjusted accordingly.*

Bicycle Boulevards

A total of 62.4 miles of bicycle boulevard projects have been recommended. There are five levels of bicycle boulevard treatments. Table A-9 includes the following costs for an "average" installation: wayfinding signs (every 400'), pavement markings (every 250'), turning stop signs (4 intersections per mile), median refuge islands (1 per mile), speed humps (every 800'), diverters (1 every two miles) plus a 25% contingency. Fully burdened project construction costs are listed below by project.

Table A-9: Bicycle Boulevards

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
107	15th Avenue	Jefferson Street to Kincaid Street	1.16	$111,000	20-year
469	17th Avenue	Jefferson Street to Alder Street	1.05	$100,000	20-year
93	19th Avenue	Tyler Street to High Street	1.14	$109,000	20-year
524	25th Avenue	Alder Street to Unversity Street	0.29	$35,000	20-year
525	25th Avenue	East of University Street to Emerald Street	0.16	$23,000	20-year
498	27th Avenue	Agate Street to Central Boulevard	0.22	$32,000	20-year
98	31st Avenue	Lincoln Street to Hilyard Street	0.79	$94,000	20-year
386	Adkins/Ione/Best	Coburg Road to Willakenzie Road	0.37	$44,000	20-year
499	Agate Street	24th Avenue to 27th Avenue	0.20	$29,000	20-year
460	Alder Street/Kincaid Street	E 18th Avenue to E 39th Avenue	2.03	$193,000	20-year
162	Arbor Drive	River Road to eastern terminus	0.18	$26,000	20-year
449	Ascot Drive	Harlow Road to Ascot Park Path	0.25	$35,000	20-year
82	Ashbury Drive	Gilham Road to Walton Lane	0.11	$16,000	20-year
471	Augusta Street	Franklin Boulevard/I-5 Ramps to 26th Avenue	0.97	$116,000	20-year
166	Avalon Street	Juhl Street to eastern terminus	0.50	$60,000	20-year
164	Avalon Street	Legacy Street to N Terry Street	0.75	$90,000	20-year
75	Avalon Street	N Danebo Avenue to Haven Street	0.21	$30,000	20-year
165	Avalon Street	Throne Drive to Candlelight Drive	0.14	$20,000	20-year
84	Avengale Drive	Walton Lane to Celeste Way	0.15	$21,000	20-year
167	Berntzen Road	Royal Avenue to Elmira Road	0.25	$30,000	20-year
117	Blair Boulevard	W 2nd Avenue to Monroe Street	0.53	$63,000	20-year
131	Bogart/Satre/Van Duyn	Willakenzie Road to Harlow Road	0.85	$101,000	20-year
141	Bond Lane	Fir Acres Drive to Norkenzie Road	0.38	$46,000	20-year
542	Brittany Street	W 18th Avenue to W 25th Avenue	0.64	$76,000	20-year
91	Broadview Street	Ellen Avenue to Hawkins Lane	0.15	$22,000	20-year
111	Broadway	Charnelton Street to High Street	0.38	$45,000	20-year
110	Broadway	McKinley Street to Charnelton Street	1.70	$162,000	20-year
72	Candlelight Drive	Avalon Street to Royal Avenue	0.51	$60,000	20-year
474	Central Boulevard/E 29th Avenue	27th Avenue to southern terminus	0.40	$48,000	20-year
138	Chad Drive	Erin Way to Coburg Road	0.14	$20,000	20-year
119	Clark Street	Grand Street to Van Buren Street	0.04	$6,000	20-year
123	Clinton Drive	Willagillespie Road to Debrick Road	0.20	$29,000	20-year
146	Copping Street	Owosso Drive to E Howard Avenue	0.28	$34,000	20-year
88	Coventry Way	Brittany Street to Ellen Avenue	0.11	$16,000	20-year
80	Dale Avenue	Downing Street to County Farm Road	0.20	$28,000	20-year
81	Dale Avenue	Riverbend Avenue to Downing Street	0.18	$25,000	20-year
122	Debrick Road	Cal Young Road to Clinton Drive	0.31	$36,000	20-year
134	Delta Oaks Road	Green Acres Road to Holly Avenue	0.08	$12,000	20-year
100	Donald Street	E 32nd Avenue to E 39th Avenue	0.64	$76,000	20-year
101	Donald Street	E 39th Avenue to Fox Hollow Road	1.39	$133,000	20-year
152	Donegal Street/York Street	Irving Road to Ruby Avenue	0.39	$46,000	20-year
108	E 12th Avenue	Oak Street to Hilyard Street	0.45	$54,000	20-year

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
381	E 13th Avenue	Agate Street to Franklin Boulevard	0.18	$26,000	20-year
104	E 15th Avenue	University Street to eastern terminus	0.82	$97,000	20-year
470	E 19th Avenue	Agate Street to Fairmount Boulevard	0.38	$45,000	20-year
172	E 29th Place	University Street to Emerald Street	0.15	$22,000	20-year
458	E 29th Place/Pearl Street/E 28th Avenue/ High Street/E 27th Avenue	Amazon Parkway to Willamette Street	0.47	$56,000	20-year
99	E 33rd Avenue	Willamette Street to Hilyard Street	0.53	$63,000	20-year
494	E 43rd Avenue	Donald Street to Fox Hollow Road	0.49	$59,000	20-year
128	E Tandy Turn	Coburg Road to Firwood Way	0.26	$31,000	20-year
89	Ellen Avenue	Todd Street to Greiner Street	0.14	$20,000	20-year
473	Emerald Street	E 18th Avenue to Laurelwood Golf Course	1.03	$98,000	20-year
137	Erin Way	Snelling Drive to Chad Drive	0.06	$8,000	20-year
451	Fair Oaks Drive	Bedford Way to Eastwood Lane	0.37	$45,000	20-year
125	Fairoaks Drive	Greenview Street to Bedford Way	0.07	$9,000	20-year
407	Ferry Street	E 30th Avenue to E 33rd Avenue	0.22	$32,000	20-year
491	Fillmore Street	W 26th Avenue to w 28th Avenue	0.29	$34,000	20-year
493	Fillmore Street/W 22nd Avenue	W 19th Avenue to Chambers Street	0.28	$34,000	20-year
142	Fir Acres Drive	Western terminus to Bond Lane	0.32	$38,000	20-year
129	Firwood Way	E Tandy Turn to Ascot Drive	0.07	$10,000	20-year
158	Fremont Avenue	N Park Ave to Grove Street	0.30	$35,000	20-year
94	Friendly Street	Fairgrounds to W 28th Avenue	0.98	$117,000	20-year
74	Golden Garden Street	Jessen Drive to Barger Drive	0.50	$59,000	20-year
151	Greenfield Drive/Ferndale Drive	Crocker Road to River Road	0.57	$68,000	20-year
124	Greenview Street	Northern terminus to Fairoaks Drive	0.15	$22,000	20-year
53	Grove Street	Silver Lane to Howard Avenue	0.53	$63,000	20-year
144	Happy Lane	Goodpasture Island Road to accessway	0.09	$13,000	20-year
143	Happy Lane	Russet Drive to Fir Acres Drive	0.07	$9,000	20-year
163	Hilliard Lane	N Park Avenue to eastern terminus	1.06	$101,000	20-year
135	Holly Avenue	Delta Oaks Drive to Gilham Road	0.53	$63,000	20-year
86	Honeywood connector	Honeywood Street to Riverbend Avenue	0.11	$16,000	20-year
85	Honeywood Street	Gilham Road to cul de sac accessway	0.23	$32,000	20-year
161	Horn Lane	Maclay Drive to River Road	0.93	$110,000	20-year
479	Hyacinth Street	Argon Avenue to Irvington Drive	0.14	$20,000	20-year
480	Hyacinth Street	Lynnbrook Drive to southern terminus	0.11	$16,000	20-year
150	Hyacinth Street/Calla Street	Irvington Drive to Irving Road	0.91	$108,000	20-year
139	Jeppesen Acres Road	Gilham Road to Coburg Road	0.69	$82,000	20-year
156	Kourt Drive	Grove Street to River Road	0.58	$69,000	20-year
159	Lake Drive	Howard Avenue to Horn Lane	0.43	$51,000	20-year
132	Lakeview Drive	Gilham Road to Park View Drive	0.34	$41,000	20-year
126	Lariat Drive	Oakway Road to eastern terminus	0.24	$34,000	20-year
114	Lawrence Street	Cheshire Avenue to W 19th Avenue	1.51	$144,000	20-year
467	Lincoln Street	W 27th Avenue to W 29th Avenue	0.19	$28,000	20-year
96	Lincoln Street	W 29th Avenue to W 30th Avenue	0.14	$20,000	20-year
97	Lincoln Street	W 31st Avenue to Crest Drive	0.12	$17,000	20-year
148	Lynnbrook Drive	Lancaster Drive to River Road	0.93	$111,000	20-year
504	Madison Street/Clark Street	Monroe Street to South Bank Path	0.36	$42,000	20-year
488	Mill Street/E 10th Avenue	High Street to E 19th Avenue	0.76	$90,000	20-year
140	Minda Drive	Norkenzie Road to Gilham Road	0.35	$42,000	20-year
95	Monroe Street	Clark Street to W 13th Avenue	0.99	$118,000	20-year
73	N Danebo Avenue	Barger Drive to Avalon Street	0.50	$60,000	20-year
118	N Grand Street	South Bank Path to Clark Street	0.28	$34,000	20-year

Project ID	Name/Location	Extent	Length (miles)	Cost	Priority Tier
157	N Park Avenue	Maxwell Road to Horn Lane	1.30	$124,000	20-year
155	N Park Avenue	Skipper Road to Maxwell Road	0.49	$58,000	20-year
452	Oakmont Way/Sorrel Way/Roan Drive/ Dapple Way	Coburg Road to eastern terminus	0.97	$115,000	20-year
389	Olive Street	W 35th Avenue to W 34th Avenue	0.10	$15,000	20-year
510	Orchard Street	15th Avenue to 19th Avenue	0.30	$36,000	20-year
145	Owosso Drive	River Road to Copping Street	0.38	$45,000	20-year
130	Palomino Drive	Harlow Road to Sorrel Way	0.37	$44,000	20-year
461	Park Avenue	Northwest Expressway to River Road	0.78	$93,000	20-year
133	Park View Drive	Lakeview Drive to County Farm Road	0.35	$42,000	20-year
397	Portland Alley	W 24th Avenue to W 27th Avenue	0.31	$37,000	20-year
106	Potter Street	E 25th Avenue to E 28th Avenue	0.36	$42,000	20-year
374	Robin Hood Avenue/Rio Glen Drive	Western terminus to Debrick Road	0.43	$52,000	20-year
153	Ruby Avenue	Canterbury Street to River Road	0.89	$106,000	20-year
147	Scenic Drive	E Beacon Drive to Wilkes Drive	1.13	$108,000	20-year
485	Scout Access Road	Martin Luther King Jr Boulevard to northern terminus	0.10	$14,000	Future
483	Silver Lane	Park Avenue to Grove Street	0.28	$33,000	20-year
136	Snelling Drive	Benson Lane to Erin Way	0.37	$44,000	20-year
79	Spring Creek Drive	River Road to Scenic Drive	0.53	$63,000	20-year
77	Spyglass Drive	Cal Young Road to southern terminus	0.69	$82,000	20-year
468	Summit Avenue/Sylvan Street	E 19th Avenue to east of Bristol Street	0.63	$76,000	20-year
453	Sunshine Acres Drive/Westward Ho Avenue/Conestoga Way	Harlow Road to N Garden Way	0.75	$89,000	20-year
399	Tyler Street	W 24th Avenue to W 28th Avenue	0.37	$44,000	20-year
105	University Street	E 13th Avenue to E 25th Avenue	0.90	$108,000	20-year
120	Van Buren Street	Clark Street to W 2nd Avenue	0.15	$22,000	20-year
121	Van Buren Street	W 2nd Avenue to Blair Boulevard	0.13	$18,000	20-year
446	W 12th Avenue	Olive Street to western terminus	1.55	$148,000	20-year
92	W 21st/W 22nd Avenue	Hawkins Lane to Chambers Street	1.00	$119,000	20-year
492	W 22nd Avenue	Polk Street and Friendly Street	0.34	$40,000	20-year
398	W 24th Avenue	Portland Alley to Willamette Street	0.06	$9,000	20-year
543	W 25th Avenue	Brittany Street to Hawkings Lane	0.36	$42,000	20-year
489	W 27th Avenue	Jefferson Street to Washington Street	0.07	$10,000	20-year
490	W 27th Avenue	Lincoln Street to Portland Street	0.24	$35,000	20-year
78	W 27th Avenue	Tyler Street to Madison Street	0.42	$50,000	20-year
394	W 27th Avenue	Washington Street to Lincoln Street	0.14	$20,000	20-year
528	W 28th Avenue	Washington Street to Lincoln Street	0.15	$22,000	20-year
388	W 37th Avenue/W 35th Place	Lawrence Street to accessway	0.31	$37,000	20-year
371	W 5th Avenue	Grant Street to Blair Blvd	0.60	$71,000	20-year
476	W Amazon Drive	Fox Hollow Road to Ridgeline Trail	0.41	$49,000	20-year
60	W Amazon Drive	Snell Street to north of Martin Street	0.38	$45,000	20-year
127	W Tandy Turn	Western terminus to Coburg Road	0.23	$33,000	20-year
168	Waite Street	Elmira Road to Roosevelt Path	0.18	$26,000	20-year
83	Walton Lane	Avengale Drive to Ashbury Drive	0.04	$6,000	20-year
393	Washington Street	W 27th Avenue to Lorane Highway/W 29th Avenue	0.18	$25,000	20-year
392	Washington Street	W 29th Avenue to southern terminus	0.13	$19,000	20-year
87	Westleigh Street	Bailey Hill Road to eastern terminus	0.11	$15,000	20-year
		Grand Total	**62.59**	**$7,245,000**	
		20-Year Total	**62.49**	**$7,231,000**	

Intersection Improvements

A total of 42 intersection improvement projects have been recommended for further study. Each should be evaluated separately to determine the barrier and mitigation strategy appropriate in each instance. Neither cost estimates nor annual maintenance cost estimates have been provided because the specific design of intersection improvements can result in widely varying construction and maintenance costs.

Table A-10: Intersection Improvements

Project ID	Name/Location
178	Agate Street/Millrace Drive at Franklin Boulevard
176	Blair Boulevard at 7th Avenue
177	Blair Boulevard at W 6th Avenue
419	Coburg Road and Oakway Road
187	Coburg Road at Harlow Road
186	Coburg Road at Oakmont Way/Sorrell Way
179	E 11th Avenue and Franklin Boulevard
412	E 17th Avenue and Pearl Street
411	E 24th Avenue and Amazon Parkway
183	E 29th Avenue and Amazon Parkway
410	E 30th Avenue and Alder Street
375	E 30th Avenue at University Street
192	Fern Ridge Path at Acorn Park Street
193	Fern Ridge Path at Bailey Hill Road
175	Fern Ridge Path at Bertelsen Road
174	Fern Ridge Path at Chambers Street
184	Fern Ridge Path at City View Street
173	Fern Ridge Path at Danebo
370	Fern Ridge Path at Oak Patch Road
191	Fern Ridge Path at Polk Street
182	Fox Hollow Road at W and E Amazon Drive
408	Franklin Boulevard at E 13th Avenue/Moss Street
195	Garden Way path crossing
421	Green Acres Road and Norkenzie Road
190	Hilyard Street/E Amazon Drive/W Amazon Drive/E 33rd Avenue/E 34th Avenue
189	I-5 path & Harlow Road
420	N Delta Highway and Green Acres Road
185	Pearl Street at E 19th Avenue
417	River Road and E Hilliard Lane
418	River Road and E Howard Avenue
514	River Road and Fir Lane
416	River Road and Horn Lane
426	River Road and Howard Avenue
415	River Road and River Avenue
424	W 12th Avenue and Chambers Street
423	W 12th Avenue and Garfield Street
425	W 18th Avenue and Friendly Street
180	W 19th Avenue at Willamette Street
413	W 1st Avenue and Monroe Street
414	W 5th Avenue and Monroe Street
422	Willagillespie Road and Cal Young Road
188	Willakenzie Road at Cal Young Road

Feasibility Studies

A total of ten feasibility studies have been recommended. The cost estimate provided is for the feasibility study, and not for facility implementation. All studies include a public involvement component.

Table A-11: Recommended Feasibility Studies

Project ID	Name/Location	Cost	Description	Notes/Assumptions
495	Alton Baker Park Path Study	$100,000	Develop lighting and width standards for shared use paths in East Alton Baker Park, particularly east-west routes and connections to the pedestrian and bicycle bridges.	Only consider existing paths.
372	Amazon Park Crossing Study	$25,000	Examine options for creating an east-west path through Amazon Park to connect neighborhoods on either side of the park. Environmental concerns will be addressed in the study.	Initial step would be environmental report determining what options can be considered. The cost of an alignment study will depend on the results of the environmental study.
251	Coburg Road	$20,000	Connect Eugene to the planned Coburg Loop Trail by providing a walking and bicycling facility on Coburg Road. The study must be coordinated with Lane County and the City of Coburg.	Assumes desired cross-section is already known, and that the study would identify right-of-way ownership and plan graphics.
464	Franklin Boulevard	n/a	Examine options for improving bicycle and pedestrian access along Franklin Boulevard from the city limits to Alder Street through planning and development of a multiway boulevard on Franklin as called for in the Walnut Station Mixed Use Center Plan.	Assumes that the cost to design a bikeway facility for Franklin Boulevard would be included in the overall planning and development of a multiway boulevard on Franklin as called for in the Walnut Station Mixed Use Center Plan.
496	Morse Family Farm Trails Study	$30,000	Create recommendations for bicycle and pedestrian circulation through Morse Family Farm to existing and planned routes that connect to the perimeter of the site.	Assumes that the goal of the study is just to link to bikeways connecting to the park. A full site trail study would be more expensive.
226	Rail Alignment westbound	$250,000	Examine the feasibility of a rails-with-trails project for the Union Pacific (UPRR) rail line within the city limits. The study must be coordinated with UPRR and take into consideration plans for continued and expanded rail service to area businesses. The study should examine existing right-of-way, path alignment options, track crossing issues, connections to adjacent sidewalks and bikeways, and next steps for negotiating with UPRR.	Assumes that the City would provide base mapping data (right-of-way width and land ownership), and that the project would include initial negotiations with the railway to gain clarity about alignment options and railway concerns. The outcome would be a preferred alignment, if one is feasible, supported by public involvement and identifying railway concerns and documenting how they will be addressed.
204	West Bank Trail	$200,000	Examine the feasibility of extending the West Bank Path north to Hileman Landing. Right-of-way ownership and environmental concerns should be addressed in the final recommendation.	Includes public involvement, negotiation with landowners, and field work.
205	Willamette McKenzie Trail	$250,000	Examine options for creating a path north along the east side of the Willamette River and east along the McKenzie River as called for in the Regional Transportation Plan. The study should build on the work done by the Willamette River Open Space Vision and Action Plan and look at land ownership, alignment alternatives, environmental issues, and recreational and scenic value.	Includes public involvement, negotiation with landowners, and field work.
212	Millrace Drive to South Bank Path	$100,000	Examine options and develop a recommended facility for completing the South Bank Path gap between the Frohnmayer and Knickerbocker Pedestrian and Bicycle Bridges. The study must consider the existing railroad line.	Same assumption as for segment 226.
534	Westmoreland Park Paths	$30,000	Examine options to create paths through Westmoreland Park to connect to existing on-street walking and bicycling routes that connect to the park.	Assumes that the initial range of pathway options has already been defined.

Maintenance Cost Estimates

Annual maintenance cost estimates have been provided below by facility type. Grade-separated crossings and intersection improvements have not been included because their cost varies widely with design. Cost estimates for sidewalks and accessways have not been included because the maintenance responsibility falls to the adjacent landowner, not the City.

Table A-12: Annual Maintenance Cost Estimates by Facility Type

Facility Type	Annual Maintenance Costs (per mile)
Shared-Use Paths	$30,400
Bike Lanes	$12,000
Buffered Bike Lanes	$19,100
Cycle Tracks - Urban Type	$41,100
Cycle Tracks - Rural Type	$28,200
Shared Lane Markings	$3,000
Bicycle Boulevards	$3,000

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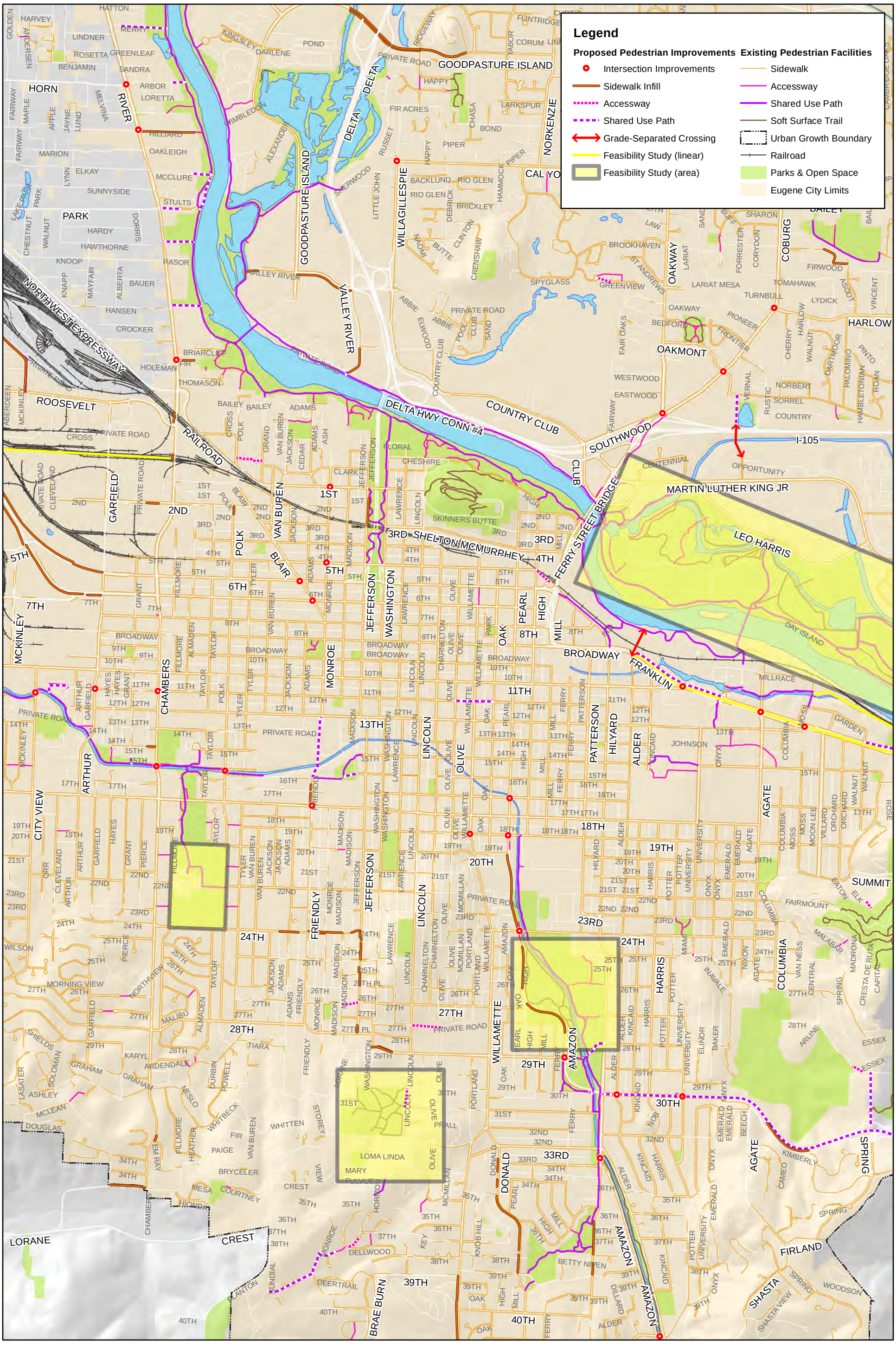
Appendix B: System Maps

Introduction

Appendix B contains maps of recommended pedestrian and bicycle facilities:

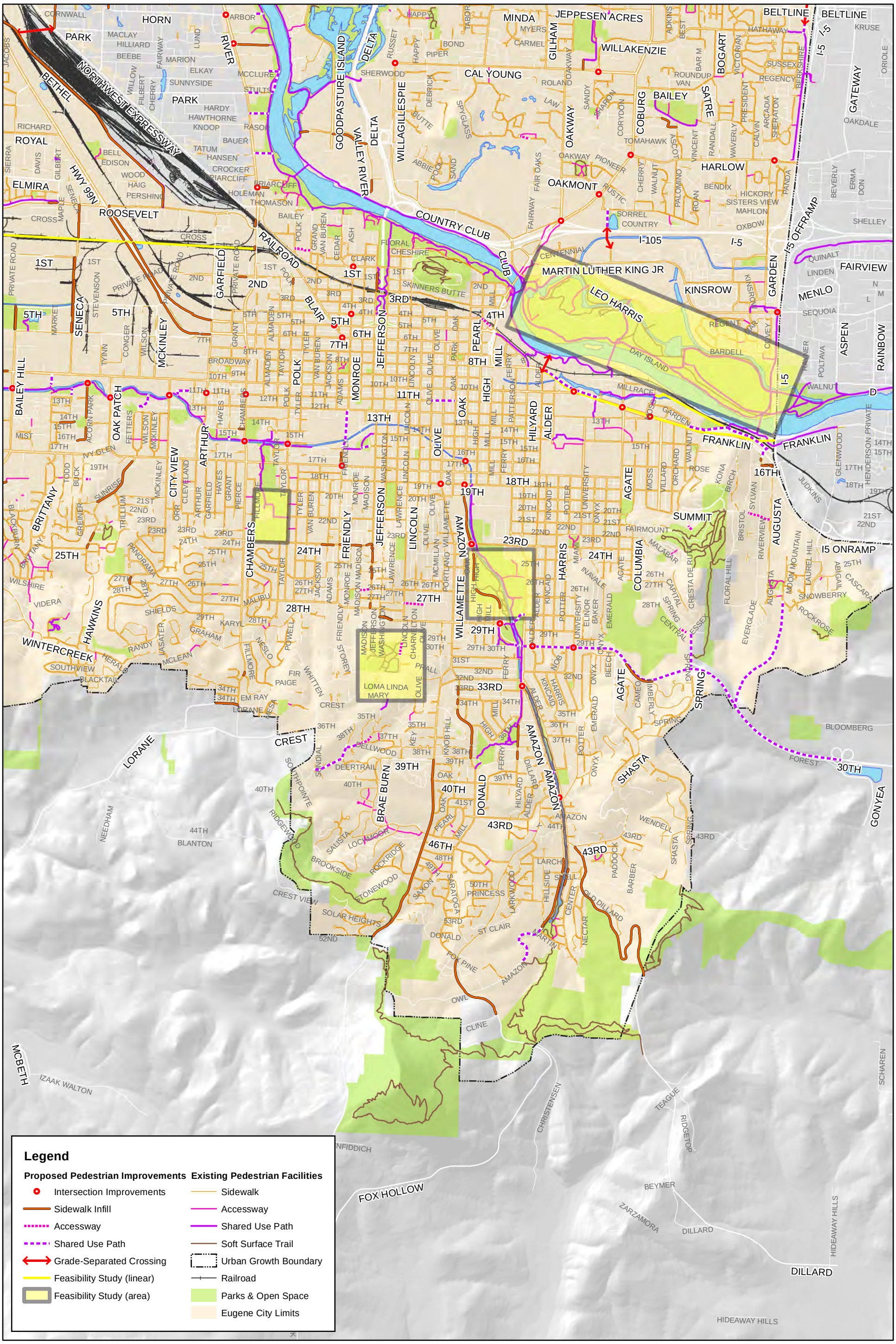
- Map 1: Proposed Pedestrian Network - Central Eugene
- Map 2: Proposed Pedestrian Network - South Hills
- Map 3: Proposed Pedestrian Network - West Eugene/ Bethel/Danebo
- Map 4: Proposed Pedestrian Network - River Road/ Santa Clara
- Map 5: Proposed Pedestrian Network - Northeast Eugene/Willakenzie/Ferry St. Bridge
- Map 6: Proposed Bicycle Network - Central Eugene
- Map 7: Proposed Bicycle Network - South Hills
- Map 8: Proposed Bicycle Network - West Eugene/ Bethel/Danebo
- Map 9: Proposed Bicycle Network - River Road/Santa Clara
- Map 10: Proposed Bicycle Network - Northeast Eugene/ Willakenzie/Ferry St. Bridge



Map 1: Proposed Pedestrian Network - Central Eugene

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

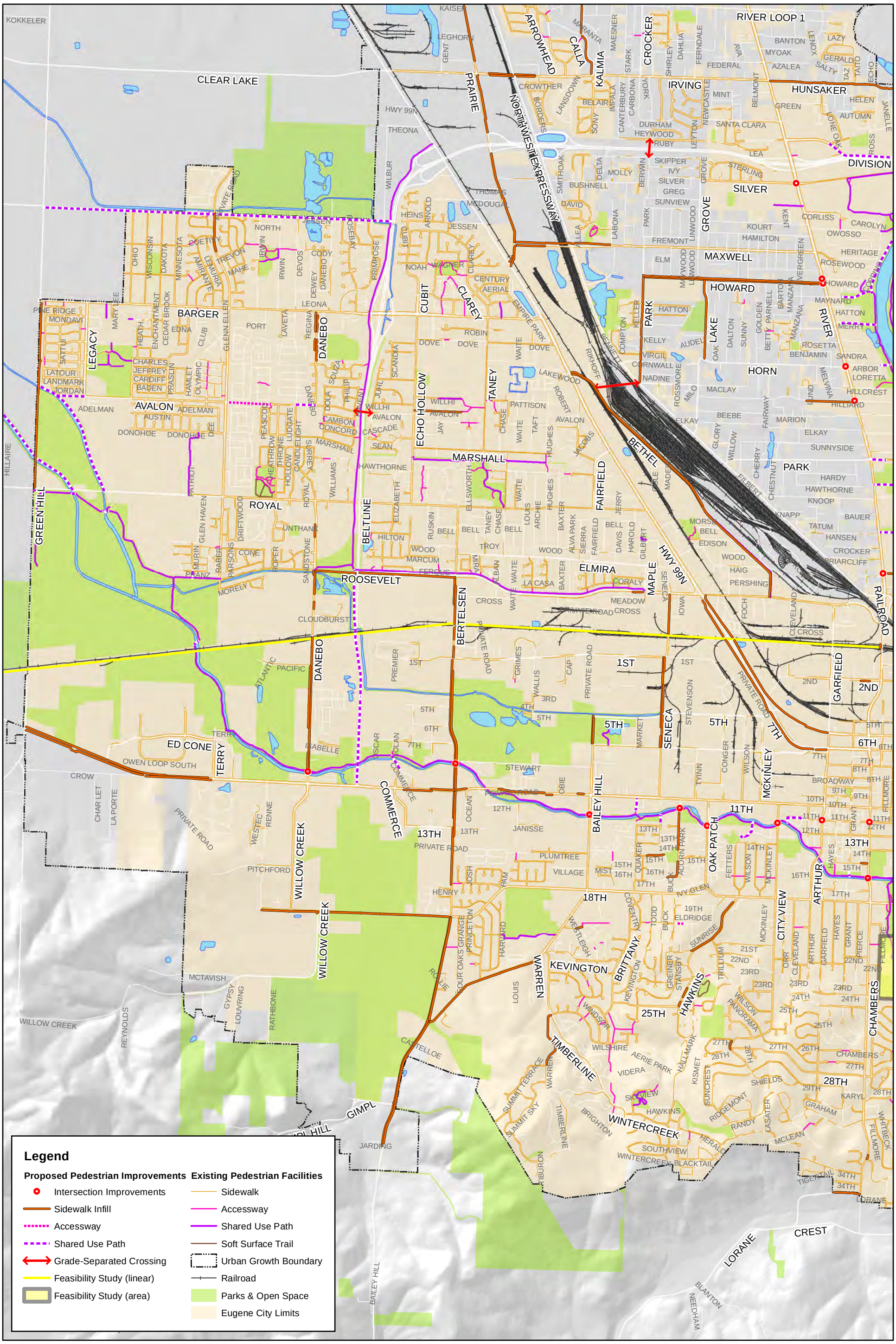
Source: Data obtained from ODOT, LCOG, City of Eugene



Map 2: Proposed Pedestrian Network - South Hills

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

Source: Data obtained from ODOT, LCOG, City of Eugene

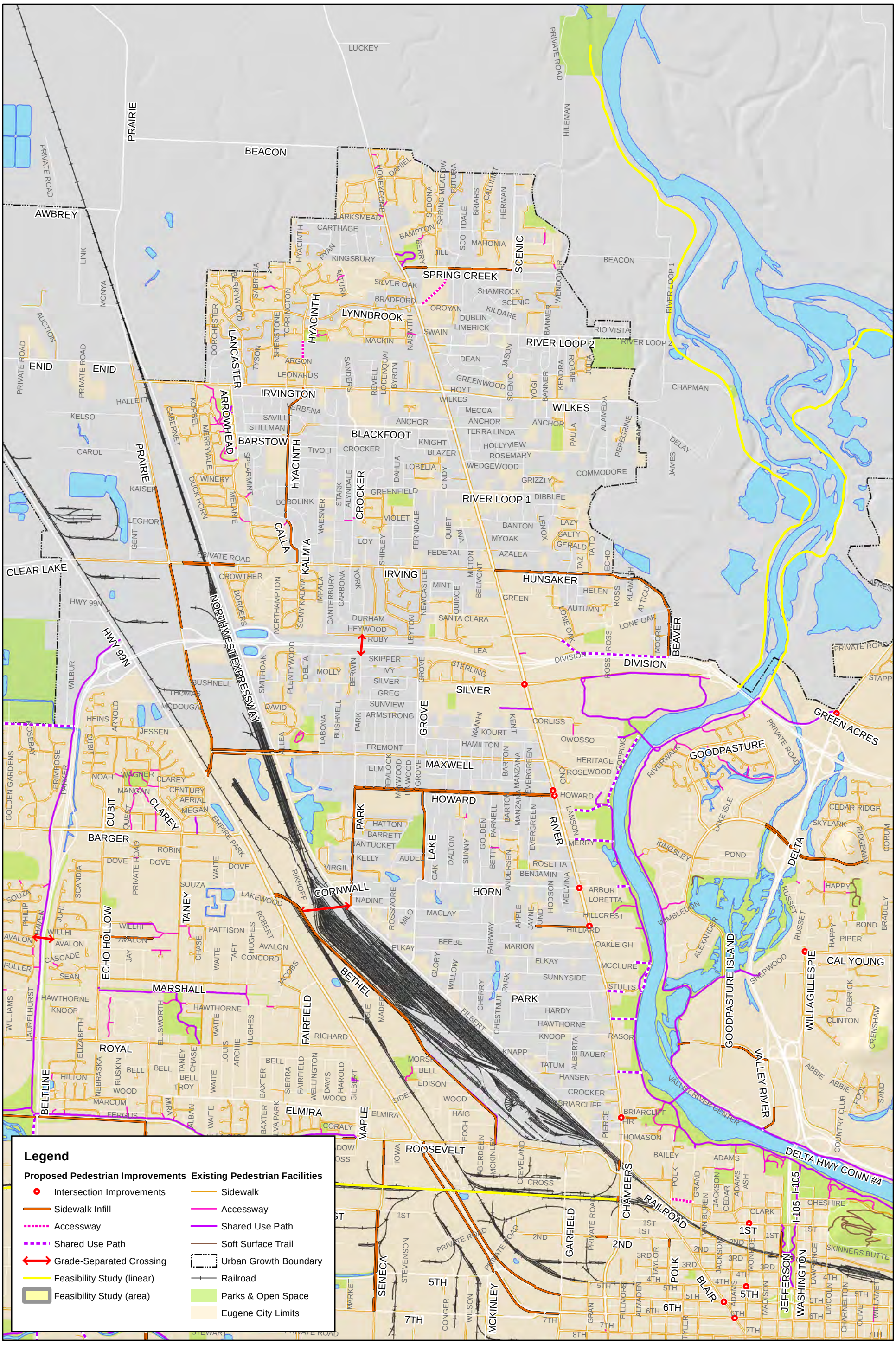


Map 3: Proposed Pedestrian Network - West Eugene/Bethel/Danebo

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

Source: Data obtained from ODOT, LCOG, City of Eugene

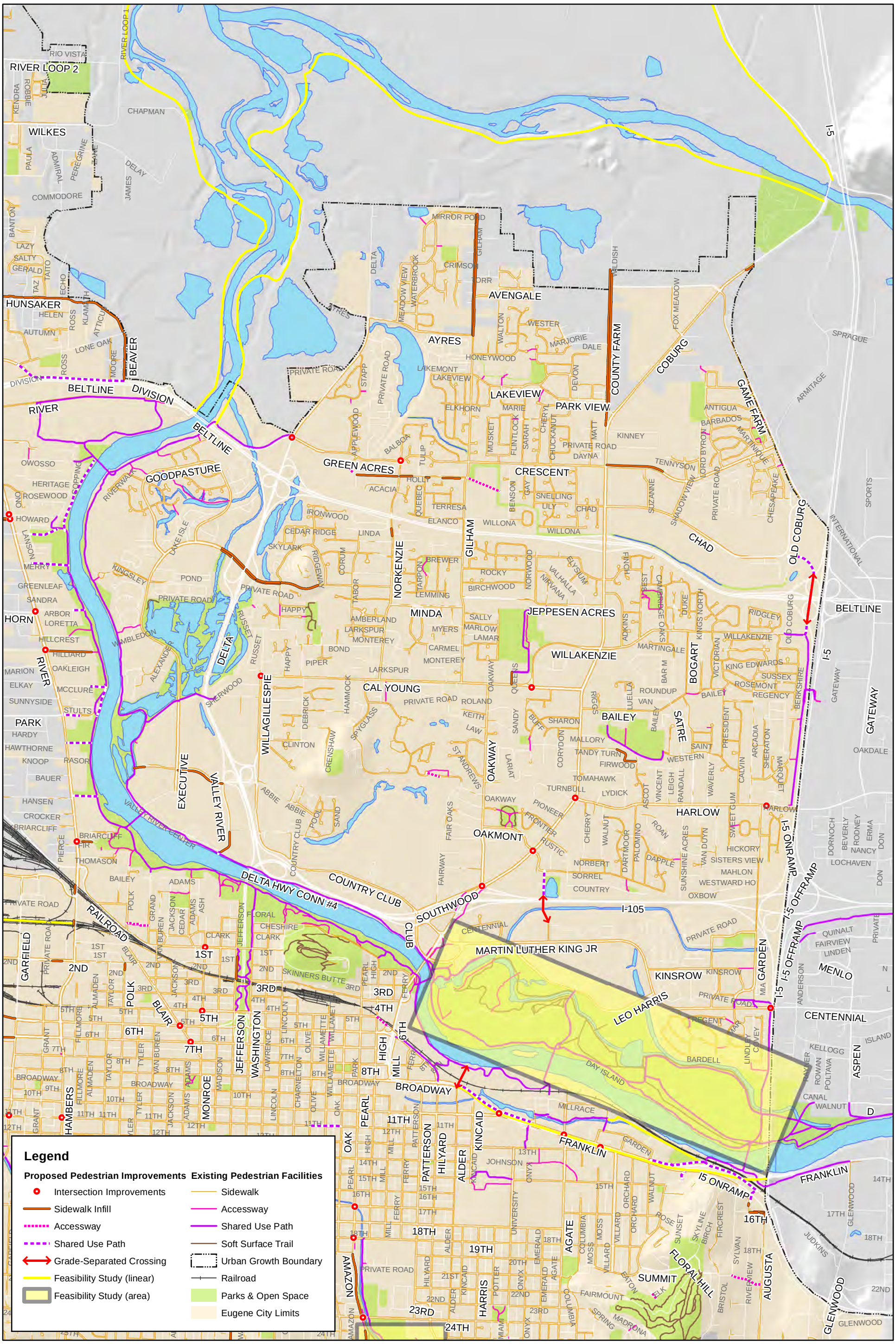
0 0.25 0.5 1 Miles



Map 4: Proposed Pedestrian Network - River Road/Santa Clara

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

Source: Data obtained from ODOT, LCOG, City of Eugene

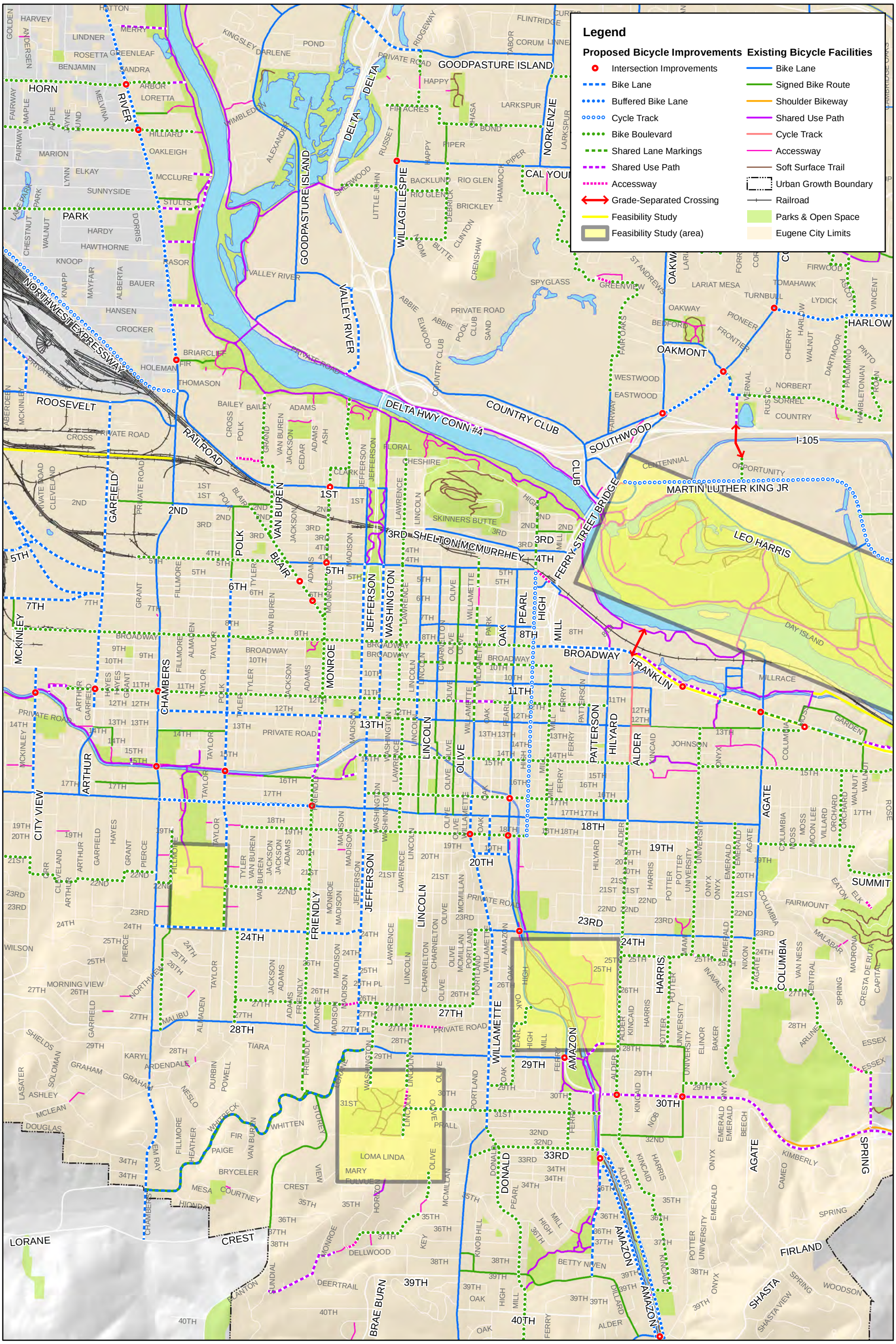


Map 5: Proposed Pedestrian Network - Northeast Eugene/Willakenzie/Ferry Street Bridge

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

Source: Data obtained from ODOT, LCOG, City of Eugene

0 0.25 0.5 1 Miles

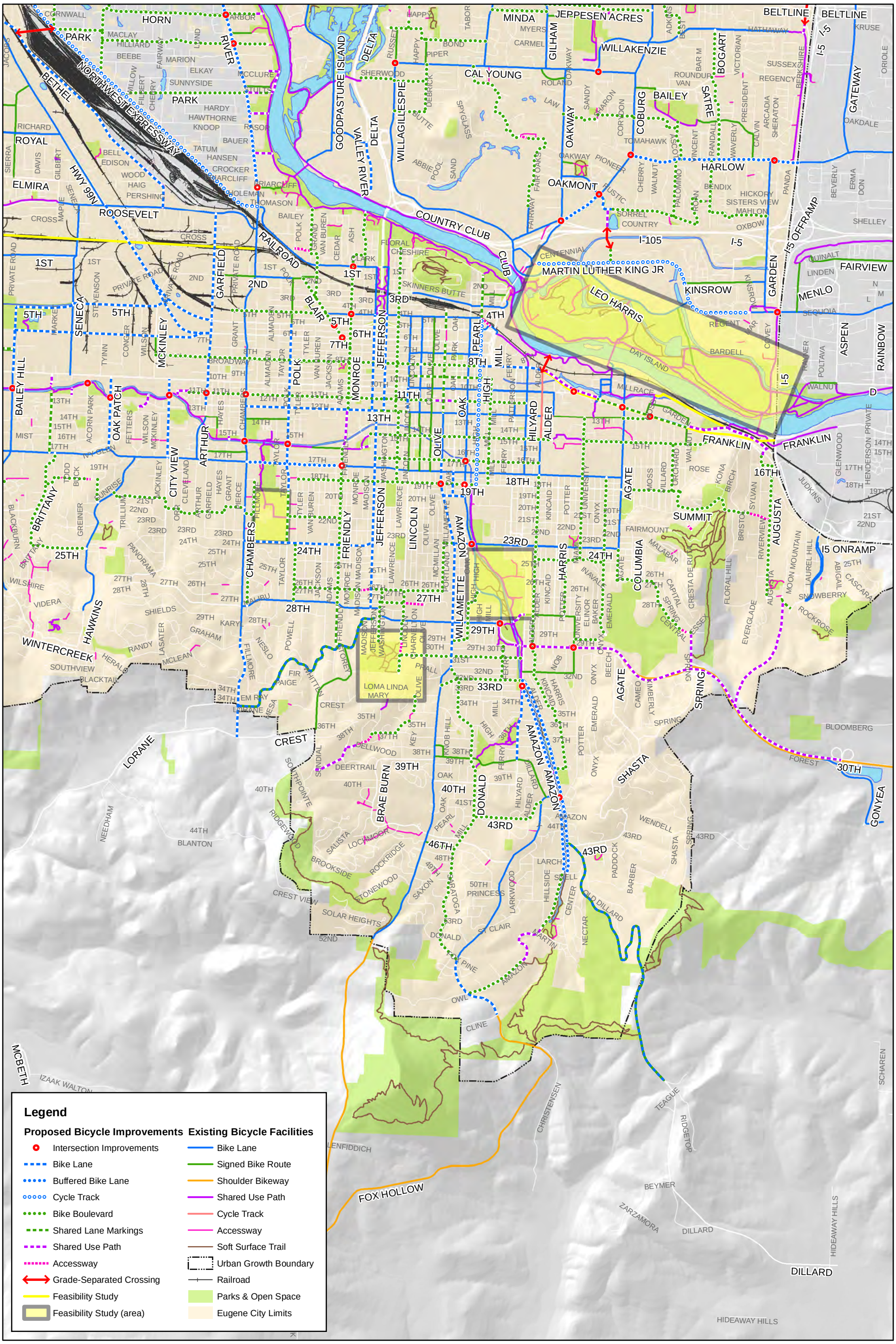


Map 6: Proposed Bicycle Network - Central Eugene

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

Source: Data obtained from ODOT, LCOG, City of Eugene

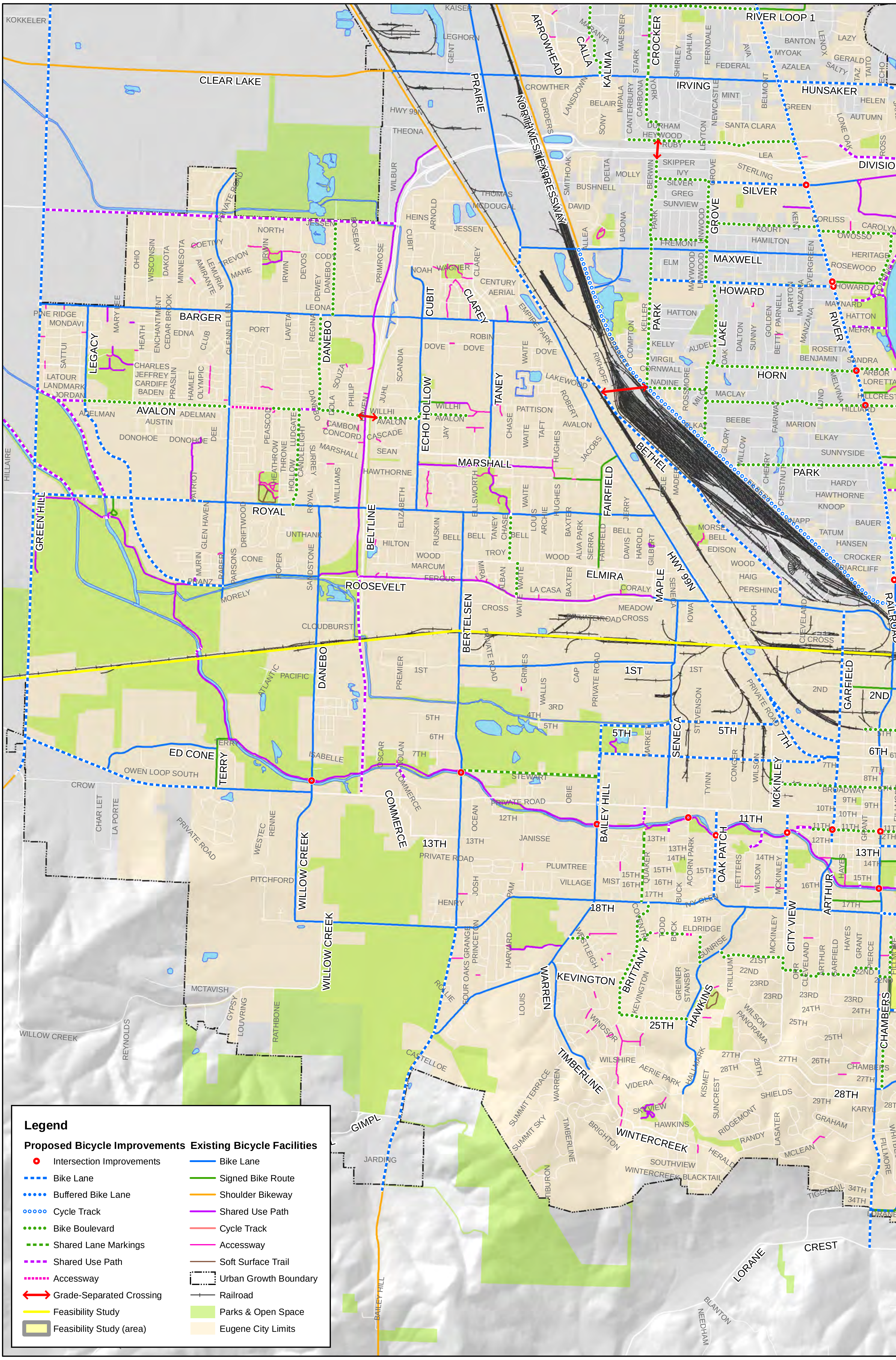
0 0.25 0.5 1 Miles



Map 7: Proposed Bicycle Network - South Hills

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

Source: Data obtained from ODOT, LCOG, City of Eugene

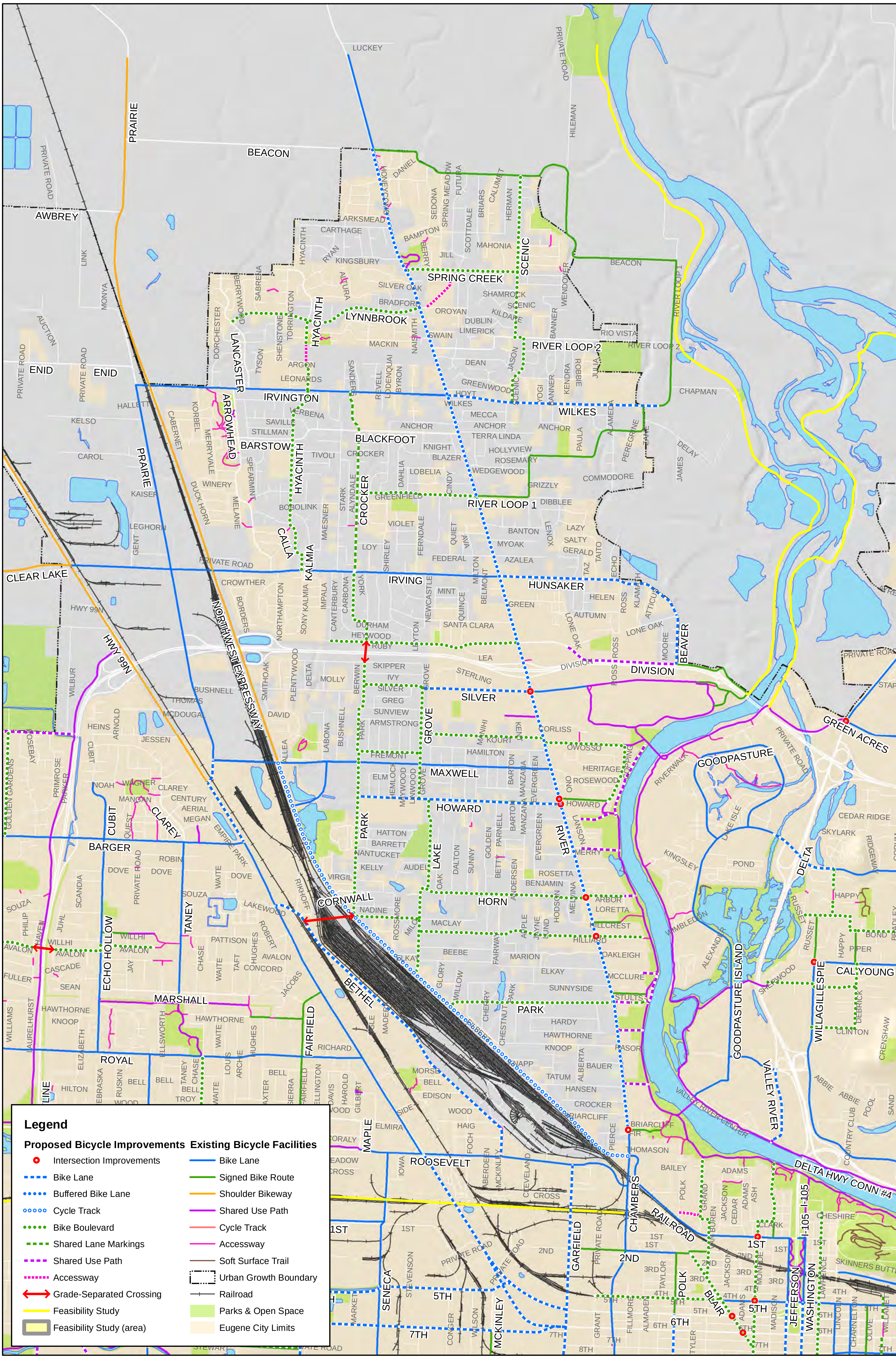


Map 8: Proposed Bicycle Network - West Eugene/Bethel/Danebo

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

Source: Data obtained from ODOT, LCOG, City of Eugene

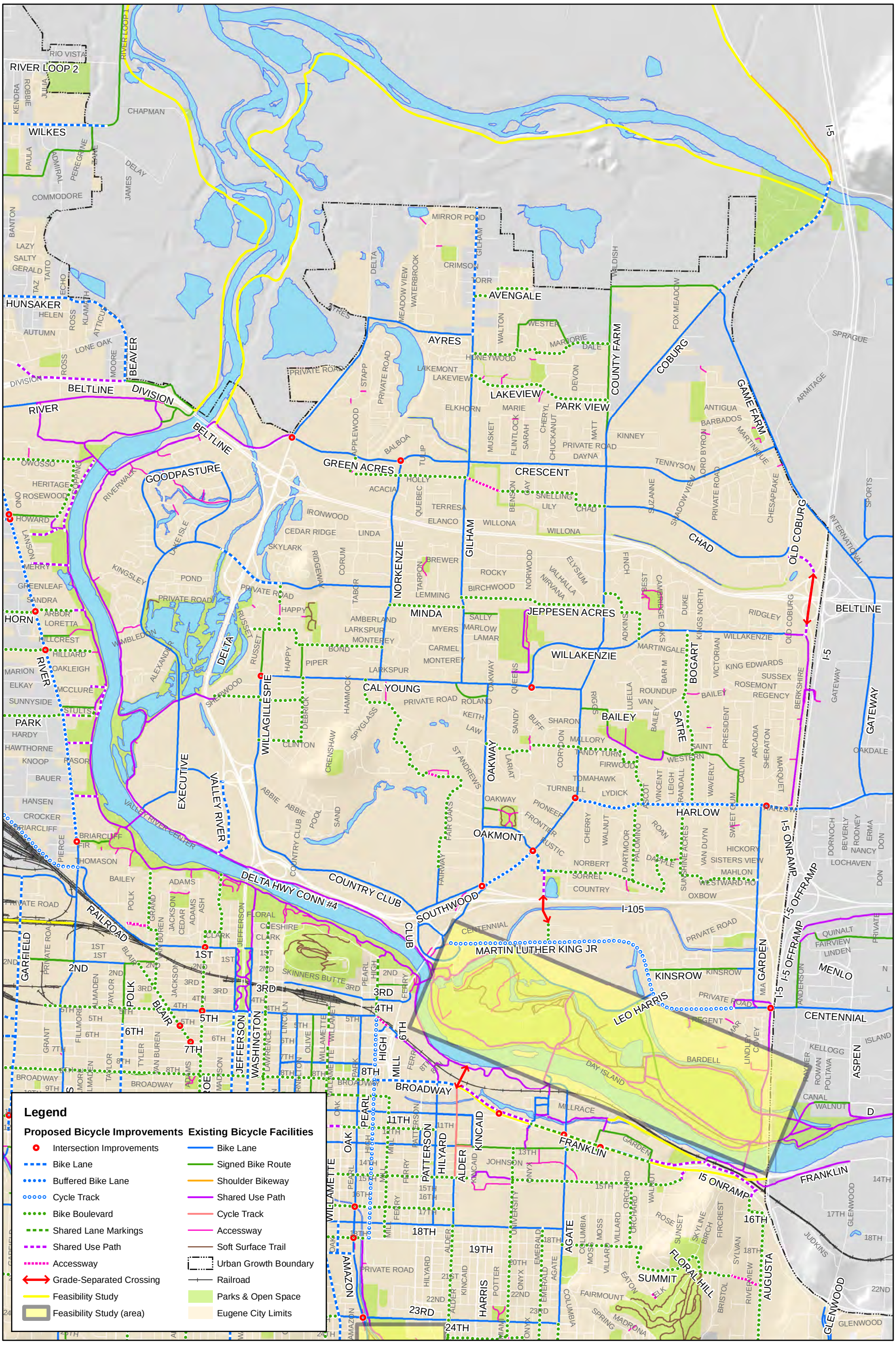
0 0.25 0.5 1 Miles



Map 9: Proposed Bicycle Network - River Road/Santa Clara

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

Source: Data obtained from ODOT, LCOG, City of Eugene



Map 10: Proposed Bicycle Network - Northeast Eugene/Willakenzie/Ferry Street Bridge

City of Eugene
Eugene Pedestrian and Bicycle Master Plan

0 0.25 0.5 1 Miles

Source: Data obtained from ODOT, LCOG, City of Eugene