Planning Commission

Agenda

Study Session

March 12, 2018
Noon

Lausmann Annex, Room 151
200 South Ivy Street, Medford, Oregon

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10. Introductions

20. Discussion items

20.1 **2017 Citizen Involvement Program Year-end Report**

20.2 **CP-16-036 Transportation System Plan Policy Topics**

30. Adjournment

Meeting locations are generally accessible to persons with disabilities. To request interpreters for hearing impaired or other accommodations for persons with disabilities, please contact the ADA Coordinator at (541) 774-2074 or ada@cityofmedford.org at least three business days prior to the meeting to ensure availability. For TTY, dial 711 or (800) 735-1232.

MEMORANDUM

Subject	2017 Citizen Involvement Program Year-end Report	
To	Planning Commission	*for March 12, 2018 study session*
From	Carla Angeli Paladino, CFM, Principal Planner	
Date	March 6, 2018	

A report is completed annually that outlines the citizen involvement program and the accomplishments made over the year. The completed report is presented to the City Council and made available to the public. A copy of the 2017 report is attached for the Planning Commission's review and comments.

Please review the document and bring any proposed changes or additions including recommendations for improvements to the program that the Commission would like to see included in the report.

CITIZEN INVOLVEMENT PROGRAM YEAR END REPORT 2017

January 2018

CITY OF MEDFORD VISION STATEMENT

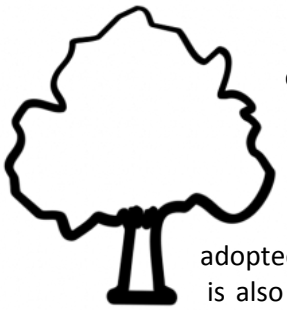
We envision Medford as an outstanding community – a fantastic place to live, work, and play.

PLANNING DEPARTMENT MISSION STATEMENT

We are a dynamic team working with the community to shape a vibrant and exceptional city.

HISTORY

Citizen involvement is a long standing tradition in Medford. The first citizens' land use committee was formed in October 1974. This committee was formed by resolution of the City Council. The purpose of the committee was to evaluate the data gathered by the Planning Commission and City Council to form the *Comprehensive Plan*. The citizens' committee evaluated this data and formulated goals, policies, and a plan map for the *Comprehensive Plan*, which was later adopted on October 16, 1975. This is also the date the Medford Citizens' Committee was appointed by City Council. Membership on this citizens' committee included 25 citizens representing virtually all occupational, social, and economic groups of the region. After the adoption of the *Comprehensive Plan* Goals, Policies and Plan Map, the citizens' committee established itself into an organizational format. The Citizens' Planning Advisory Committee (CPAC) was then established and served the community for over 35 years. The CPAC was dissolved in 2014.



PURPOSE

As required by the *Oregon Statewide Planning Goal 1,* the City of Medford is required to have a Committee for Citizen Involvement (CCI). Medford's CCI is the Planning Commission.

The Planning Commission is required to ensure implementation of the citizen involvement program in conformance with all applicable laws and regulations and to continually evaluate the success of the program. The PC is responsible for preparing a formal evaluation of the citizen involvement program at least once a year for transmittal to City Council. Suggestions are encouraged to alleviate any problem areas.

STATEWIDE PLANNING GOAL 1

Statewide Planning Goal 1 states, "To develop a citizen involvement program that insures the opportunity for all citizens to be involved in all phases of the planning process." Goal 1 requires that cities clearly define procedures by which the general public can be involved in the on-going land use planning process and incorporate the following components:

(1) Widespread citizen involvement;
(2) To assure effective two-way communication with citizens;
(3) Citizen influence to provide the opportunity for citizens to be involved in all phases of the planning process;

(4) To assure that technical information is available in an understandable form;
(5) Feedback mechanisms to assure that citizens will receive a response from policy-makers; and
(6) Financial support to insure funding for the citizen involvement program.

(1) CITIZEN INVOLVEMENT

As noted, the CCI for the City of Medford is the Planning Commission. The Planning Commission broadly represents the geographic areas and interests of Medford as related to land use and land-use decisions. This Commission is composed of members appointed by the City Council in an open, well-publicized, public process. The Planning Commission has the ultimate responsibility of assisting with the development, implementation, and evaluation of the program that promotes and enhances citizen involvement in land-use planning.

(2) COMMUNICATION

The City of Medford has established mechanisms to provide for effective communication between citizens and elected and appointed officials. The various methods used in the land use planning process include: public hearing notices, on-site signs, public hearings, mailings, posters, questionnaires, face-to-face interaction, telephone assistance, and the City of Medford website.

(3) CITIZEN INFLUENCE

Through the citizen involvement program, citizens have the opportunity to inventory, analyze, and evaluate elements of proposed plans and policies. The Planning Department ensures all C*omprehensive Plan* and *Land Development Code* amendment proposals are posted to the City of Medford website with a request for public comments. This opportunity to provide comments encourages citizen involvement in the development of policies and goals by which land is conserved and developed.

All development proposals are available to the public upon request. Copies of materials are found at the Medford Planning Department. Seven days prior to all public hearings, the agenda packets for the hearing are posted to the City of Medford Planning Department webpage. These agenda packets include the proposal accompanied by the Staff Report and all recommended conditions of approval. The Staff Report contains a recommendation to the approving authority.

(4) TECHNICAL INFORMATION

The land use process is clearly defined in the *Medford Land Development Code* (MLDC). The Planning Department works diligently to articulate and clarify this process to all customers through various media: front counter interaction, telephone inquiries, and at *Land Development Committee (LD)* meetings. LD meetings provide the opportunity for applicants to meet with city staff members to review land use applications, discuss requirements of the code, and discuss options and next steps. This meeting is held prior to the public hearing and is informal in nature.

Additionally, all technical information contained in plans and studies is placed on the City of Medford website. The *Comprehensive Plan*, *Transportation Plan*, and *Riparian Corridors* are some examples of the documents available.

(5) FEEDBACK MECHANISM

Land use decisions are made by review bodies, including the Planning Commission, Site Plan and Architectural Commission, and the Landmarks and Historic Preservation Commission. The outcomes of Commission hearings are mailed to those who testified at the public hearing or in writing, explaining the appeal process. Additionally, approved minutes of the hearings are posted on the City of Medford website.

(6) FINANCIAL SUPPORT

The City of Medford funds the citizen involvement program in various ways. A manager, Planning staff, and Recording Secretary attend all Commission meetings (PC, SPAC, and LHPC). Additionally, Planners prepare and present staff reports at the hearings, including the City Council. The Planning Department also staffs the Bicycle and Pedestrian Advisory Committee (BPAC) and other ad hoc committees. Such committees have included the Southeast Implementation Committee and the Water Conservation Site Development Committee.

Staffing of all these commissions and committees requires a high level of staff resources and city funds, which results in an efficient and valuable citizen involvement program.

COMMISSIONS AND COMMITTEES

All commission and committee members are citizen volunteers. The Planning Commission meets four times per month and the Site Plan and Architecture Commission meet twice per month, while the Landmarks and Historic Preservation Commission and Bicycle and Pedestrian Advisory Committee meet one time each month. Ad hoc committees meet as necessary.

PLANNING COMMISSION

Members of the Planning Commission apply to and are appointed by the City Council. Openings for the PC are announced using media such as press releases, web site postings, and postings in City Hall. The PC holds two public hearings per month, on the second and fourth Thursday at 5:30 p.m. Two study sessions generally are held each month, on the second and fourth Monday at noon.

SITE PLAN AND ARCHITECTURAL COMMISSION

Like the PC, the Site Plan and Architectural Commission (SPAC) consist of members who are appointed by the City Council. Also like PC, SPAC position openings are posted on the City of Medford website and in City Hall. A press release is sent to all local media outlets. SPAC holds two quasi-judicial public hearings each month, on the first and third Friday at noon. Study sessions are held as needed.

LANDMARKS AND HISTORIC PRESERVATION COMMISSION

The Landmarks and Historic Preservation Commission also holds quasi-judicial public hearings. Members are appointed by the City Council. The Landmarks and Historic Preservation Commission meets on the first Tuesday of the month, starting at 5:30 p.m.

BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE

The purpose of the Bicycle and Pedestrian Advisory Committee is to advise Medford City Council on plans and issues related to non-motorized transportation. Membership requires appointment by the City Council. All members must reside in the City of Medford throughout his/her term.

AD HOC AND SPECIAL PROJECT COMMITTEES

The Planning Department also staffs and facilitates ad hoc committees, groups whose purpose is directly related to a specific project, Code Amendment, or Comprehensive Plan Amendment. The Water Conservation Site Development Committee is a recent example of such a committee. It was formed to draft an

ordinance amending provisions of the *Land Development Code* pertaining to water conservation and landscaping. Code changes recommended by this committee were adopted by City Council.

Membership on these ad hoc committees is generally through appointment by the City Council.

CITIZEN INVOLVEMENT & THE MEDFORD LAND USE PROCESS

The City of Medford *Land Development Code* establishes the process by which land-use applications comply with the Citizen Involvement Program. These steps include the following: posting of signs on all properties with a current land-use proposal; availability to the public of submitted proposals; notice to all property owners within 200 feet of any proposed land-use application, or a minimum of 75 properties for Planned Unit Developments (PUD); neighborhood meetings prior to submittal of a land use application (for PUDs); except for LHPC, broadcast of public hearings on local television; the recording of minutes of each public meeting; and mailing decision letters to all citizens and affected parties who testified orally or in writing to a proposed land-use application, including an explanation of their appeal rights.

TYPES OF LAND-USE APPLICATIONS

There are four types of land-use applications: Class "A," "B," "C" and "D".

CLASS "A"

Class "A" proposals are legislative. The PC provides a recommendation to the City Council who then makes the final decision. The Council decision is based upon applicable criteria of the *Comprehensive Plan* and *Land Development Code*, compliance with the Statewide Planning Goals and Guidelines, staff analysis, comments from the referral agencies, public testimony, and any other evidence that may be provided.

Class "A" applications include:

(1) Major Comprehensive Plan Amendments;
(2) Major Zoning Map Amendments; and
(3) Code Amendments.

Number of Class "A" Applications Adopted in 2016 and 2017

CLASS "A" APPLICATIONS	APPLICATIONS ADOPTED IN 2016	APPLICATIONS ADOPTED IN 2017
Major Comprehensive Plan Amendments	**3***	**1**
Minor Comp. Plan Amendment	**0**	**1**
Major Zoning Map Amendments	**0**	**0**
Code Amendments	**5**	**4**
TOTAL	**8**	**6**

**Planning Commission made a recommendation on the Urban Growth Boundary Amendment project in 2015. City Council adopted Ordinance 2016-99 in August 2016.*

CLASS "B"

Class "B" applications are quasi-judicial actions heard by the City Council who makes the final decision. The Council decision is based upon applicable criteria of the *Comprehensive Plan* and *Land Development Code*, compliance with the Statewide Planning Goals and Guidelines, staff analysis, comments from the referral agencies, public testimony, and any other evidence that may be provided.

Class "B" applications include:

(1) General Land Use Plan Map (GLUP) Amendments;
(2) Annexation;
(3) Street Vacations; and
(4) Transportation Facility Development Proposals.

Number of Class "B" Applications Approved in 2016 and 2017

CLASS "B" APPLICATIONS	APPLICATIONS APPROVED IN 2016 & 2017	
GLUP Map Amendments	**2**	**0**
Annexations	**0**	**0**
Street Vacations	**2** **1-denied**	**4**
Transportation Facilities	**1**	**2**
TOTAL	**4**	**6**

CLASS "C"

Class "C" applications are quasi-judicial actions decided by Planning Commission, Site Plan and Architectural Commission, or the Landmarks and Historic Preservation Commission. These quasi-judicial actions may be appealed to the City Council. All Class "C" applications are required to receive final action within 120 days from the date the application is deemed complete. The decisions of Planning Commission, Site Plan and Architectural Commission, or the Landmarks and Historic Preservation Commission are based upon applicable criteria, staff analysis, comments from the referral agencies, public testimony, and any other evidence that may be provided. The 120 days may be extended at the request of the applicant, but in no case may the total extensions exceed 245 days.

Class "C" applications include:

(1) Zone Changes;
(2) Planned Unit Developments, Preliminary PUD Plans;
(3) Conditional Use Permits;
(4) Exceptions;
(5) Site Plan and Architectural Reviews;
(6) Land Divisions, Tentative Plats; and
(7) Historic Reviews.

Number of Class "C" Applications Approved in 2016 and 2017

CLASS "C" APPLICATIONS	APPLICATIONS APPROVED IN 2016 & 2017	
Zone Changes	**12**	**12**
Preliminary Planned Unit Developments	**9**	**1** **2 revisions**
Conditional Use Permits	**10**	**5**
Exceptions	**11**	**4**
Site Plan and Architectural Review	**25**	**21**
Land Divisions, Tentative Plats: Partitions Subdivisions	 **5** **15**	 **2** **9**
Historic Review	**13**	**9**
TOTAL	**100**	**65**

CLASS "D"

Class "D" applications are Administrative decisions. The Planning Department Director is the designated approving authority for this type of application. The Director shall take final action within 120 days after the application is deemed complete and render a decision to approve, approve with conditions, or deny the request.

A Class "D" application includes:

(1) Temporary Portable Storage Containers
(2) Private Street Renaming

Two requests for Temporary Portable Storage Containers were approved in 2017.

PUBLIC HEARINGS

Section 10.161 of the Medford *Land Development Code* regulates the conduct of public hearings before an approving authority.

In 2016 and 2017, the City of Medford held 74 public hearings. The Planning Department is responsible for staffing the Planning

Commission, Site Plan and Architectural Commission, and Landmarks and Historic Preservation Commission and presents at City Council meetings as necessary.

Number of Public Meetings in 2016 & 2017

APPROVING AUTHORITY	PUBLIC MEETINGS IN 2016 & 2017	
City Council	23	24
PC	22	22
SPAC	20	19
LHPC	9	9
TOTAL	**74**	**74**

PUBLIC HEARING NOTICES

Before public hearings can take place, various noticing requirements must first be met. As required by the *Land Development Code* and State Statute, the following methods are used to notice a public hearing. These may vary depending on the type of land use application.

(1) The posting of signs on the subject property 21 days prior to the public hearing.
(2) Mailed letters to all property owners within 200 feet of the subject site 20 days prior to the public hearing. PUDs are required to notice a minimum of 75 property owners;
(3) For PUDs, neighborhood meetings prior to submittal of a land use application;
(4) Notices printed in the local newspaper ten days prior to the public hearing;
(5) Staff reports available seven days prior to the public hearing;
(6) The posting of staff reports and public hearing notices on the Planning Department website seven days prior to the public hearing; and
(7) Mailed decision notices.

The amount of public notification varies per project. Some long range planning projects that involve notice to both affected and surrounding properties may require notice to hundreds of owners.

Notification for current planning projects can vary from less than twenty to several hundred.

BUILDING PERMITS

The table below shows the number of permits issued for new dwelling units in the years 2015–2017.

MEDFORD PERMITS ISSUED (2015–2017)	
Housing Types	**Number of Units**
2015	
ADU	3
Duplex	3 (6 units)
Manufactured Units	2
Multi-Family	6 (132 units)
Single-Family Attached	16
Single-Family	225
Total	**384**
2016*	
ADU	14
Duplex	1 (2 units)
Manufactured Units -In Park/On Parcel	3/0
Multi-Family	19 (178 units)
Single-Family Attached	36
Single-Family Detached (Building Dept. web data)	291
Total	**364**
2017	
ADU	23
Duplex	4 structures/8 units
Manufactured Units -In Park/On Parcel	1/0
Multi-Family	14 structures/115 units
Single-Family Attached	0
Single-Family Detached	291

ACCOMPLISHMENTS IN 2017

The City of Medford adopted the following Comprehensive Plan Amendments and Code Amendments in 2017:

PROJECT	DATE ADOPTED
Foothill TSP Amendment	April 6, 2017
Leisure Services Plan Update	April 20, 2017
Marijuana production in C-H	May 18, 2017
Temporary Food Trucks	June 15, 2017
Chickens	October 5, 2017
LHPC Quorum/Membership Amendment	October 19, 2017

Other projects or actions include:

(1) Recertified the City as a Class 6 Community in the Community Rating System program.

(2) Staffed a flood awareness booth at the Preparedness Fair in September.

(3) Public Outreach for the Transportation System Plan, attended community events, held an open house, conducted an on-line workshop and community survey

(4) Planning staff nominated the Monarch Building which was awarded the DeMuro Award from Restore Oregon.

(5) Hosted a movie night for October Planning Month.

(6) Co-sponsored the RecFest Event at Hawthorne Park with the Parks Department

(7) Awarded $140,000 is state grants through the Transportation and Growth Management and Technical Assistance programs

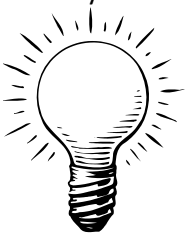
(8) Hosted a bicycle breakfast with Public Works for Bike to Work Week

(9) Hosted national speakers including Joe Minicozzi and Dan Parolek

(10) Worked with several citizen committees including the Citizen Advisory Committee and Technical Advisory Committee for the transportation plan update as well as the Housing Advisory Committee related to housing policy, the Regional Housing Strategy, and the Urban Growth Boundary project.

RECOMMENDATIONS FOR 2018

The City of Medford works hard to encourage meaningful citizen involvement. In addition to some of the efforts and practices already described, the following projects are planned:



(1) Adopt the Transportation System Plan

(2) Bring forward code amendments from the Housing Advisory Committee's recommendation list

(3) Adopt the Local Wetland Inventory for the expanded UGB and remaining Urban Reserve areas.

(4) Adopt an Urbanization Plan process for lands in the new expanded UGB

QUESTIONS OR COMMENTS?

Contact Us:
Planning Department
200 South Ivy Street, Lausmann Annex
Room 240
Medford, Oregon 97501

planning@ci.medford.or.us

541-774-2380 (office)
541-618-1708 (facsimile)

MEMORANDUM

Subject	Transportation System Plan Policy Topics	
File no.	CP-16-036	
To	Planning Commission	*for 03/12/2018 Study Session*
From	Carla Angeli Paladino, CFM, Principal Planner	
Date	March 6, 2018	

TSP POLICY TOPICS - UPDATE

The City continues to make strides in completing the update to the Transportation System Plan. To date, the following transportation topics have been discussed with City Council, the Citizen Advisory Committee, and the Technical Advisory Committee:

- Goals, Objectives, and Actions
- Level of Service and Concurrency
- Transportation Planning Rule (TPR)
- Design Guidelines
- South Stage Overcrossing
- Project Prioritization

At the Planning Commission study session on Monday, staff will provide an overview of the last three topics noted above. This will bring the Planning Commission up-to-date with the topics discussed thus far regarding the Transportation System Plan.

On March 22nd, the City Council will evaluate the project prioritization list in more detail as staff will be identifying projects necessary to meet the City's Level of Service standard. The goal is to provide Council and the advisory committees with the necessary tools to help prioritize the project list so they can be incorporated into the document. Staff will provide the Planning Commission with the same information and a summary of the discussion from that meeting at the next PC study session on March 26, 2018.

The Planning Commission and City Council have a joint study session scheduled for March 29, 2018 at 6:00 p.m. in the Prescott Room. Project prioritization will be a topic of discussion during that meeting.

The information below is a summary of the attached memoranda topics.

DESIGN GUIDELINES

The design guidelines memorandum seeks to answer two questions:

1) Which cross sections are to be adopted in the Transportation System Plan for new roadways? and
2) How does the City address retrofitting streets deemed "legacy streets"?

Legacy streets are those existing streets that for one reason or another do not or cannot meet the cross section associated with its functional classification. An example of a legacy street is Barnett Road. This road is built out for most of its length with curb, gutter, sidewalk, travel lanes and a center turn lane, however it is missing bike lanes and planter strips. When development occurs along Barnett, the code requires the dedication of the necessary right-of-way to accommodate the full cross section as if to provide the missing bike lanes and planter strips. However, the missing facilities will not be installed within the dedicated right-of-way and the City ends up obtaining and maintaining unneeded right-of-way that in turn reduces the developable area of the parcel and shifts the buildings farther from the street.

Engineering staff has outlined six different legacy street scenarios for consideration and discussion. The goal is to incorporate a legacy street standard within the TSP and development code for future implementation.

SOUTH STAGE OVERCROSSING

The South Stage Overcrossing project is a high profile project identified in the updated Transportation System Plan. The project will extend South Stage Road (a minor arterial) from Highway 99 to Phoenix Road with a bridge over Bear Creek and Interstate 5. The project will help alleviate congestion at the South Medford and Phoenix interchanges as well as serve new develop proposed in the Urban Growth Boundary expansion areas for both Medford and Phoenix.

The roughly $50 million project will require a significant amount of resources from the City, surrounding jurisdictions, the State and possible Federal funding to build. The memorandum details where those various funding allocations may come from and a timeline for the project. Careful consideration of this project is needed as the City begins to prioritize projects in the plan.

PROJECT PRIORITIZATION

The project list is one of the most important elements of the Transportation System Plan. It provides guidance to staff on the priority transportation improvements to be made over the next twenty years. Engineering staff has estimated the City will have approximately 75.4 million dollars in revenue to fund projects. Projects will be distributed based on near, mid, and long term timeframes (2018-2022, 2023-2028, 2029-2038). The project list must be financially constrained meaning the project costs

for identified projects cannot exceed anticipated revenues. Projects will be separated into Tier 1 (funded) or Tier 2 (unfunded) categories. The list of projects are separated into seven project types (Urban Upgrades, Road Widening, New Roadways, Intersections, Pedestrian, Bicycle, and Multi-use Paths). It is recognized that there are more projects than revenue, therefore, the City must prioritize which projects are determined to be Tier 1 or Tier 2 in the plan. The document is to remain dynamic, so shifts in priority or funding over time, will result in the projects being rearranged and moved from one tier to the other.

GOALS, OBJECTIVES, AND ACTIONS

The Goals, Objectives, and Actions (GOA) continue to be refined and modified based on input from the advisory committees, City staff, and appointed and elected officials. The GOA are another important element of the TSP document and guide what the transportation system will look like in the future. Staff is seeking feedback on the latest draft.

PLANNING COMMISSION DIRECTION

The Planning Commission is being asked to review the attached memoranda and provide staff with additional direction or comments on how to better incorporate these topics into the updated TSP.

EXHIBITS

1 - City Council memorandum dated January 18, 2018 regarding Design Guidelines
2 - Inter-office memorandum dated January 17, 2018 regarding South Stage Overcrossing
3 - City Council memorandum dated February 13, 2018, regarding Project Prioritization
4 - City Council memorandum dated February 13, 2018, regarding Goals, Objectives, and Actions

City of Medford

PUBLIC WORKS – ENGINEERING & DEVELOPMENT

MEMORANDUM

Date	January 18, 2018
To	Mayor & City Council
From	Karl MacNair, P.E., Transportation Manager
Subject	Transportation System Plan (TSP) – Policy Discussion Design Guidelines & South Stage Overcrossing

Council Direction

- Accept cross-sections for new streets as proposed?
- Is the legacy street proposal acceptable?

Presentation Outline

- Introduction and Initial Information – Brian Sjothun
- Presentation – Cory Crebbin, P.E.
- Discussion and Direction – Mayor and City Council

Purpose

"Legacy streets," cannot be constructed to TSP standards. It is recommended that the new TSP include separate standards for these streets.

Legacy Streets

The streets in downtown Medford were initially laid out in 1883. Since then Medford has expanded and developed many different types of streets. Streets vary in width, cross section and function. Many streets and neighborhoods were built without pedestrian and bicycle facilities and have become more congested over time. The draft TSP identifies gaps in pedestrian and bicycle connectivity. See Exhibit A for the gaps in the pedestrian and bicycle networks.

Issues with the Current System

The Medford Land Development Code (MLDC) establishes the desired cross section for new streets. For existing improved streets (those with existing curb and gutter) the only direction in the code is that additional right-of-way (ROW), consistent with current standards, shall be required upon development along higher order streets (collectors and arterials). (MLDC sections 10.431 and 10.451)

Every existing street in Medford will never meet the current cross section associated with its functional classification. MLDC 10.451 results in the City acquiring and maintaining public ROW

that, in many cases, will never be used for a public street. Staff has coined the term "legacy street" to identify existing streets that the current code does not satisfactorily address.

Examples

Barnett Rd has two travel lanes in each direction and a center-turn-lane, curb, gutter, and curb-tight sidewalk on both sides for most of its length. It has bike lanes from S Holly St to Ellendale Ave, but no bike lanes from Ellendale to N Phoenix Rd. The only elements missing from the standard cross section identified in the MLDC are the bike lanes and planter strips. Commercial and residential development is built fairly close to the back of the sidewalk, making roadway widening impractical. The City is building the Larson Creek Greenway Trail in lieu of providing bike lanes on Barnett Rd. However, when a property redevelops along Barnett Rd, the MLDC still requires dedication of the full ROW width sufficient to include 6 foot bike lanes and 10 foot planter strips. This results in the City having unneeded ROW and reduces the size of lots along Barnett. It also forces buildings to be further away from the street to meet required setbacks.

A slightly different scenario occurs at Spring St. near Crater Lake Ave. The portion of Spring St with curb, gutter, and sidewalk was built with a 40-foot-wide curb-to-curb width. It is classified as a major collector which now has a 44-foot-wide curb-to-curb width standard. The sidewalks are also curb-tight, so it is lacking the 10 foot planter strip per the current cross section. The MLDC currently requires dedication of ROW for the standard cross section. It is unlikely that this section will be rebuilt to the current cross section.

Legacy streets generally fall into six categories:

1. Improved streets that have facilities for all travel modes, but lanes are narrower than the current standard
2. Improved streets that are missing vehicle lanes
3. Improved streets that are missing center-turn-lanes
4. Improved streets that are missing planter strip and/or sidewalk
5. Improved streets that are missing bike facilities
6. Streets that are mostly improved to an old standard but have unimproved segments

Note that unimproved streets, those without curb & gutter, are not considered "legacy streets" and are proposed to be improved based on current standards.

Staff Proposal

A proposal to address the six categories of legacy streets is outlined below:

1. If existing facilities for all modes exist on an improved street but are narrower than the current standard; then no street improvements or ROW dedication will be required by development
2. If the street is improved but is missing auto lanes, then the full ROW dedication would be required at time of development. No physical improvements would be required, unless one of the other categories also applies.
3. If the street is improved but is missing the center-turn-lane, then full ROW dedication would be required at time of development for properties within 200 feet of an intersection with a collector or arterial. If the property is greater than 200 feet from a collector or arterial intersection, no ROW will be required. No physical improvements would be required, unless one of the other categories also applies.

4. If the street is improved but is missing planter strip or sidewalk, then sidewalk construction would be required by development. If the property frontage is greater than 200 feet, then the sidewalk shall be built with full width planter strip. If the property frontage is less than 200 feet, then the sidewalk shall be built to match the planter strip width of the adjacent properties. ROW dedication shall be reduced where the planter strip width is reduced or eliminated.
5. If the street is improved but is missing bike facilities, then seek alternatives in the priority listed below:
    - Seek alternate routes via local streets or off-street paths
    - Evaluate lane reconfigurations where alternate routes are not available.
    - Provide, or require by development, 14 foot wide sidewalks to serve as multi-use paths where alternate routes and lane reconfigurations are not feasible.
6. If the street is mostly improved, then the unimproved sections will be built to the match the abutting cross section.

Exhibit B has examples of how this proposal would apply to various streets.

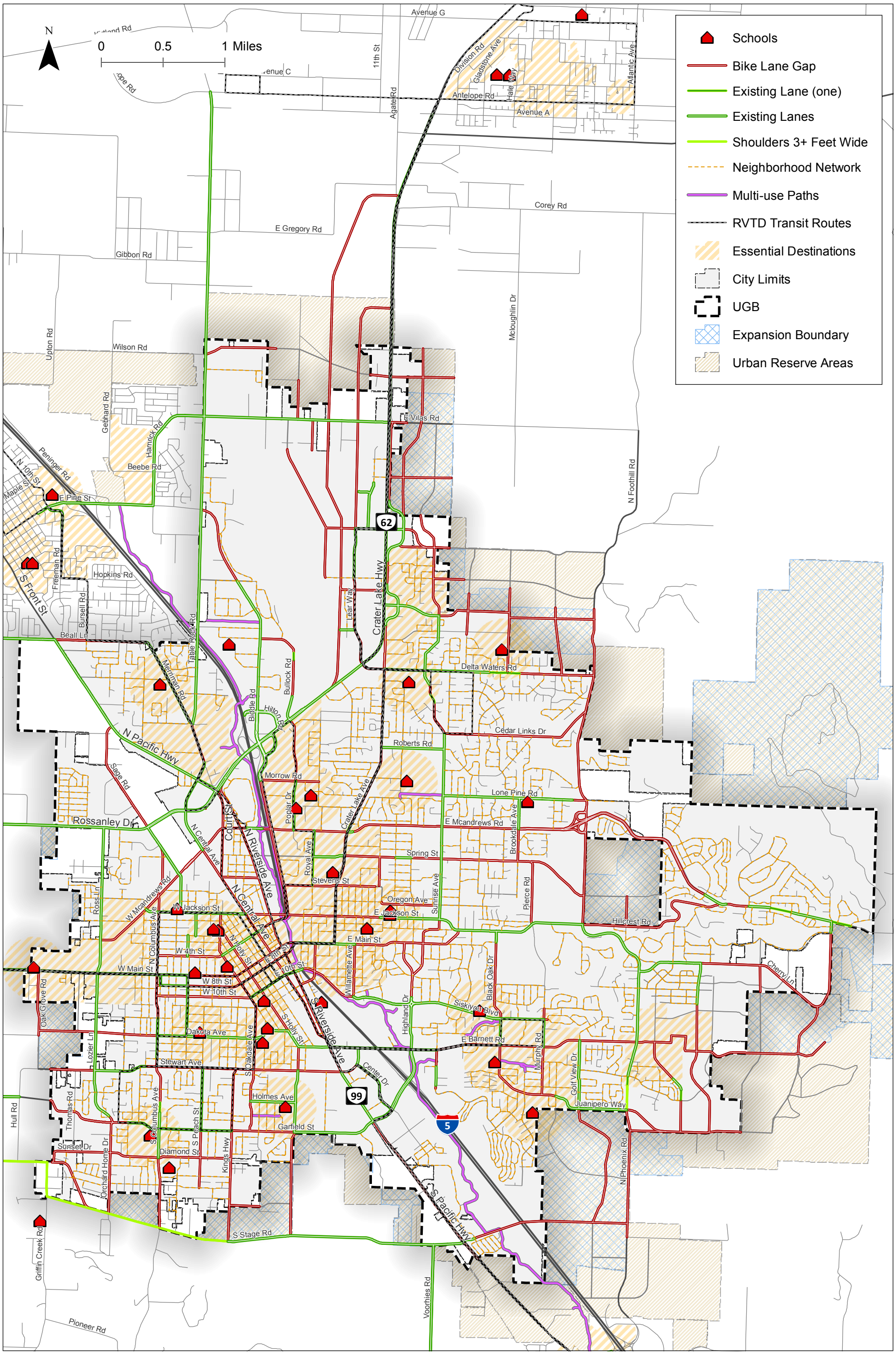
New Streets – Proposal

Similar to Level of Service (LOS), Level of Traffic Stress (LTS) is a measurement for how well a transportation facility functions. Whereas LOS measures the operations of stopped controlled intersections on a graduated scale from A through F, LTS measures the level at which pedestrians and bicyclists experience stress on a transportation facility on a graduated scale of LTS 1 through LTS 4. See Exhibit C, LTS Memo, for a more detailed explanation.

The consultant developed proposed cross-sections for higher order streets based on a maximum LTS 2 rating. Council is asked to direct staff as to whether or not new streets should be built to these new "lower stress" standards. See Exhibit D, Functional Classification Memorandum for the proposed cross sections.

Exhibits

A – Map identifying the gaps in the pedestrian and bicycle networks
B – Staff's explanation of proposal related to different streets
C – Level of Traffic Stress Memorandum
D – Functional Classification Memorandum



Existing Bicycle Facilities
Medford, Oregon

Figure **8**

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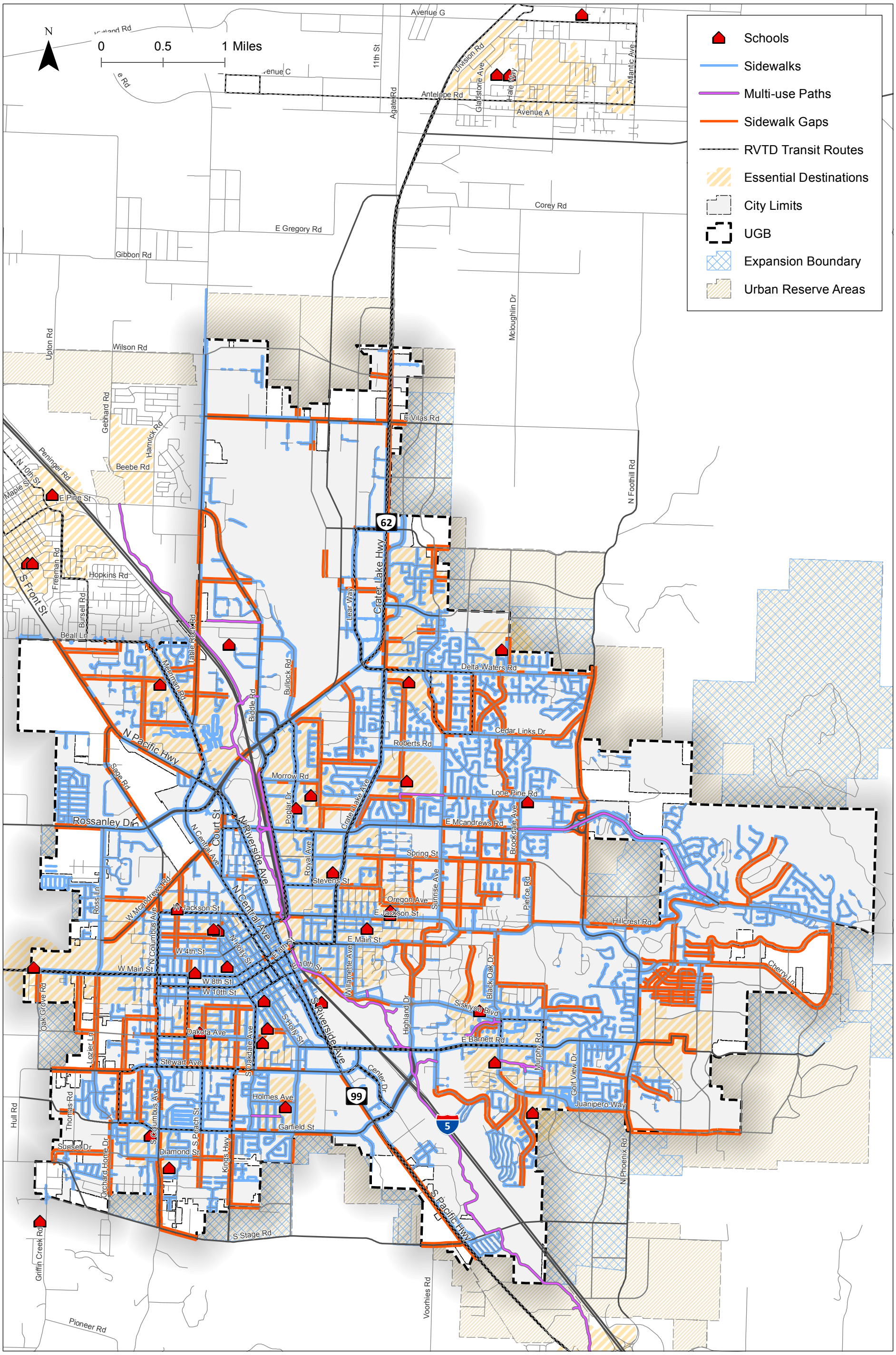

Pedestrian Facilities
Medford, Oregon

Figure
11

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Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

City of Medford

PUBLIC WORKS – ENGINEERING & DEVELOPMENT

MEMORANDUM

Date	January 18, 2018
To	Mayor & City Council
From	Karl MacNair, P.E., Transportation Manager
Subject	Transportation System Plan (TSP) – Legacy Street Detailed Proposal

Legacy Streets – Staff's Proposal

As outlined above, the MLDC requires ROW dedications with the intent of meeting the current standard. Given the history of Medford's street system and the issues outlined above, staff presents the approach below for Council's consideration.

They are generally six categories of legacy streets:

1. Improved streets that have facilities for all modes but lanes are narrower than the current standard
2. Improved streets that are missing auto lanes
3. Improved streets that are missing center-turn-lanes
4. Improved streets that are missing planter strip and/or sidewalk
5. Improved streets that are missing bike facilities
6. Streets that are mostly improved to an old standard but have unimproved segments

Note that unimproved streets, those *without curb & gutter*, are not considered "legacy streets" and would be built out to current standards.

A proposal for addressing legacy streets is outlined below:

1. If existing facilities for all modes exist on an improved street but are narrower than the current standard; then no street improvements or ROW dedication would be required by development
2. If the street is improved but is missing auto lanes, then the full ROW dedication would be required at time of development. No physical improvements would be required, unless one of the other categories also applies.
3. If the street is improved but is missing the center-turn-lane, then full ROW dedication would be required at time of development for properties within 200 feet of an intersection with a collector or arterial. If the property is greater than 200 feet from a collector or arterial intersection, no ROW would be required. No physical improvements would be required, unless one of the other categories also applies.
4. If the street is improved but is missing planter strip or sidewalk, then sidewalk construction would be required by development. If the property frontage is greater than 200 feet, then the sidewalk shall be built with full width planter strip. If the property frontage is less than 200 feet, then the sidewalk shall be built to match the planter strip width of the adjacent properties.

5. If the street is improved but is missing bike facilities, then see the below list:
    - Crater Lake Ave., E. Main St. to Delta Waters Rd. - Alternate parallel routes will be provided via neighborhood bikeways on Keene Way, Royal Ave, and Corona St. A lane reconfiguration to add bike lanes should be studied South of Spring St. No improvements or ROW dedication would be required, unless one of the other categories also applies.
    - Barnett Rd., Ellendale Dr. to N Phoenix Rd. - Alternate parallel route will be provided via the Larson Creek Greenway. No physical improvements or ROW dedication would be required, unless one of the other categories also applies.
    - McAndrews Rd.-
        - No physical improvements or ROW required east of Brookdale Ave.
        - Brookdale Ave. to Springbrook Rd. - Investigate lane reconfiguration to add bike lanes until full section can be built. (ROW would be required at the time of development by #2)
        - Bear Creek Greenway to Springbrook Rd. - Require 14-ft wide sidewalk be built along frontage at the time of development to accommodate both bikes and pedestrians.
        - Mall Entrance to Bear Creek Greenway - No further improvements required.
        - McAndrews Overpass to Mall Entrance- Require 14-ft wide sidewalk be built along frontage at the time of development to accommodate both bikes and pedestrians.
        - No physical improvements or ROW required along the McAndrews Overpass
        - N. Columbus Ave. to McAndrews Overpass - Require 14-ft wide sidewalk be built along frontage at the time of development to accommodate both bikes and pedestrians.
        - West of N. Columbus Ave. - Plan for a lane reconfiguration where improved.
    - Columbus Ave., Stewart Ave. to W McAndrews Rd. - Plan for a lane reconfiguration to add bike lanes. No improvements or ROW dedication for bike facilities would be required by development.
    - Hillcrest Rd., Bel Air Ct. to E. McAndrews Rd. - No improvements or ROW dedication would be required for bikes or pedestrians due to steep grades. Investigate lane reconfiguration with priority to the bike lane uphill.
    - Cedar Links Dr., Springbrook Rd. to Wilkshire Dr. – Plan for a lane reconfiguration to add bike lanes. No improvements or ROW dedication for bike facilities would be required by development.
    - Lawnsdale Rd. and Bullock Rd. – Plan for a lane reconfiguration to add bike lanes where none exist. No improvements or ROW dedication for bike facilities would be required by development.
    - Delta Waters Rd., Lear Way to Crater Lake Ave. – Require 14-ft wide sidewalk be built along frontage at the time of development to accommodate both bikes and pedestrians between Lear Way and Crater Lake Ave.
    - Lear Way - Plan for a lane reconfiguration to add bike lanes. No improvements or ROW dedication for bike facilities would be required by development.
    - Table Rock Rd., Highway 99 to Merriman – Require 14-ft wide sidewalk be built along frontage at the time of development to accommodate both bikes and pedestrians

- Riverside Ave., Central Ave., Court St., Main St., and 8th Street – Complete a downtown corridor study to investigate multi-modal treatments and develop a standard cross-section to be applied for development.
- Biddle Rd. - Complete a corridor study to investigate multi-modal treatments and develop a standard cross-section to be applied for development.
- Stewart Ave. - Complete a corridor study to investigate the feasibility of building a multi-use path on the north side of the street or similar design alternatives. Develop a standard cross-section to be applied for development.
- All other higher order streets that are missing bicycle facilities should be studied for lane reconfigurations

6. The following streets have been mostly improved. The unimproved sections should be built out to the match the abutting cross section by development:
   - Delta Waters Rd., Nome Ct. to Foothill Rd
   - Cedar Links Dr., Callaway Dr. to Foothill Rd.
   - Bullock Rd.
   - Hillcrest Rd., N. Phoenix Rd. to Bel Air Ct.
   - Black Oak Dr. – Hillcrest to Acorn Way
   - Crater Lake Ave. – South of Coker Butte Rd.
   - Springbrook Rd. – South of Coker Butte Rd.

KITTELSON & ASSOCIATES
851 SW 6th AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

TECHNICAL MEMORANDUM

Date: January 17, 2018

Project #: 21255

To: Karl MacNair
City of Medford

From: Susan Wright, P.E. and Sara Parks, Kittelson & Associates, Inc.
Project: City of Medford TSP Supplement
Subject: Functional Classification Memorandum

This memorandum provides an overview of the City of Medford's roadway functional classification system, cross-section elements, supporting standards and policies, and recommended changes to the functional classification system to support the updated 2038 year planning horizon and better meet the City's multi-modal, economic development, and mobility goals.

FUNCTIONAL CLASSIFICATION

Functional classification of a roadway characterizes the intended purpose, amount, and type of vehicular traffic a roadway is expected to carry, provisions for non-auto travel, and the roadway's design standards. The classification considers access to adjacent land uses and transportation modes to be accommodated. Functional classification systems:

- Provide a basis for the public and policy-makers to understand, identify, and prioritize improvements.
- Inform right-of-way needs and appropriate street design and streetscape characteristics.
- Guide the City's development of policies and performance standards needed to operate, manage, maintain, and finance a transportation system that advances the City's economic and livability goals.

As illustrated in Exhibit 1, higher-order facilities such as arterials are primarily intended to move traffic and provide mobility while lower-order facilities such as local streets are primarily intended to provide access. Roadway design standards and access management policies balance the function of the different classifications of roadways.

Hierarchy of access and mobility needs are established by a roadway's classification. Ideally, lower-order facilities connect into progressively higher-order facilities, allowing a smooth transition between access and throughput while providing for safe and efficient movement of people and goods. Planning for the needs of active transportation modes is essential to providing a complete transportation system for a community. The Oregon Transportation Planning Rule (OAR 660-12) requires that collector and arterial facilities include pedestrian and bicycle facilities to provide continuous facilities for walking and cycling.

Exhibit 1 Relationship between Access, Mobility, and Functional Classification

A roadway's functional classification is determined by several factors, including how the facility connects with the rest of the system, the volume of traffic (local or through) it is expected to carry, and the types of trips it is expected to carry. The functional classification considers the adjacent land uses and the kinds of transportation modes that should be accommodated. The public right-of-way should also provide sufficient space for utilities to serve adjacent land uses. In some cases, natural features, topographical limitations, compatibility issues, and the built urban environment provide constraints that make the ideal functional classification of a given roadway impractical. In cases where an upgrade to larger cross sections are not feasible, parallel facilities were identified to support the network.

RECOMMENDED CHANGES TO EXISTING FUNCTIONAL CLASSIFICATIONS

Review of Existing Functional Classification Network

The City's functional classification system was reviewed to address the connectivity and continuity of the existing roadway network, constrained corridors based on the link demand to capacity ratio under 2038 conditions, opportunities and constraints of the current system based on the existing vehicular demands, and connectivity of the existing and proposed low stress bicycle network.

System Connectivity and Hierarchy

The need for future roadway connections to serve vehicles, bicyclists, and pedestrians has been expressed by many previous planning documents, including the *Regional Transportation Plan (RTP), Jackson County Transportation System Plan (TSP),* the existing Medford TSP and expansion area planning, and more.

Connectivity of the existing arterial and collector street system was reviewed by identifying whether a continuous grid network is in place throughout the City, how the facility classification changes or continues at the junction of collector and arterial roadways, and areas that do not follow a traditional hierarchical access scheme.

The arterial network exhibits the highest density along the City core and surrounding the I-5 corridor. The network of arterials is poorly spaced east of Crater Lake Avenue, with both limited east-west and north-south connections. While several roadways are classified as minor arterials west of I-5, the transition in the east of the City generally occurs directly from Major Arterial to some form of Collector. The collector network has limited length and continuity throughout the City. The integration and stepped access from minor collectors to major collectors is generally not present in Medford.

Many of the City's higher-order facilities (typically the arterial and collector network) are serving both local and regional traffic due to the lack of an integrated local roadway network. To implement the regional system, the City needs additional local and collector roadway extensions and connections that will allow the higher-order facilities to provide their intended function. These are included in the Functional Classification Map as future roadways. In addition, there is also the need for additional connectivity of higher-order facilities as described below.

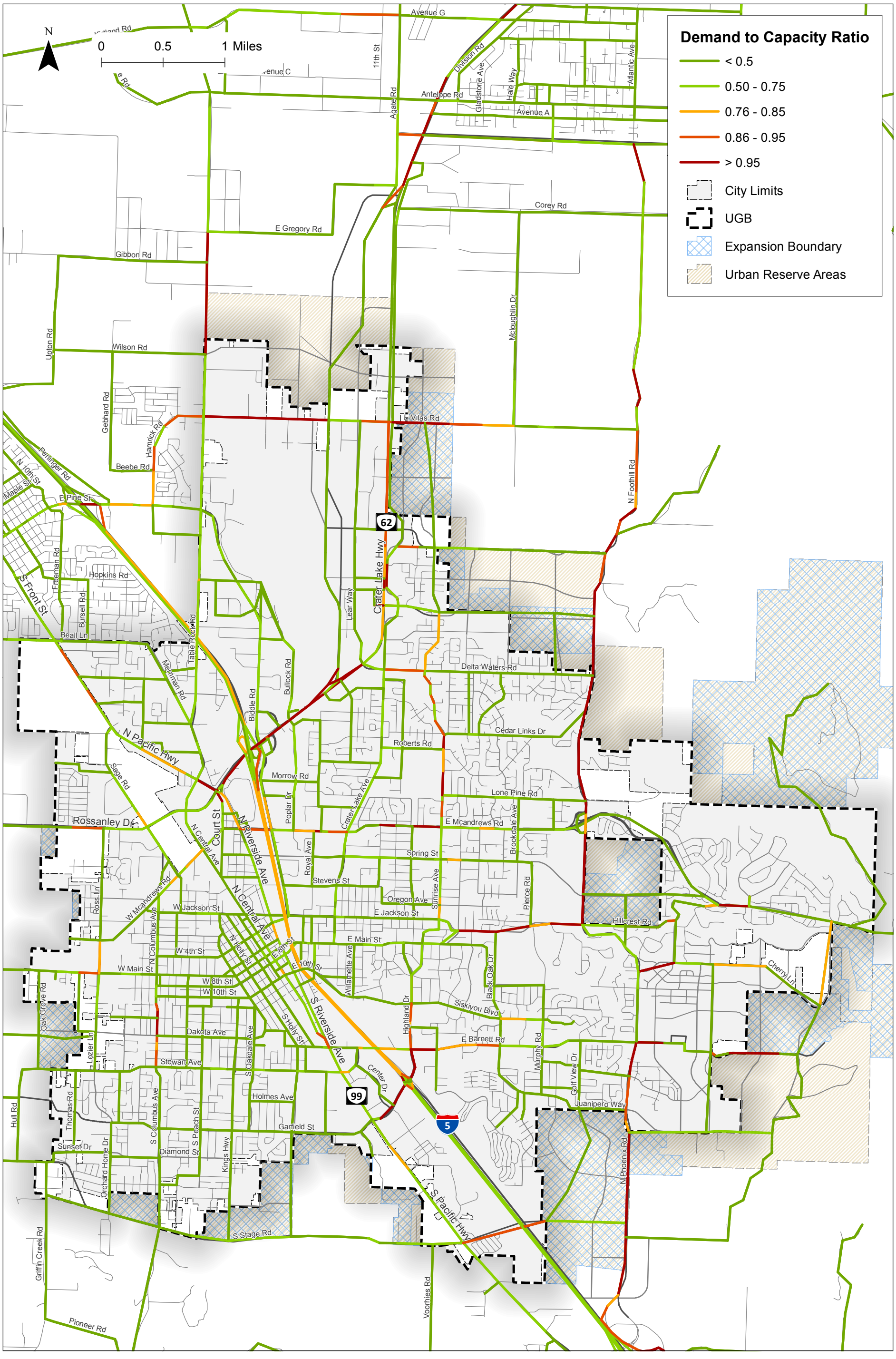
South Stage Road Extension

The South Medford Interchange is one of the most congested areas of the City. Medford anticipates growth in both southwest and southeast Medford. Providing an east-west connection between these two areas will help reduce congestion at the South Medford Interchange, provide access to Major Arterials including North Phoenix Road, Riverside Avenue, and Columbus Avenue, allowing for travel around Medford without reliance on I-5 and the South Medford Interchange. This connection would also remove circuitous trips between areas of Medford and Phoenix. This new connection over I-5 is assumed in the transportation analysis of the 2038 forecast conditions.

Constrained Corridors

Year 2038 traffic demand to segment capacity ratios (d/c ratios) were assessed to further identify facilities that operate beyond their current or forecast capacity (based on the travel demand model), as illustrated in Figure 1. The following observations were noted in the review of d/c ratios:

- OR 62, even with the bypass, will continue to operate with significant capacity constraints between Riverside Avenue and the planned bypass.
- Corridors directly serving and along the route to both I-5 interchanges are projected to operate in a constrained manner.
- Vilas Road has a d/c of 0.95 or higher with the assumption of a facility with one travel lane in each direction.



Future Roadway Demand-to-Capacity
Medford, Oregon

Figure 1

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Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

- N Foothill Road – N Phoenix Road has a d/c of 0.95 or higher along a majority of the portion that is in Medford with the assumption of one travel lane in each direction.

Collector and Arterial Opportunities and Constraints

The 2038 peak hour link volumes from the travel demand model, peak hour segment volumes calculated from the post processed 2038 intersection volumes, and 2038 traffic d/c ratios were reviewed to assess where opportunities and constraints exist within the current system. This assessment was intended to identify roadways that carry higher or lower volumes than is typical for their classification. Table 1 presents the general volume thresholds for the City's higher-order facilities from the 2003 Transportation System Plan. These thresholds were used as a guideline to identify if an upgrade to functional classification was needed based on capacity. However, volumes alone are not intended to form the basis of a roadways' classification. *See Attachment A for the RVMPO Travel Demand Model Outputs.*

Table 1. Generalized Traffic Volume Thresholds

Functional Classification	Volume Threshold (ADT)
Major Arterial	>15,000
Minor Arterial	10,000-15,000
Major Collector	5,000-10,000
Minor Collector	2,500-5,000

Bicycle Level of Traffic Stress

To help prioritize the bicycle system needs, the City's bicycle network (including future roadways assumed to be built to city standards) was evaluated using the Bicycle Level of Traffic Stress (LTS) methodology[1]. This methodology classifies four levels of traffic stress that a cyclist can experience on the roadway, ranging from LTS 1 (little traffic stress) to LTS 4 (high traffic stress). A road segment with a LTS 1 generally has low traffic speeds and low volumes and is suitable for all cyclists, including children. A road segment with a LTS 4 generally has high speeds, high volumes, and is perceived as unsafe by most adults. LTS 2 is considered appealing to a majority of the bike-riding population and is therefore the desired target on most roadways.

The results of the analysis helped guide the improvements, upgrades, or new roadways needed on the functional classification map to improve the bicycle connectivity of the roadway network.

[1] LTS analysis procedures are included in the ODOT Analysis Procedures Manual (APM).

Recommended Changes

Based on the review and analysis of the existing network, changes to the functional classification designations were identified as a part of this TSP to improve system connectivity and provide a roadway network that serves vehicles, bicycles, and pedestrians.

Figure 2 provides an exhibit of the proposed functional classification map and highlights new future roadways and existing roadways with changed designations. As shown in Figure 2, some of the key changes to functional classifications are outline below.

Airport Road was identified as a Minor Collector to provide an east-west connection as well as improve the bicycle connectivity between Biddle Road and Table Rock Road.

W McAndrews Road was identified to be upgraded to a Minor Arterial to provide connectivity and capacity based on the travel demand forecast.

Dakota Avenue was identified to be upgraded to a Minor Collector to provide an east-west connection and bicycle connectivity from Oak Grove Road to S Oakdale Avenue.

Oak Grove Road wad identified to be upgraded to a Major Collector to provide improved north-south collector connectivity.

Stewart Avenue was identified to be upgraded to a Minor Arterial from Orchard Home Drive to Oak Grove to continue the east-west arterial connection Stewart Avenue provides in the vicinity.

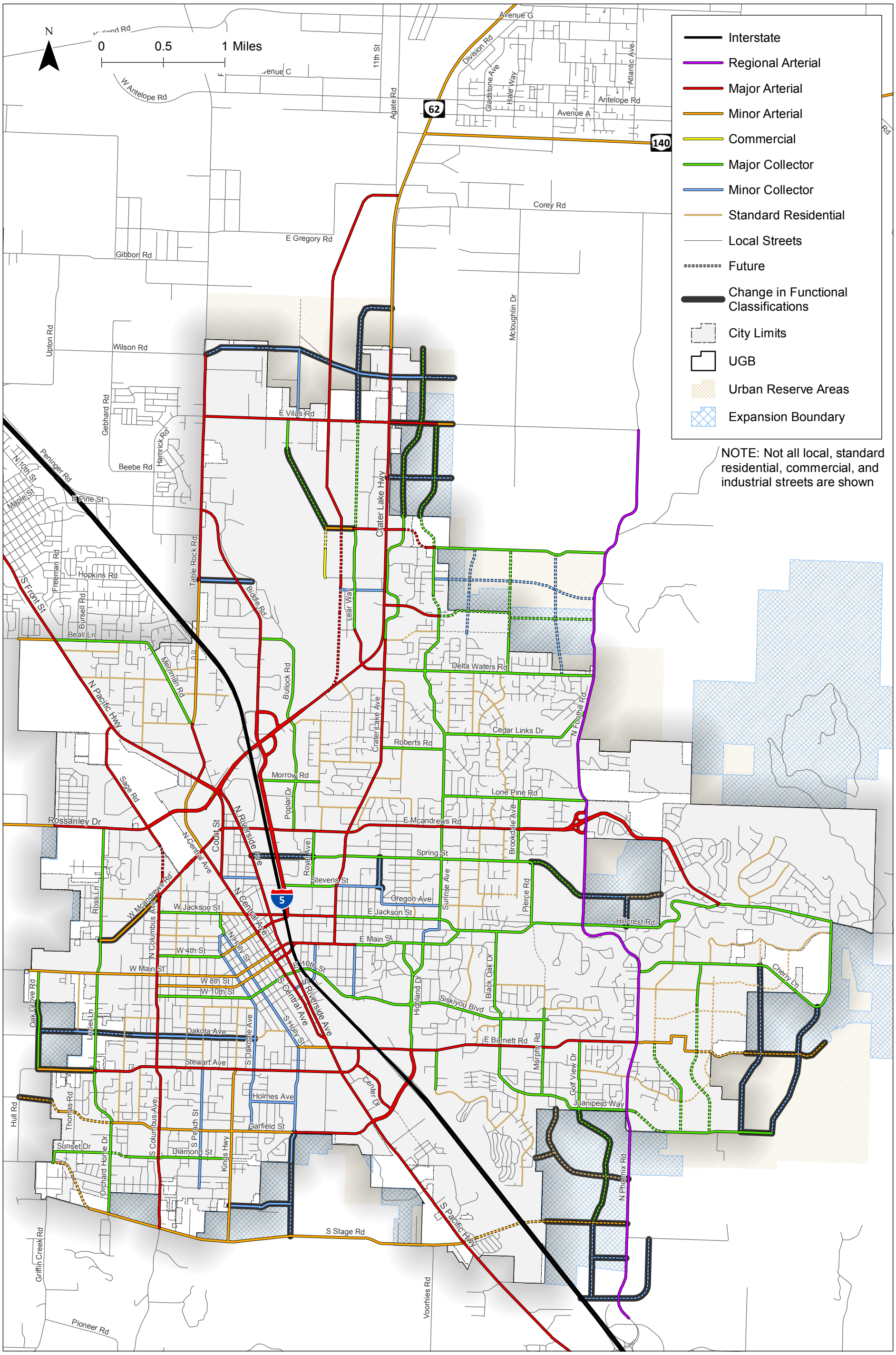
12th Street – Cottage Street was identified to be upgraded to a Minor Collector from East Main Street to Central Avenue to address the travel demand forecasted in the area and improve the connection across I-5.

Stevens Street was identified to be downgraded from the previously proposed Minor Arterial classification to a Major Collector from Crater Lake Avenue to Biddle Road to address the travel demand forecasted in the area.

Wabash Avenue was identified as a Minor Collector to provide a north-south collector that connects Major Collectors in the area such as Sunrise Avenue, Stevens Street, and Spring Street.

Experiment Station Road was identified as a Minor Collector to provide an east west connection between two Minor Arterials: Garfield Street and S Stage Road.

Holly Street was identified to be upgraded to Minor Collector from Garfield Street to Sparrow Way and provide a new roadway extension to S Stage Road to provide a north-south connection between Garfield Street and S Stage Road.



Roadway Functional Classification Changes
Medford, Oregon

Figure **2**

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Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

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Airway Drive was identified to be upgraded to a Major Collector to provide a collector for the industrial area.

Coker Butte Road was identified to be upgraded to a Minor Arterial from International Way to Lear Way to provide an east-west connection between the future International Way-Airway Drive and Lear Way collectors.

Vilas Road

Vilas Road is identified as a major arterial roadway in the functional classification map to address the demand to capacity (d/c) ratio, to accommodate for the projected volumes at intersections along Vilas Road, and to allow for capacity that supports the construction of the future OR62/Vilas Road interchange.

As illustrated in Figure 1, Vilas Road is projected to have a link demand to capacity ratio of 0.95 or higher under the 2038 conditions with the assumption of a facility with one travel lane in each direction.

The operations analysis at the Crater Lake Highway/Vilas Road intersection is projected to operate at a Level-of-Service "F" and over capacity (see Figure 10H in the Operations Memorandum). This intersection was noted to be monitored after the opening of the OR62 Bypass to verify how travel patterns change and affect the operations of the system (Medford TSP Project I-40).

The Jackson County TSP includes an intersection project at the Table Rock Road/Vilas Road intersection to monitor traffic operations following construction of the OR62 Bypass, with the potential recommendation to install a second separate left-turn lane and a separate right-turn lane at the westbound approach.

Based on turning movement volumes at both Crater Lake Highway/Vilas Road shown in Figure 10H and Table Rock Road/Vilas Road shown in Attachment B, the peak hour segment volumes are over 2,000, which is an approximate average daily traffic volume of 20,000. The projected volumes at these intersections do not include the assumption of a future OR62 Bypass/Vilas Road interchange, which would likely increase the expected volumes.

ROADWAY CROSS SECTIONS

Medford's roadway cross-section standards apply to new and reconstructed roads. The cross-sections take into consideration roadway function and operational characteristics, including traffic volume, capacity, operating speed, and safety. The cross-sections ensure that as the road system develops, it will be capable of safely and efficiently serving the traveling public, while also accommodating orderly development of adjacent lands. The right-of-way required ensures that adequate space is provided to accommodate all modes of travel as well as utility needs.

Medford's roadway cross-sections are based on the 20-year forecast conditions to ensure that roadways are built to accommodate forecasted need.

Improvements on Jackson County roads will typically follow City of Medford cross-sections within the city limits but should be coordinated with Jackson County. State highways must meet ODOT's design and operating standards, as provided in the ODOT Highway Design Manual.

Cross-sections may be adjusted through an adopted plan, such as a downtown or corridor plan, or based on project descriptions contained within this TSP. Streets that are likely to have alternative cross-sections developed through future neighborhood or corridor plans include (but are not limited to):

- Biddle Road
- Riverside Avenue
- Central Avenue
- West 8thStreet
- Main Street
- Crater Lake Highway
- East Main Street
- McAndrews Road
- Barnett Road
- Columbus Avenue

For existing roadways, the full right-of-way does not need to be obtained if the proposed cross-section can be accommodated within the available right-of-way.

Major and Regional Arterials

The Major Arterial classification is primarily used for roadways with high traffic volumes and inter-regional connections. Arterials are high-order facilities that are generally intended to connect to several collector roadways or provide links to higher order interstate or highway facilities. Regional Arterials are intended to have greater access control than Major Arterials. One-hundred and four feet of right-of-way is required for Major Arterials to allow construction of a five-lane roadway section, bicycle facilities, and detached sidewalks with a landscaped planter strip. Major Arterials within the City of Medford include roadways such as McAndrews Road, N Phoenix Road, and Barnett Road.

Exhibit 2, Exhibit 3, and Exhibit 4 show three variations of the Major and Regional Arterial cross-section. The first includes typical bicycle lanes. The second and third include cross-sections necessary to achieve a Level of Traffic Stress (LTS) 2, which is suitable for bicycling to a broad range of age and abilities. The buffered bicycle lanes are for facilities with posted speed limits of 35 miles per hour or lower. The

separated bicycle lanes are for facilities with posted speed limits of 40 miles per hour and higher. Separated bicycle lanes do not require additional right-of-way but do require a change in the curb alignment. If separated bicycle lanes are not achievable, buffered bicycle lanes are acceptable.

Additional Notes:

- Planter strip can vary when buffered bike lanes are included or when a multi-use path of at least 10 feet is built.
- Median lane can be reduced to 6 feet if a 2 foot raised median is built and is compatible with the area context and surrounding roadways.
- The range in pavement width accounts for the possibility of reduced median and buffered bike lanes.

Changes to Existing Standards:

- Flexibility with planter strip and median lane widths provides the ability to limit right of way impacts and improve the LTS for bicycles.
- New cross section options that include buffered bicycle lanes or separated bicycle facilities to improve the LTS for bicycles.

Exhibit 2 Major Arterial/Regional Arterial

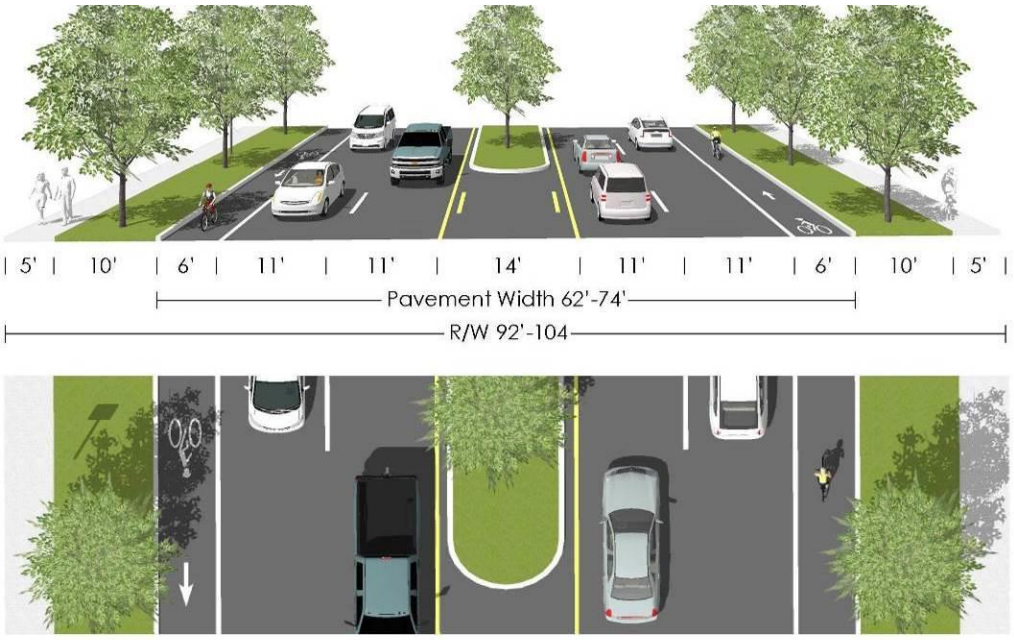


Exhibit 3 **Major Arterial/Regional Arterial With Buffered Bicycle Lanes (Low Stress for 35 mph and Lower)**

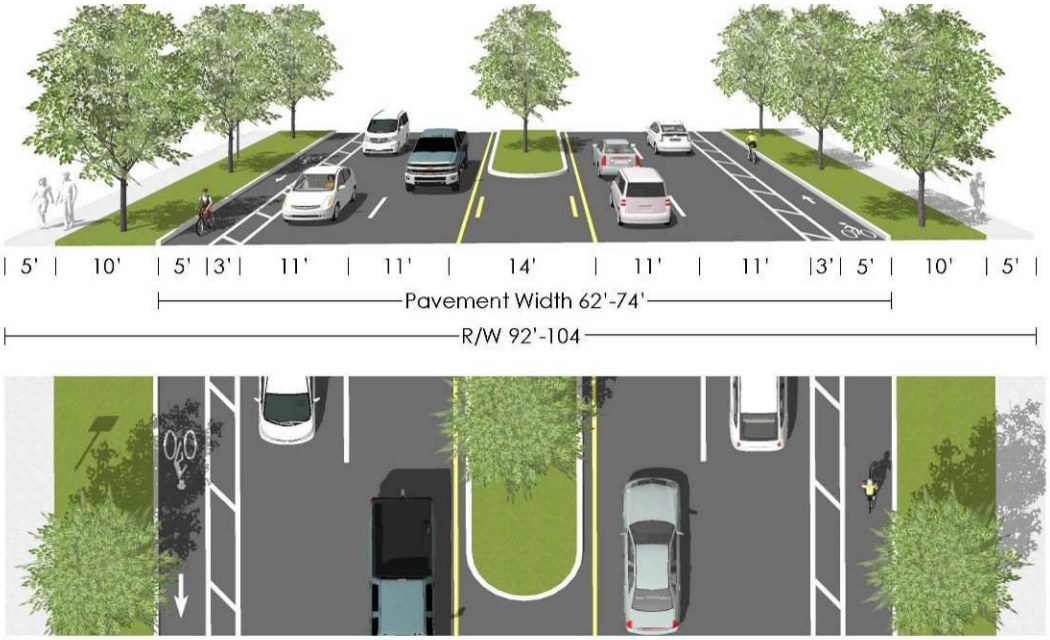
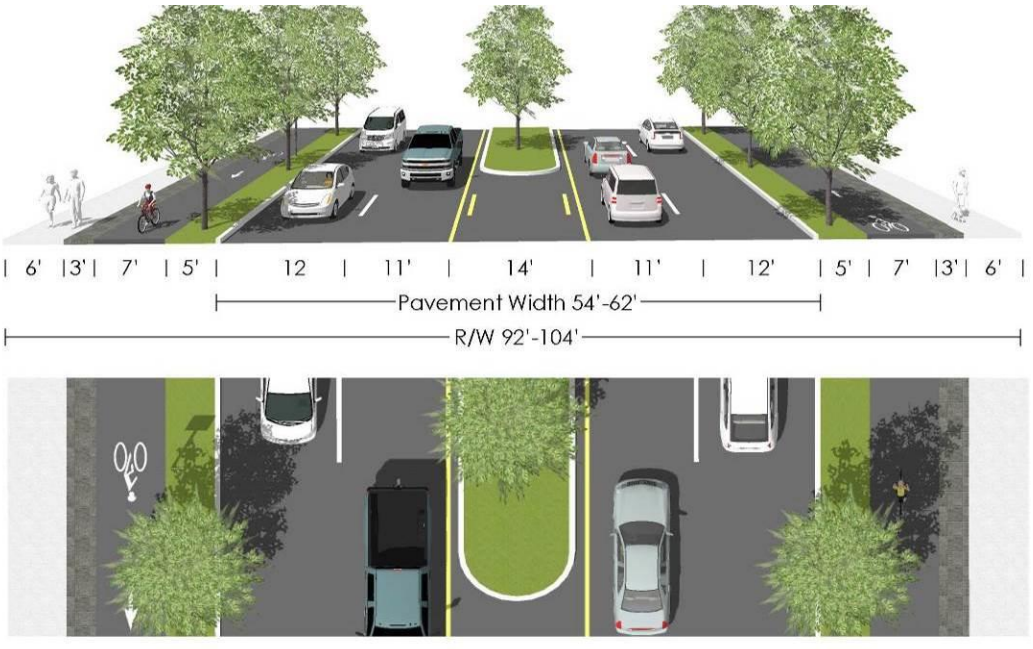


Exhibit 4 **Major Arterial/Regional Arterial With Separated Bicycle Lanes (Low Stress for 40 mph and Higher)**



Minor Arterials

The Minor Arterial classification further distinguishes between arterials with a five-lane cross-section (Major Arterials) and those with three traffic lanes (Minor Arterials). Minor Arterials generally serve slightly lower traffic volumes than Major Arterials. Design flexibility for minor arterials may be needed in some areas to allow for lower vehicular speeds, on-street parking, and appropriate landscaped planter strip and sidewalk width to better reflect specific area needs such as Transit-Oriented Districts (TODs), adopted specific plans or neighborhood plans, and pedestrian oriented, mixed-use development areas. Minor Arterials within the City of Medford include roadways such as West Main Street and Kings Highway.

Exhibit 5, Exhibit 6, and Exhibit 7 show three variations of the Minor Arterial cross-section. The first includes typical bicycle lanes. The second and third include cross-sections necessary to achieve a Level of Traffic Stress (LTS) 2 (suitable for bicycling to a broad range of age and abilities). The buffered bicycle lanes are for facilities with posted speed limits of 35 miles per hour or lower. The separated bicycle lanes are for facilities with posted speed limits of 40 miles per hour and higher. Separated bicycle lanes do not require additional right-of-way but do require a change in the curb alignment. If separated bicycle lanes are not achievable, buffered bicycle lanes are acceptable.

Additional Notes:

- Planter strip can vary when buffered bike lanes are included or when a multi-use path of at least 10 feet is built. Minimum width of 5 feet.
- Median lane can be reduced to 6 feet if a 2 foot raised median is built and is compatible with the area context and surrounding roadways.
- The range in pavement width accounts for the possibly of reduced median and buffered bike lanes.

Changes to Existing Standards:

- Flexibility with planter strip and median lane widths provides the ability to limit right of way impacts and improve the LTS for bicycles.
- New cross section options that include buffered bicycle lanes or separated bicycle facilities to improve the LTS for bicycles.
- New travel lane width of 11 feet instead of 12 feet.
- New bicycle lane width of 6 feet instead of 5 feet.

Exhibit 5 **Minor Arterial**

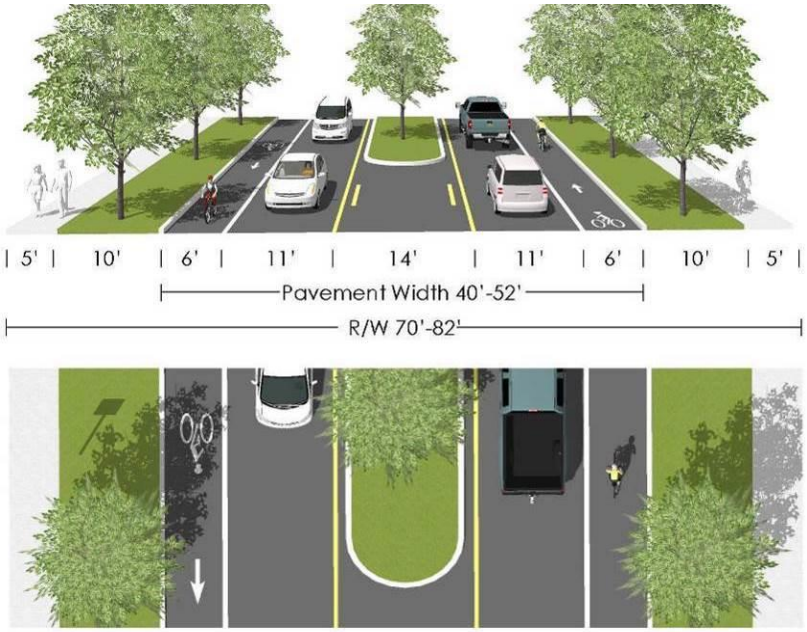


Exhibit 6 **Minor Arterial With Buffered Bicycle Lanes (Low Stress for 35 mph and Lower)**

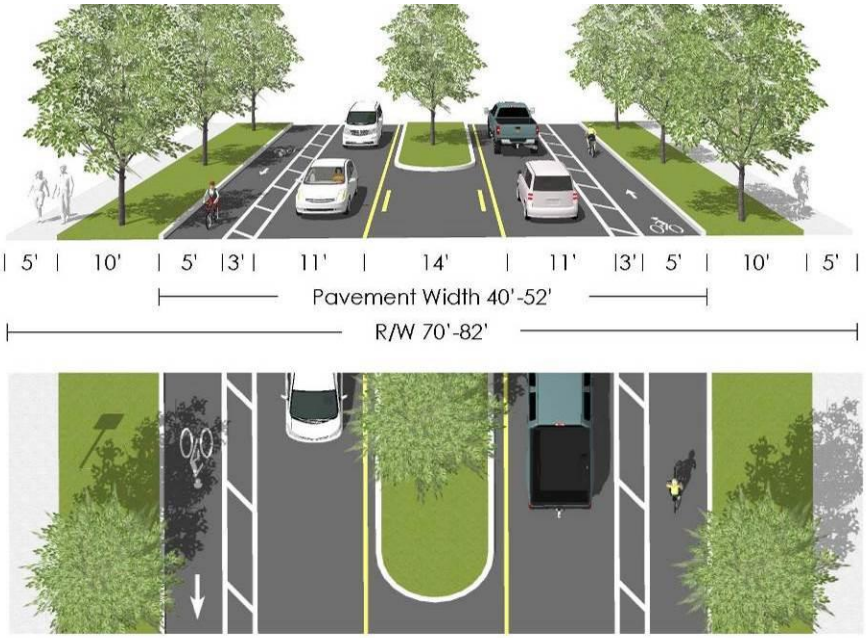
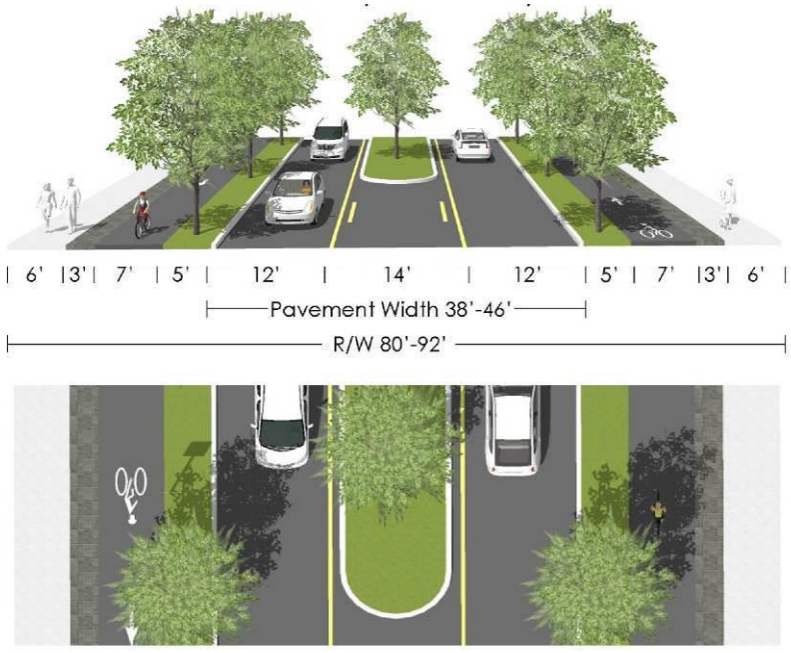


Exhibit 7 **Minor Arterial With Separated Bicycle Lanes (Low Stress for 40 mph and Higher)**



Major Collectors

The Major Collector classification is used for streets that link arterial and lower-order streets and serve moderate traffic volumes. Collectors serve both mobility and access functions with a three-lane roadway section, bicycle lanes, and detached sidewalks with a landscaped planter strip. Within this classification on-street parking is not provided. Where right-of-way is constrained on existing roadways, flexibility shall be provided to allow 5-foot sidewalks plus tree wells or 7-foot curb-tight sidewalks if tree wells are not feasible. Major Collectors within the City of Medford include roadways such as Lozier Lane, Hillcrest Road, Siskiyou Boulevard, Black Oak Drive, and Springbrook Road.

Exhibit 8 and Exhibit 9 show two variations of the Major Collector cross-section. The first includes typical bicycle lanes. The second includes the cross-section necessary to achieve a Level of Traffic Stress (LTS) 2 (suitable for bicycling to a broad range of age and abilities) when the posted speed limit is 35 mph or higher or the existing or projected traffic volumes are over 5,000 ADT.

Additional Notes:

- Planter strip can vary when buffered bicycle lanes are included. Minimum width of 5 feet.

Changes to Existing Standards:

- Flexibility with planter strip widths when right-of-way is constrained which provides the ability improve the LTS for bicycles.
- New cross section option that includes buffered bicycle lanes to improve the LTS for bicycles.
- Removal of the cross section alternative that includes on street parking.

Exhibit 8 Major Collector

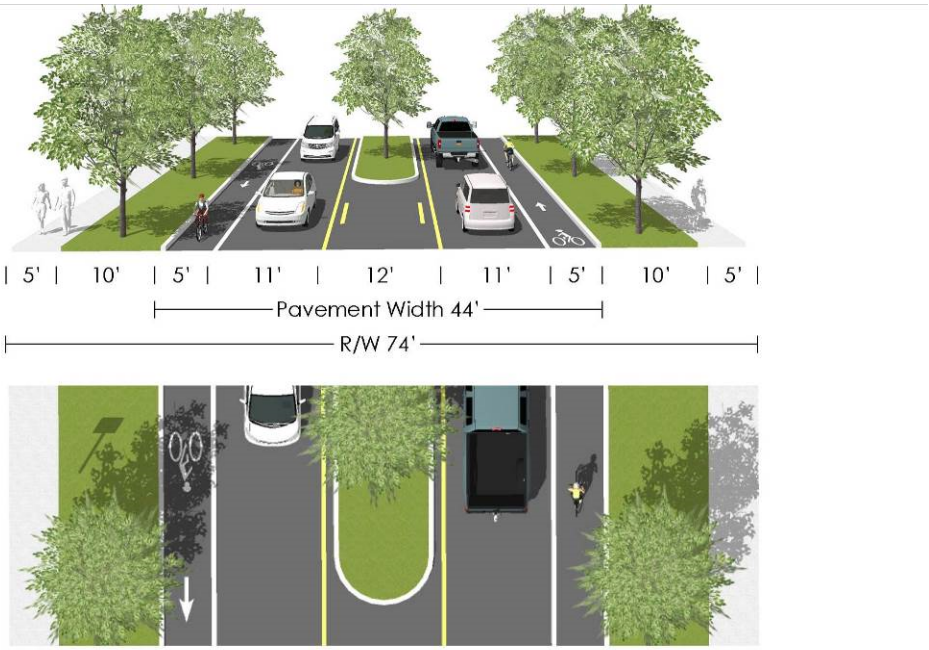
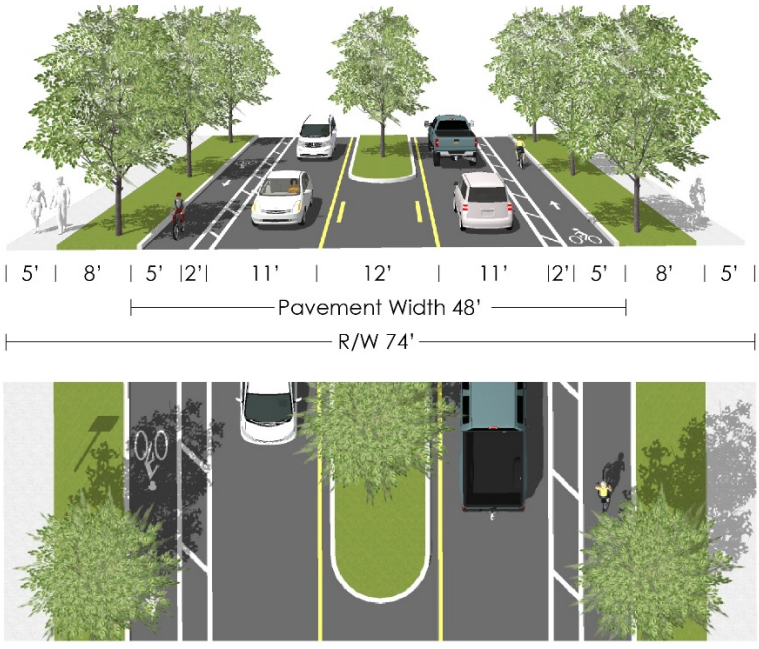


Exhibit 9 Major Collector With Buffered Bicycle Lanes (Low Stress for 35 mph and Higher)



Minor Collectors

Minor Collectors place a greater emphasis on access than throughput as compared to major collectors and serve relatively low traffic volumes. Most Minor Collectors run through neighborhoods and link residential streets to higher-order collectors and arterials. This classification includes a similar paved width to major collectors but includes on-street parking and no center turn lane. Where right-of-way is constrained on existing roadways, flexibility shall be provided to allow 5-foot sidewalks plus tree wells or 7-foot curb-tight sidewalks if tree wells are not feasible.

Additional Notes:

- Parking is not SDC creditable, done at developer's expense.
- The range in pavement width accounts for the possibility of no on-street parking.

Changes to Existing Standards:

- Flexibility with planter strip widths provides the ability to limit right of way impacts and improve the LTS for bicycles.
- New alternative minor collector cross section that provides options for wider parking and bicycle lanes to improve LTS for bicycles.

Exhibit 10 **Minor Collector**

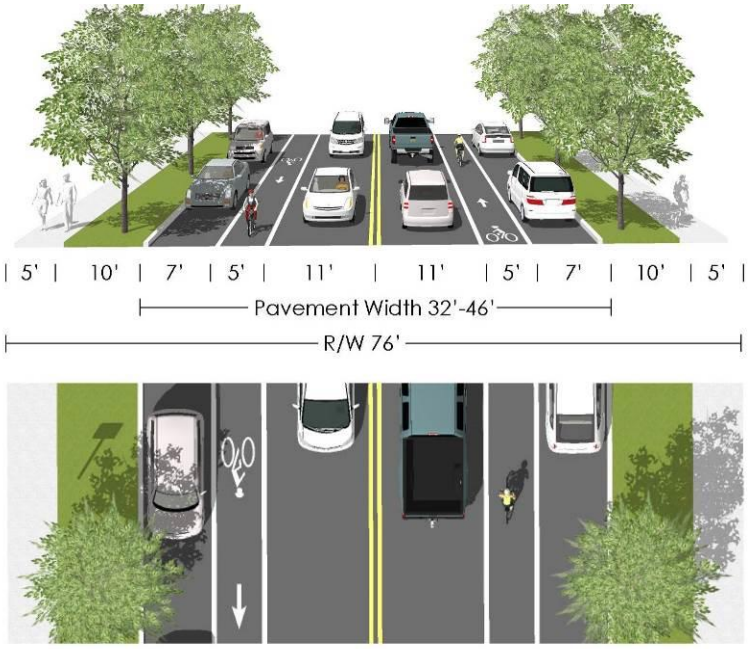
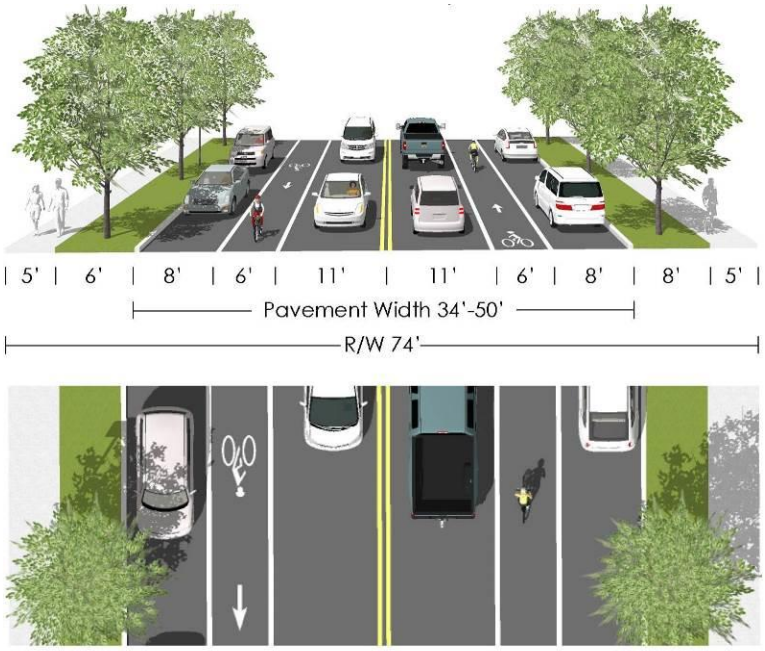


Exhibit 11 Minor Collector Alternative



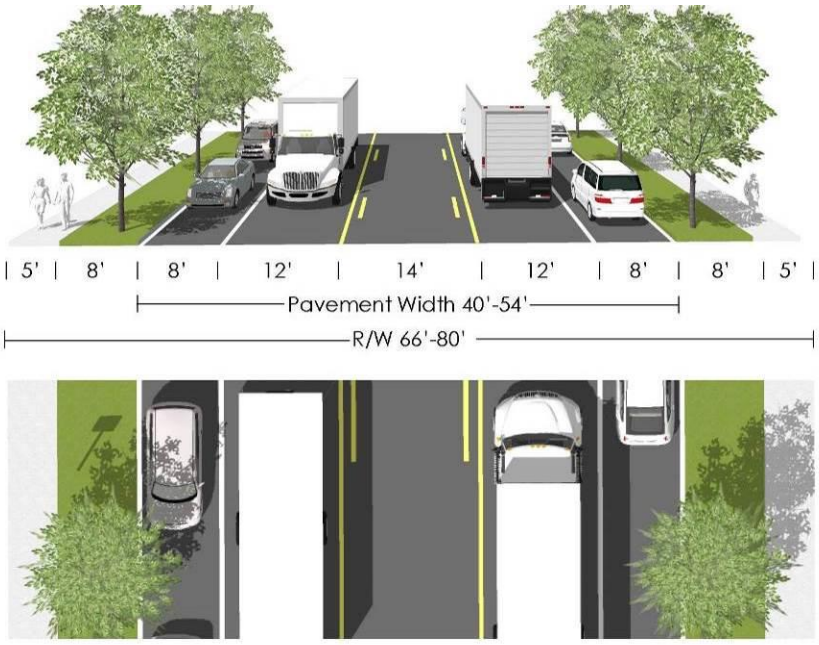
Industrial Street

The Industrial Street classification is used for lower-order streets within or abutting industrially zoned lands. Industrial streets provide frontage and direct access to industrial uses and link them to collectors and arterials to facilitate mobility for vehicles and goods. This designation provides wider travel lanes and a center turn lane/median to accommodate heavy trucks. Industrial Streets also provide on-street parking, sidewalk, and planter strips on both sides of the street. This cross section is an option for industrially zoned lands when the commercial street standard is not adequate for the expected volume of truck traffic. No roadways are currently designated as industrial streets in Medford.

Additional Notes:

- Left-turn lane may be omitted at the developer's request with approval from the City Engineer.

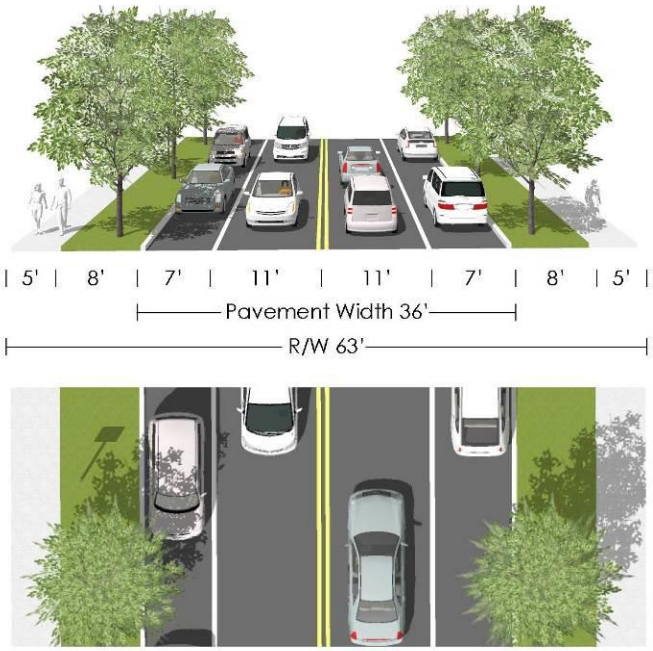
Exhibit 12 Industrial Street



Commercial Street

The Commercial Street classification is intended to provide frontage and direct access to land uses within a commercially zoned district. Commercial streets link downtown and commercial centers with other parts of the City and provide vehicular and pedestrian mobility and access by providing one travel lane and on-street parking in each direction with a sidewalk and planter strip on both sides. The Municipal Code allows for adjustments in sidewalk width and planter strip use to create a "main street" atmosphere. The Commercial Street classification can also be used for industrially zoned lands where lower volume truck traffic is expected. This section is identical to Standard Residential. Six inches of right-of-way is to be provided behind the sidewalks.

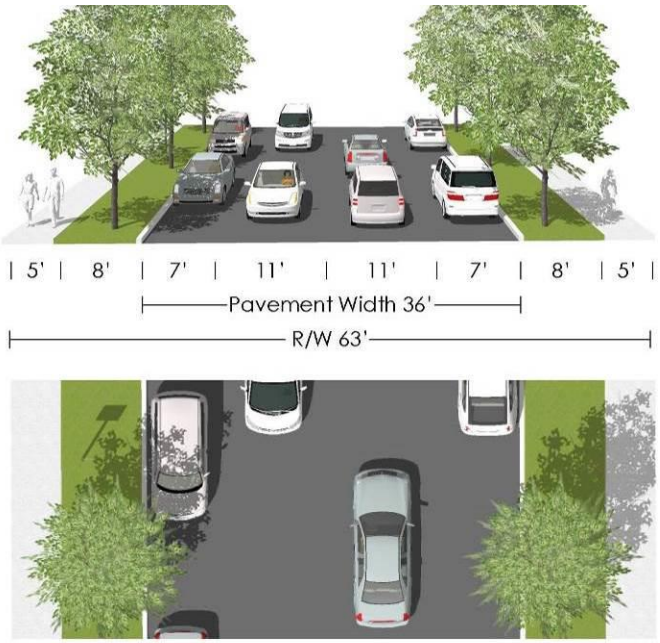
Exhibit 13 Commercial Street



Standard Residential Street

Standard residential streets classification prioritizes access over throughput and generally serves less than 2,500 vehicles per day. Standard residential is the highest of the residential roadway classifications, connecting neighborhoods to collector roadways. This designation provides one travel lane and on-street parking in each direction with a sidewalk and planter strip on both sides. Typical volumes and speeds on Standard Residential streets are low enough to accommodate shared use of travel lanes between bicyclists and motorists. Six inches of right-of-way is to be provided behind the sidewalks.

Exhibit 14 Standard Residential Street



Minor Residential Street

Minor Residential Streets are low-volume streets that provide immediate access to a maximum of 100 dwelling units on adjacent land. Minor Residential Streets have a two-lane cross-section and on-street parking on both sides. Given the narrow width and low-speed environment cyclists share the road with motorists. A key consideration within this cross-section is the ability to maintain a 20-foot clear width for fire access, where use of on-street parking could leave only 14-feet. This requires clustered, off-set (staggered) driveways so parking spots are not located directly opposite each other. An option is available for a wider street section (33-feet) with narrowed planter strips to maintain the same right-of-way. Six inches of right-of-way is to be provided behind the sidewalks. Minor Residential Streets that are also Neighborhood Bikeways include pavement markings and may also include wayfinding signage and traffic calming devices.

Exhibit 15 Minor Residential Street

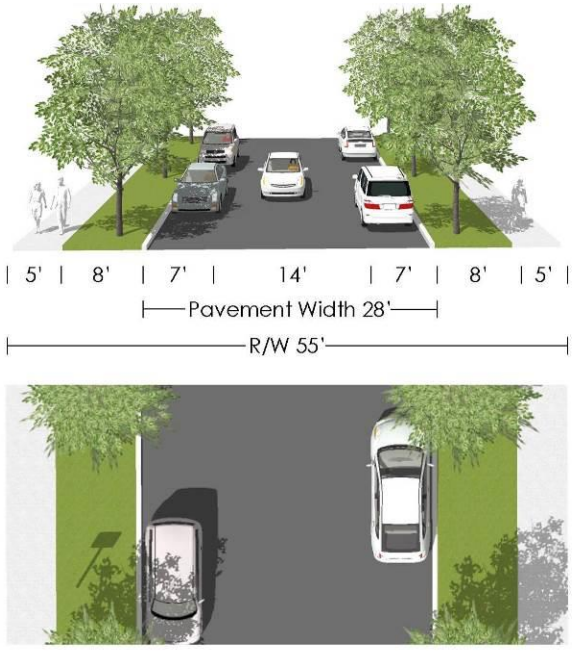
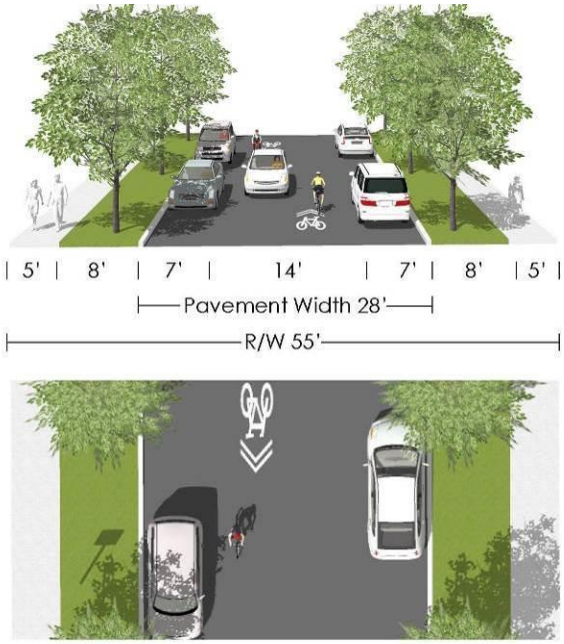


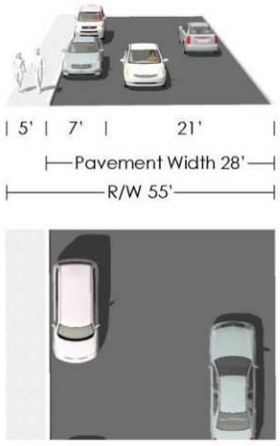
Exhibit 16 Minor Residential Street – Neighborhood Bikeway



Residential Lane

Residential Lanes are the lowest-order residential facility. These roads can serve a maximum of 8 residences and extend no more than 450 feet. The terminus of residential lanes is an approved cul-de-sac adequate for turn-around maneuvers (minimum 37-foot paved radius). Six inches of right-of-way is to be provided behind the sidewalks or curb if no sidewalk is present. The right-of-way width provides for future sidewalks and landscape strips on both sides of the roadway.

Exhibit 17 Residential Lane



Additional Notes:

- Additional 2 feet of right-of-way required for drainage behind the curb with no sidewalk when the road is on the outside border of a development. Not required when street is internal to the development and there is a Public Utility Easement (PUE) behind the curb.

Attachment A

N

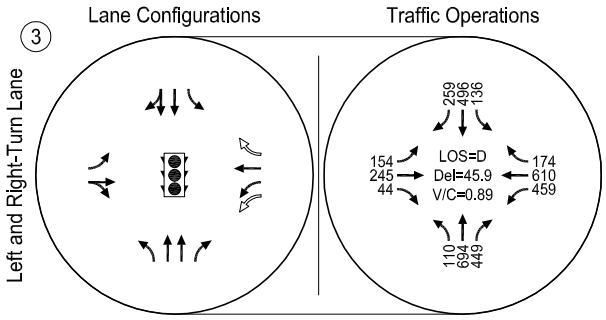
0 1 2 3 Miles

2038 Scenario C PM Peak Model Links
@odpp / PM Peak Link Volumes

- 0 - 200
- 201 - 600
- 601 - 1200
- 1201 - 2000
- 2001 - 3134

Document Path: K:\H_Portland\projfile\17342 - Medford TSP and UGB Amendment\gis\Task 6\2038 Scenario C PM Peak.mxd

Attachment B



- NEW LANE
- STOP SIGN
- TRAFFIC SIGNAL

#3 - Table Rock Road/Vilas Road
Alternative Traffic Operations
Jackson County, OR

Figure
3

MEMORANDUM

Subject	Transportation System Plan – Bicycle and Pedestrian Level of Traffic Stress
File no.	CP-16-036
To	TSP Review Bodies
From	Kyle Kearns, Planner II
Date	November 20, 2017

LEVEL OF TRAFFIC STRESS OVERVIEW

Similar to level of service (LOS), level of traffic stress (LTS) is a measurement for how well a transportation facility functions. Whereas LOS measures the operations of stopped controlled intersections on a graduated scale from A through F, LTS measures the level at which pedestrians and bicyclist experience stress on a transportation facility on a graduated scale of LTS 1 through LTS 4. Currently the City of Medford does not recognize LTS as a standard as the level of traffic stress analysis was not performed or adopted into code for the previous TSP from 2004. The intent of this memo is to provide information regarding LTS and to outline potential next steps for its application within the Transportation System Plan and the City of Medford.

MEASURING LEVEL OF TRAFFIC STRESS

The Oregon Department of Transportation (ODOT) has adopted the criteria used for measuring LTS and it can be viewed in the Analysis Procedures Manual (APM).[1] Within the APM the methodologies for measuring both bicycle level of stress (LTS) and pedestrian level of stress (PLTS) are outlined separately. However, ODOT encourages that both analyses be done concurrently, and in the case of Medford's 2038 TSP update, both LTS and PLTS were analyzed at the same time. Each LTS is briefly summarized within this memo. For a "cheat sheet" on how LTS and PLTS is measured, see Exhibit A.

Bicycle Level of Traffic Stress (LTS)[1]

Once the analysis of the bicycle network is performed, each segment of the network is assigned an LTS rating. The LTS rating is determined using several factors, which include: posted roadway speed, roadway width, presence and width of bike lane, and presence and width of parking lane. The outcome of the analysis determines the rating for each roadway and multi-use path within the City, assigning a rating to each direction the road

or path travels in. ODOT also recognizes four types of bicycle riders often paired with the LTS analysis, and together one can begin to understand the implications of the different levels of LTS. The four distinct riders/LTS categories are:

Bicycle LTS Classifications

LTS 1: Traffic stress is considered low. Facilities require little attention and are suitable for all cyclists. Traffic speeds are low with no more than one lane in each direction. Children age 10 and up can adequately use LTS 1 facilities, which include residential streets and some separated facilities.

LTS 2: Facilities with little stress but need more attention than an LTS 1 facility. Speeds are still low, with a maximum of three travel lanes in both directions. LTS 2 facilities are suitable for teenagers and up. Typical facilities include low speed collectors with bike lanes or central business districts.

LTS 3: Traffic stress is considered moderate on LTS 3 facilities, allowing for up to five travel lanes in both directions and moderate traffic speeds. Facilities with an LTS of 3 are suitable for observant adult cyclist. Typical facilities include low-speed arterials with bike lanes or moderate speed, non-multilane roadways.

LTS 4: Traffic stress is considered high and typical users of these facilities are skilled cyclist only. Speeds are moderate to high, with two to over five lanes in both directions. Typical facilities include high-speed roadways with narrow or no bike lanes.

Types of Riders

Source: Dill & McNeil, PSU

Pedestrian Level of Traffic Stress (PLTS)[1]

Much like LTS, PLTS is a measurement of the stress experienced by pedestrians while using pedestrian facilities, particularly sidewalks or multi-use paths. Where bicycle level of traffic stress can be paired with defined user groups, pedestrian level of traffic stress blankets all users into one grouping, that of the pedestrian. PLTS is separated into four distinct rankings, on a graduated scale of PLTS 1 through PLTS 4.

To determine PLTS the analysis considers roadway posted speed, roadway width (# of lanes), sidewalk width, sidewalk condition, buffer type, buffer width, and land use. Certain factors may be trumped by others; for example a roadway may have a low posted speed (25 MPH), a tree buffer, and a residential land use (all PLTS 1 & 2 factors) but the condition of the sidewalk is in complete disrepair with cracks, roots, and uneven pavement assigning a PLTS 4 to the facility. The four levels of PLTS and the types of facilities that would receive the ranking are:

PLTS 1: Facilities with little to no traffic stress suitable for all users, including children under 10 and people using wheeled mobility devices (WhMD)[2]. A buffer between the pedestrian and motor vehicle must be present and either traffic speeds must be low or motor vehicles must be far from the pedestrian. Some examples include separated multi-use paths or sidewalks adjacent to buffers with a minimum 10 foot width.

Low roadway speeds, bike lanes and parking in between the sidewalk and the road, and sidewalk width all attribute to the PLTS rating of 1.

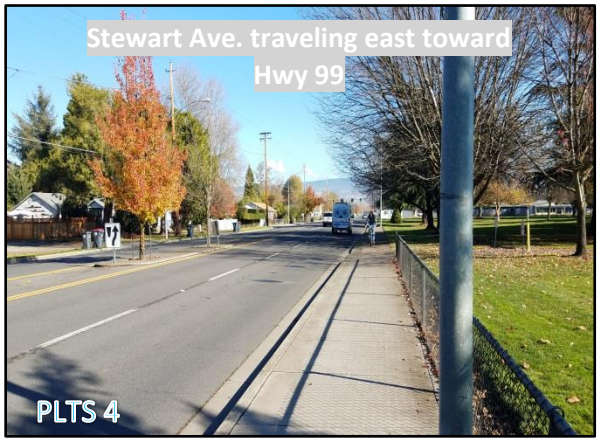
PLTS 2: Facilities will have little traffic stress, but require more attention than a PLTS 1 facility. All users should be able to use a PLTS 2 facility, with some limitations for children under 10 and people with WhMD. Roadways will have higher speeds or volumes, but most users are comfortable using them. Facilities are similar to PLTS 1 facilities but may have a smaller buffer and/or sidewalk widths or are in higher traffic volume areas.

Low roadway speeds, surrounding land uses, sidewalk width and the bike lane in between the sidewalk and roadway give this a PLTS of 2.

PLTS 3: Facilities are considered to have moderate stress and are suitable for adults. Even the most capable of adults would feel uncomfortable, but safe using a PLTS 3 facility. Individuals using a WhMD may find portions of a PLTS 3 facility impassable requiring the use of a bike lane, travel lane, or shoulder to continue travel along the facility. Examples of PLTS 3 facilities include sidewalks adjacent to a five foot buffer along a five lane road or a curb tight sidewalk along a 35 MPH road.

Higher roadway speeds, small buffer widths, lack of items in buffer, surrounding land uses, and sidewalk condition contribute to a PLTS 3.

PLTS 4: Facilities will have a high level of traffic stress and are typically only used by able-bodied adults, with limited route choices along the facility. Traffic speeds are moderate to high along a PLTS 4 facility and often have narrow or no pedestrian facilities provided. Use of these roadways is often driven by need more than desire. Examples include moderate/high speed roads without a sidewalk or freeway interchanges.



High roadway speeds, no buffers, sidewalk gaps, curb tight sidewalks, and sidewalk condition contribute to a PLTS 4 on all of Stewart Ave.

USING LEVEL OF TRAFFIC STRESS AS A TOOL

Having only been released in May of 2012[3], the level of traffic stress analysis is still new and has yet to receive a wide application. Jackson County uses the bicycle level of traffic stress analysis in their TSP to locate deficient facilities, but beyond the analysis only policy suggestions were made in regard to LTS. Some Oregon cities that have used the LTS analysis in their adopted TSP include West Linn and The Dalles; some other cities are in the process of performing the analysis such as Gladstone, Brookings, and Gresham. The use of PLTS has yet to receive any notable consideration within a TSP.

Staff reviewed the potential applications of both the bicycle and pedestrian LTS analysis and the implications for the 2018-2038 TSP Update.

A map of the LTS analysis can be found in Exhibit B

A map of the PLTS analysis can be found in Exhibit D

Bicycle LTS as a Tool

Within the draft 2018-2038 TSP Update bicycle LTS is used to help identify the most critical deficiencies in the bicycle system as well as to prioritize the needs of the bicycle network. Exhibit D includes the draft text from the TSP regarding LTS. The LTS analysis enables an objective review of the perceived safety of a roadway for bicycle users; as such the LTS analysis has been used to aid in the drafting of the bicycle project list. If constructed as proposed, the bicycle project list would create a bicycle network that has a system wide rating of LTS 2; a map can be found in Exhibit C.

Currently, level of service is used in a manner that requires development to maintain an LOS that meets the City's standard along roadway facilities. If, through the traffic impact analysis (TIA), it is determined that development will cause a roadway facility to drop below the established LOS standard, the development must mitigate for the degradation in the roadway facility. LOS standards apply to automobile traffic only.

Since LOS only applies to automobile traffic this creates inconsistencies when measuring other transportation modes and how they are impacted by development. Currently, Medford does not recognize LTS as a method for determining transportation infrastructure adequacy upon development. However, if directed, LTS could be used similarly to LOS. When considering LTS for policy implementation, achieving a LTS 2 is the most realistic standard as it would reach a broader audience of bicycle users and an LTS 1 is often only achievable through the complete separation of bicycle facilities (i.e. multi-use paths, separated bike lanes) or the use of lower order, lower speed roadways (i.e. local/residential streets, bicycle boulevards). Some possible applications of LTS in the TSP update include:

- Require an LTS 2 for all greenfield and infill development
- Require an LTS 2 for all development, when applicable
- Mirror LOS policies (e.g. require LTS 2 at time of re-zone)
- Focus on LTS 2 in specific geographic locations or corridors
- Ensure roadway cross-sections achieve LTS 2 standard
- Do nothing, use LTS as a reference for future planning efforts

Pedestrian LTS as a Tool

ODOT adapted the bicycle level of traffic stress analysis to apply it to pedestrian facilities as well, which is provided for in the APM.[1] PLTS is used to identify the most critical deficiencies in the pedestrian network, much like LTS. The analysis of Medford's PLTS was performed and mapped; however it was not provided for in the draft TSP. A PLTS 2 is considered a minimum target for pedestrian facilities as most users would be

comfortable using it. Higher levels of traffic stress may be acceptable in areas depending on land use, traffic volumes, roadway classification, and population types.
Possible applications for PLTS include:

- Incorporate PLTS analysis into TSP
- Require a PLTS 2 for all greenfield and infill development
- Require a PLTS 2 for all development, when applicable
- Mirror LOS policies (e.g. require PLTS 2 at time of re-zone)
- Focus on PLTS 2 in specific geographic locations or corridors
- Ensure roadway cross-sections achieve PLTS 2 standard
- Do nothing, use PLTS as a reference for future planning efforts

EXHIBITS
A: BLTS and PLTS Cheat Sheet
B: Bicycle Level of Traffic Stress Analysis Map
C: Bicycle Improvements Map (to achieve LTS 2)
D: Pedestrian Level of Traffic Stress Analysis Map

Sources

[1] Oregon Department of Transportation, Transportation Development Division, Planning Section, Transportation Planning Analysis Unit. "Analysis Procedures Manual Version 2." Sept. 2017. www.oregon.gov/ODOT/Planning/Documents/APMv2.pdf.

[2] A wheeled mobility device (WhMD) includes walkers, manual wheelchairs, power base chairs, and light weight scooters. Each of these devices requires the operator to maneuver and set the direction of travel. All of these devices can be operated independently and do not require additional people to maneuver the device. The American with Disability Act (ADA) (1990) sets limits on the vertical change in a surface to 0.5 inches.

[3] Mekuria, Maaza C., et al. Low-Stress Bicycling and Network Connectivity. Mineta Transportation Institute, College of Business, San Josè State University, 2012, transweb.sjsu.edu/project/1005.html.

Exhibit A
BLTS and PLTS Cheat Sheet

Bicycle Level of Traffic Stress

Assumptions and Scoring

Non-residential streets in the City of Medford (ranging from Commercial Streets to Major/Regional Arterials) were assigned a bicycle level of traffic stress (BLTS) score. The methodology for assigning BLTS scores to Medford Streets was based on Chapter 14 of Oregon Department of Transportation's (ODOT) Analysis Procedure's Manual (APM)[1]. BLTS scores are based on a range of criteria, including:

- Posted speed
- Roadway width
- Presence and width of a bike lane
- Presence and width of a parking lane

A combination of GIS data provided by the City and Jackson County (roadway speeds, roadway functional classification, bicycle facilities) and manual data collected using aerial imagery from Google Earth (roadway widths, bike lane widths and parking facilities and widths) was used to determine appropriate BLTS scores. BLTS scores were assigned to both sides of each street to provide a more detailed depiction of barriers and opportunities for bicyclists travelling in Medford.

The following tables list the scoring criteria used to assign BLTS roads to Medford Streets. **Table 1** details the criteria used for streets with both a bike lane and adjacent parking lane. **Table 2** details the criteria used for streets with a bike lane and without an adjacent parking lane. **Table 3** details the criteria used for streets where cyclists must travel in mixed traffic (no bicycle facilities available). **Table 4** details the assumptions used to score future (unbuilt) streets in Medford's network.

A key efficiency offered by the BLTS analysis is that it follows the "weakest link principle", in which the dimension with the worst level of traffic stress governs. For instance, a roadway with a posted speed of 30 miles per hour and three travel lanes per direction will receive an LTS score of 4, overriding the lower stress value of the speed component.

[1] Oregon Department of Transportation. *Analysis and Procedures Manual Version 2*. February 2017.

Table 1: Bike Lane with Adjacent Parking Lane Criteria (ODOT APM - Chapter 14 - Exhibit 14-3)

1 Lane Per Direction				≥ 2 Lanes per direction[1]	
Prevailing or Posted Speed	≥ 15' bike lane + parking	14' - 14.5' bike lane + parking	≤ 13' bike lane + parking or Frequent blockage[2]	≥ 15' bike lane + parking	≤ 14.5' bike lane + parking or Frequent blockage[2]
≤ 25 mph	LTS 1	LTS 2	LTS 3	LTS 2	LTS 3
30 mph	LTS 1	LTS 2	LTS 3	LTS 2	LTS 3
35 mph	LTS 2	LTS 3	LTS 3	LTS 3	LTS 3
≥ 40 mph	LTS 2	LTS 4	LTS 4	LTS 3	LTS 4

[1]Streets with two-way left turn lanes were assumed to have 2 lanes per direction
[2]Typically occurs in urban areas (i.e. delivery trucks, parking maneuvers, stopped buses)

Table 2: Bike Lane without Adjacent Parking Lane Criteria (ODOT APM - Chapter 14 - Exhibit 14-4)

1 Lane Per Direction					≥ 2 Lanes per direction[1]	
Prevailing or Posted Speed	≥ 7' (buffered bike lane)	5.5' - 7' bike lane	≤ 5.5' bike lane	Frequent bike lane blockage[2]	≥ 7' (buffered bike lane)	< 7' bike lane or frequent blockage[2]
30 mph	LTS 1	LTS 1	LTS 2	LTS 3	LTS 1	LTS 3
35 mph	LTS 2	LTS 3	LTS 3	LTS 3	LTS 2	LTS 3
≥ 40 mph	LTS 3	LTS 4	LTS 4	LTS 4	LTS 3	LTS 4

[1]Streets with two-way left turn lanes were assumed to have 2 lanes per direction
[2]Typically occurs in urban areas (i.e. delivery trucks, parking maneuvers, stopped buses)

Table 3: Urban/Suburban Mixed Traffic Criteria (ODOT APM - Chapter 14 - Exhibit 14-5)

Prevailing or Posted Speed	Unmarked Centerline	1 lane per direction	2 lanes per direction[1]	3+ lanes per directions
≤ 25 mph	LTS 1	LTS 2	LTS 3	LTS 4
30 mph	LTS 2	LTS 3	LTS 4	LTS 4
≥ 35 mph	LTS 3	LTS 4	LTS 4	LTS 4

[1]Streets with two-way left turn lanes were assumed to have 2 lanes per direction

Table 4: Future Streets - Assumptions

Functional Classification	Assumed Speed	Lanes per Direction[1]	Bike Lane[1]	Buffer[1]	Parking [1]	BLTS[1]
Major Arterial	40 mph	3	5'	3'	-	3
Regional Arterial	40 mph	3	5'	3'	-	3
Minor Arterial	35 mph	2	5'	3'	-	2
Major Collector	30 mph	2	5'	-	-	3
Minor Collector	30 mph	1	5'	-	7'	3
Commercial[2]	30 mph	1	-	-	7'	2

[1]Per Updated Functional Classification Cross Sections for the City of Medford
[2]LTS Score assumes that Commercial Streets have unmarked centerlines - a centerline would increase the score to an LTS 3

Pedestrian Level of Traffic Stress

Assumptions and Scoring

Non-residential streets in the City of Medford (ranging from Commercial Streets to Major/Regional Arterials) were assigned a pedestrian level of traffic stress (PLTS) score. The methodology for assigning PLTS scores to Medford Streets was based on Chapter 14 of Oregon Department of Transportation's (ODOT) Analysis Procedure's Manual (APM). PLTS scores are based on a range of criteria, including:

- Posted Speed
- Roadway Width
- Sidewalk Width
- Sidewalk Condition
- Buffer Type
- Buffer Width

A combination of GIS data provided by the City and Jackson County (roadway speeds, roadway functional classification and sidewalk location) and manual data collected using aerial imagery from Google Earth (roadway width, sidewalk width/condition and buffer width/type) was used to determine appropriate PLTS scores. PLTS scores were assigned to both sides of each street to provide a more detailed depiction of barriers and opportunities for pedestrians travelling in Medford.

The following tables list the scoring criteria used to assign PLTS roads to Medford Streets. **Table 5** details the criteria used to assign scores based on sidewalk width and condition. **Table 6** details the criteria used to assign scores based on buffer type and roadway speed. **Table 7** details the criteria used to assign scores based on roadway speed and buffer width. **Table 8** details the assumptions used to score future (unbuilt) streets in Medford's network.

A key efficiency offered by the PLTS analysis is that it follows the "weakest link principle", in which the dimension with the worst level of traffic stress governs. For instance, a roadway with a posted speed of 40 miles per hour, a brand new six-foot sidewalk and no buffer (curb tight) will receive an LTS score of 4, overriding the lower stress value of the sidewalk condition component.

Table 5: Sidewalk Condition (ODOT APM - Chapter 14 - Exhibit 14-16)

Actual/Effective Sidewalk Width (ft.)[1]		Sidewalk Condition				
		Good	Fair	Poor	Very Poor	No Sidewalk
Actual	< 4'	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4
	≥ 4' to < 5'	PLTS 3	PLTS 3	PLTS 3	PLTS 4	PLTS 4
	≥ 5	PLTS 2	PLTS 2	PLTS 3	PLTS 4	PLTS 4
Effective	≥ 6[2]	PLTS 1	PLTS 1	PLTS 2	PLTS 3	PLTS 4

[1]Effective width is the available/usable area for the pedestrian. Does not include areas occupied by store fronts or curbside features.

[2]Effective width should be proportional to volume since higher volume sidewalks should be wider than the base six feet. Use a minimum PLTS 2 for higher volume sidewalks that are not proportional.

Table 6: Physical Buffer Type (ODOT APM - Chapter 14 - Exhibit 14-17)

Physical Buffer Type				
Buffer Type[1]	Prevailing or Posted Speed			
	≤ 25 mph	30 mph	35 mph	≥ 40 mph
No Buffer (curb tight)	PLTS 2	PLTS 3	PLTS 3	PLTS 4
Solid Surface	PLTS 2[2]	PLTS 2	PLTS 2	PLTS 2
Landscaped	PLTS 1	PLTS 2	PLTS 2	PLTS 2
Landscaped with trees	PLTS 1	PLTS 1	PLTS 1	PLTS 2
Vertical	PLTS 1	PLTS 1	PLTS 1	PLTS 2

[1]Combined Buffers: If two or more of the buffer conditions apply, use the most appropriate, typically the lower stress level.

[2]If street furniture, street trees, lighting, planters, surface change etc. are present then the PLTS can be lowered to PLTS 1.

Table 7: Total Buffering Width (ODOT APM - Chapter 14 - Exhibit 14-18)

Total Number of Travel Lanes (both directions)	Total Buffering Width (ft.)[1]				
	<5	≥ 5 to < 10	≥ 10 to < 15	≥ 15 to < 25	≥ 25
2	PLTS 2	PLTS 2	PLTS 1	PLTS 1	PLTS 1
3	PLTS 3	PLTS 2	PLTS 2	PLTS 1	PLTS 1
4 to 5	PLTS 4[2]	PLTS 3	PLTS 2	PLTS 1	PLTS 1
6	PLTS 4[2]	PLTS 4[2]	PLTS 3	PLTS 2	PLTS 2

[1]Total buffering width is the summation of the width of buffer, width of parking, width of shoulder and width of the bike lane on the same side of the roadway as the pedestrian facility is being evaluated.

[2]Sections with a substantial physical barrier/tall railing between the travel lanes and the walkway can be lowered to PLTS 3.

Table 8: Future Streets – Assumptions

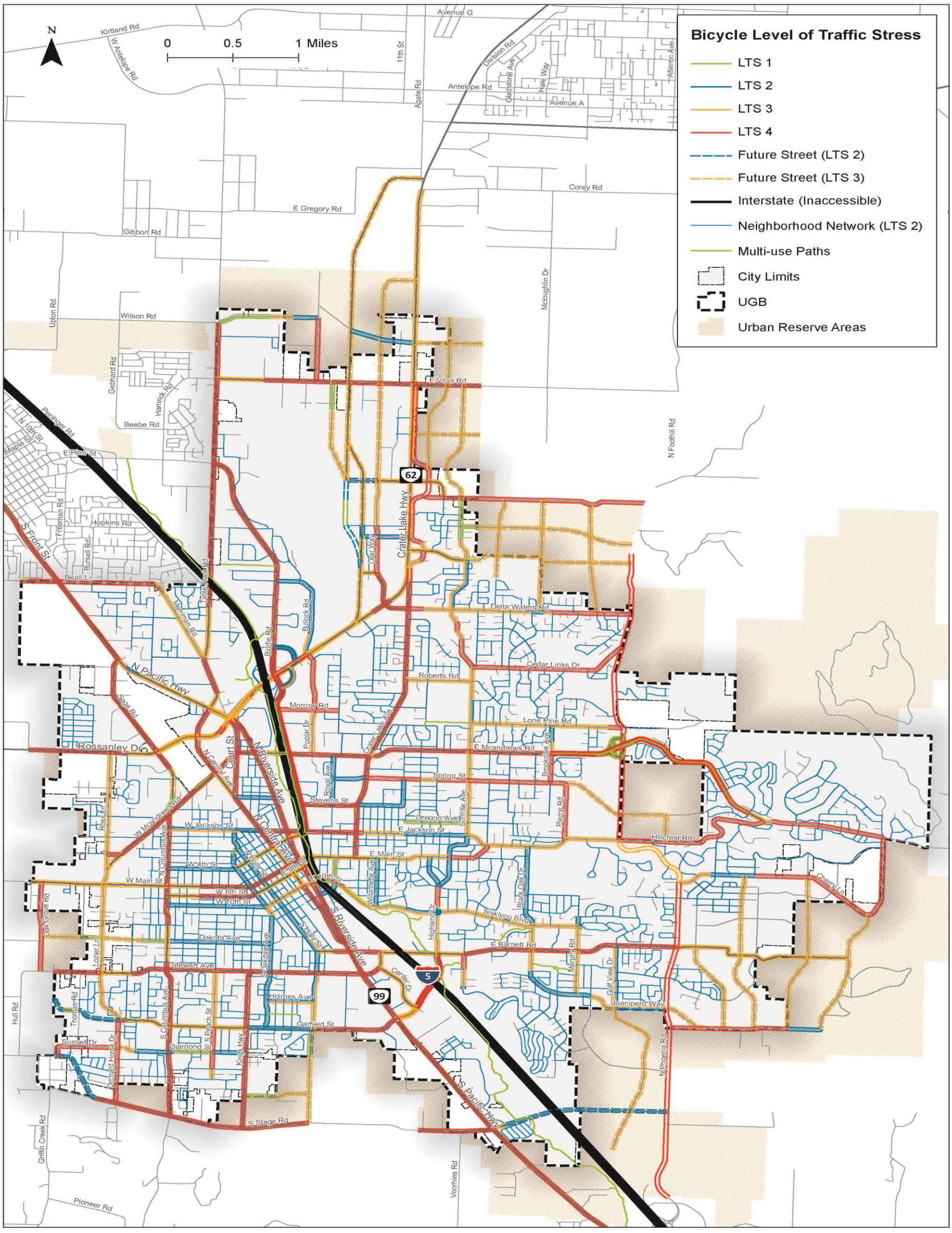
Functional Classification	Assumed Speed	Sidewalk Width[1]	Sidewalk Condition[1]	Buffering Width[1]	Travel Lanes	Buffer Type[1]	PLTS[1]
Major Arterial	40 mph	5'	Good	18'	5	Landscape + Trees	2
Regional Arterial	40 mph	5'	Good	18'	5	Landscape + Trees	2
Minor Arterial	35 mph	5'	Good	18'	3	Landscape + Trees	2
Major Collector	30 mph	5'	Good	15'	3	Landscape + Trees	2
Minor Collector	30 mph	5'	Good	20'	2	Landscape + Trees	2
Commercial[2]	30 mph	5'	Good	15'	2	Landscape + Trees	2

[1]Per Updated Functional Classification Cross Sections for the City of Medford

Chapter 14 of the APM includes an additional set of scoring criteria in its PLTS Methodology: General Land Use. The General Land Use criteria takes into account the effects that adjoining land uses can have on the walkability and desirability of certain facilities for pedestrians. While the General Land Use Criteria provides insights into areas that may be more or less friendly to pedestrians, it doesn't provide direct insight into the role that the Medford TSP could play in improving PLTS in the City. Consequently, the project team made the decision to omit the General Land Use criteria from the PLTS analysis of Medford Streets.

Exhibit B
Bicycle Level of Traffic Stress Analysis Map

Medford TSP *July 2017*



Bicycle Level of Traffic Stress
Medford, Oregon

Figure **2**

K:\H_Projects\21\21255 - City of Medford TSP Supplement\gis\Bicycle Facilities_LTS.mxd - msanders - 9:49 AM 7/13/2017

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Exhibit C
Bicycle Improvements Map
(to achieve LTS 2)

Figure 8 **Bicycle Facility Improvement Needs for Low-Stress Connection**

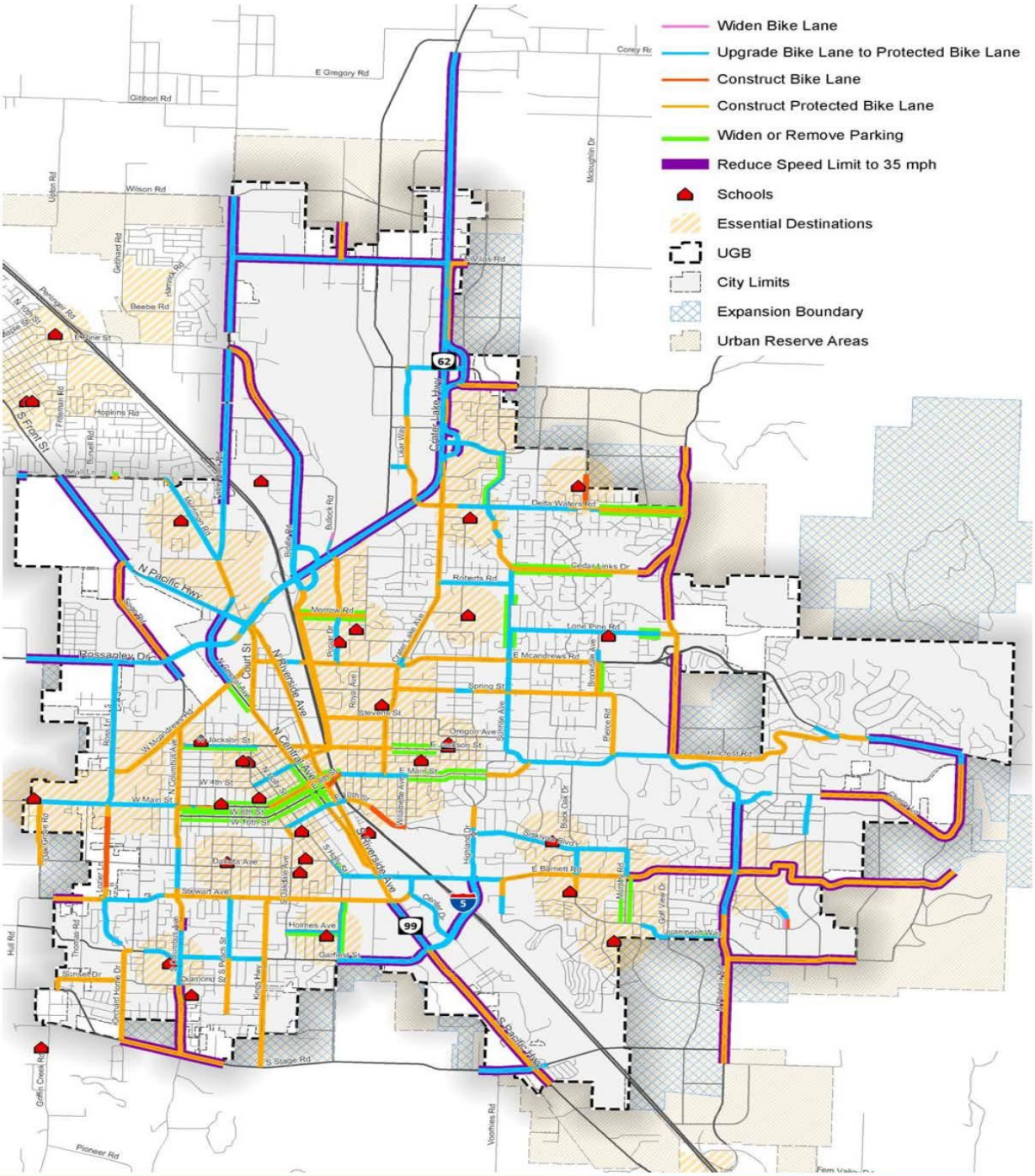
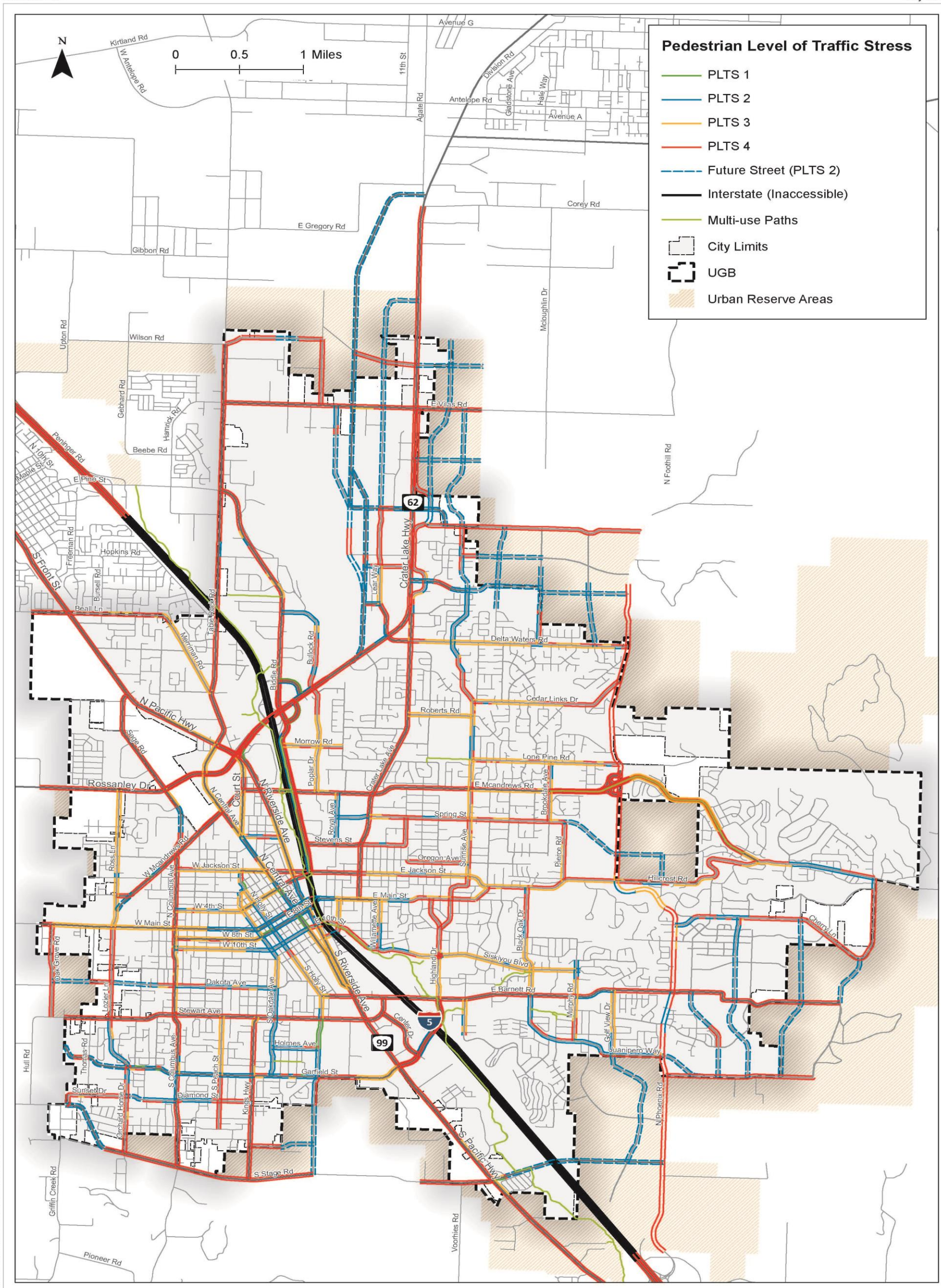


Exhibit D
Pedestrian Level of Traffic Stress Analysis Map

Medford TSP *July 2017*



Pedestrian Level of Traffic Stress
Medford, Oregon

Figure **2**

K:\H_Projects\21\21255 - City of Medford TSP Supplement\gis\Pedestrian Facilities_PLTS.mxd - msanders - 9:52 AM 7/13/2017

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TELEPHONE (541) 774-2100
Fax: (541) 774-2552

CITY OF MEDFORD

INTER-OFFICE MEMORANDUM

Date: **January 17, 2018**

To: **Brian Sjothun, City Manager**

Cc: **Cory Crebbin, Public Works Director**
Matt Brinkley, Planning Director

From: **Alex Georgevitch, Deputy Public Works Director City Engineer**

Subject: **South Stage Overcrossing – Funding Options and Timelines**

Project Overview

The planned South Stage Road overcrossing is approximately 6,650 foot long minor arterial road that connects from Highway 99 to North Phoenix Road. The new roadway will be a three-lane cross section with bike lanes and sidewalks on both sides of the roadway. A new bridge approximately 1,500 feet will span both Bear Creek (and the riparian area along with other environmentally sensitive areas along the alignment) and Interstate 5. The project has a 2017 anticipated cost of approximately $50M.

The project will serve a significant portion of Medford's Urban Growth Boundary (UGB) Expansion area MD-5 along with Phoenix's expansion on the easterly side of Interstate 5. The connection will also help alleviate congestion for Oregon Department of Transportation (ODOT) interchanges at south Medford and Phoenix as well. A joint effort between the City of Medford, Jackson County, the City of Phoenix and a group of affected property owners is working to find a funding solution to allow the project to move forward.

The project has several risks and challenges and Council direction will be required to move forward with the proposal.

Funding Opportunities

The City of Medford will need to dedicate a significant portion of its gas tax and System Development Charge (SDC) revenue to help fund the project. The Transportation System Plan (TSP) is currently looking at how to allocate future revenues.

The City of Phoenix will also be a significant benefactor and has agreed verbally to participate in the cost, though no specific amount has been provided.

Jackson County has stated support of the project but will not dedicate money to the project. There is a potential for the county to provide a dedication of land they own along with political and grant support (co-applicants would be desired).

ODOT has stated no money is available though there could be funding available through the Rogue Valley Area Commission on Transportation (RVACT) State Transportation Improvement Program (STIP) allocations.

Depending on funding scenarios, we should anticipate generating between $17M to $25M from local agencies. All four agencies should be joint applicants for Rogue Valley Metropolitan Planning Organization (RVMPO) Surface Transportation Block Grant (STBG) and Congestion Mitigation and Air Quality (CMAQ) funding solicitations. It will likely take several cycles to obtain meaningful funds for construction. Currently the RVMPO anticipates receiving approximately $1M per year for CMAQ funding and $0.9M per year for STBG funding (after Rouge Valley Transportation District 50% direct allocation). Projects are solicited on a two-year basis and it would be challenging to assume more than 50% funding going to a single project, especially more than once.

The total funding available could range from $17.25M to $25.25M which means approximately $25M to $35M is needed to fully fund the project. Grants from RVMPO will, at best, be in the range of $1M per year. It would be hard to plan for more than 3 or 4 cycles which could generate $6M to $8M.

RVACT will have some discretionary funding available, but we still do not know what amount that would be. This funding is competitively solicited between Jackson and Josephine Counties and therefore will be harder to quantify. It is conceivable to obtain $2M to $4M through the process over several cycles, if available.

In a best case scenario I see in the range of $35M available in state and local funds if all parties come together for the project. This still leaves the project at least $15M short. The only options for funding the remainder are the federal government or private parties. There is the possibility of federal funding through the Transportation Investment Generating Economic Recovery (TIGER) program or other infrastructure programs. There is also a possibility that the local match could be used for these larger grants as well, thus not needing the other funding listed above. Either way, the City will work with our partners in developing different options for funding towards this important transportation project

Timeline

The first step is to have the project included in the Medford TSP as a tier 1 project and then request a Regional Transportation Plan (RTP) update to the same. An Intergovernmental Agreement (IGA) should be entered into between the City of Medford and the City of Phoenix that outlines funding from each agency. Any agreement for private donations of right-of-way should also be entered into prior to completion of the TSP, although these agreements are effectively non-binding if federal funds are obtained.

The project will require significant environmental review and, because there is a high likelihood of federal funds being used, a full National Environmental Policy Act (NEPA) analysis. We should plan on conducting an Environmental Assessment (EA) for the project. This will cost approximately $2.0M to $2.5M and is a significant risk for the project. It is important to have this work complete as it shows readiness for grant applications or direct earmarks. Unfortunately environmental work has a shelf life and therefore the investment can be lost if funding to complete the project doesn't occur within 5 years on finding of no significant impact (FONSI). The EA is the first grant opportunity from the RVMPO. A joint grant application by the City of Medford, City of Phoenix, Jackson County and ODOT for $1.5M of STBG funds for NEPA work could be applied for during the next grant cycle. If successful, this would provide funding in 2022 (Oct. 2021).

NEPA work will take approximately 2 years to complete. This should allow for the same group to apply for funding on the next cycle (2024 funding year) at the RVMPO. This funding would be for final design and right-of-way and utility work. A grant application in the amount of $2.5M ($1.5M STBG, $1.0M CMAQ, will need to verify eligibility for CMAQ). This funding will help pay for the approximate $4M design work needed to do final design for the project. This work should be complete by then end of 2025.

During this time the City of Medford and the City of Phoenix should be collecting revenue so we can be prepared for construction sometime after 2025 but no later than 2028 or further environmental work will be needed. All grant opportunities during this time will need to be explored, including Infrastructure For Rebuilding America (INFRA), TIGER, RVACT STIP, and direct lobbying for earmarks or other support.

City of Medford

Planning Department

Working with the community to shape a vibrant and exceptional city

MEMORANDUM

Subject	Transportation System Plan Project Prioritization
File no.	CP-16-036
To	Mayor and City Council
From	Carla Angeli Paladino CFM, Principal Planner
Date	February 13, 2018 *for 02/22/2018 Study Session*

COUNCIL DIRECTION

Staff is seeking direction on the Council's preference on how best to review and prioritize the proposed projects in the Transportation System Plan.

PRESENTATION OUTLINE

Introduction and Presentation – Carla Paladino
Discussion and Direction - Mayor and City Council

OVERVIEW

A major component of the Transportation System Plan is the list of transportation projects proposed over the twenty-year planning period. The projects identified by Kittelson and Associates (KAI) address existing and future roadway needs for the City intended to provide a number of benefits including adding vehicle capacity, new street extensions and connections, upgrades to accommodate missing modes of travel, and safety. There are over 250 projects proposed and an estimated 75.4 million dollars in revenue to build projects. Therefore, the projects identified must be prioritized to determine which improvements are funded over the twenty-year planning period. The project list becomes the City's roadmap in building the transportation system.

BACKGROUND

Revenues and Timeframe

In September 2017, the Council was presented the project list as ranked by Kittelson and Associates. State law requires a jurisdiction's Transportation System Plan to be financially constrained; meaning the project to be constructed is tied to an identified revenue source available to use over the planning period.

The Engineering Department has calculated the City's estimated Transportation Revenues from a number of existing funding sources. The table below identifies the revenue estimates by category, the fixed expenditures, and the total revenues. These revenues and expenditures are allocated over the twenty-year planning period under three columns, the near term (2018–2022), mid-term (2023–2027) and long-term (2028–2038) timeframes. The City estimates revenues of $75,405,344 to fund capital projects.

City of Medford 20-Year Transportation Revenue Estimates

Budget Item	2018-2022	2023-2027	2028-2038
Revenue Estimates			
Existing Revenue Sources:			
State Gas Tax	$ 23,500,000	$ 23,500,000	$ 47,000,000
Street System Development Charges (SDC)	$ 8,750,000	$ 8,750,000	$ 17,500,000
Street Utility Fees	$ 37,000,000	$ 37,000,000	$ 74,000,000
Miscellaneous (CBDG, grants, MURA, etc.)	$ 3,500,000	$ 3,500,000	$ 7,000,000
Total Estimated Revenue from Existing Sources	*$ 72,750,000*	*$ 72,750,000*	*$ 145,500,000*
Anticipated Revenue Sources:			
State Transportation Revenue Increase from HB 2017	$ 6,484,160	$ 9,887,520	$ 20,209,600
Total Estimated Revenues	**$ 79,234,160**	**$ 82,637,520**	**$ 165,709,600**
Fixed Expenditures			
Operating Expenses (staff, indirect, non-road capital)	$ 49,000,000	$ 49,000,000	$ 98,000,000
Maintenance (includes 3% annual increase)	$ 13,272,840	$ 15,386,859	$ 38,516,238
Loan Repayment (Foothill)	$ 5,000,000	$ 5,000,000	
SDC Credits	$ 2,250,000	$ 2,250,000	$ 4,500,000
Total Fixed Expenditures	**$ 69,522,840**	**$ 71,636,859**	**$ 141,016,238**
Balance Available for Capital Street Projects	$ 9,711,320	$ 11,000,661	$ 24,693,362
Fund Balance Carried Forward	$ 30,000,000		
Total Revenue Available for Capital Projects	***$ 39,711,320***	***$ 11,000,661***	***$ 24,693,362***
20-year Total Revenue Available for Capital Projects	***$75,405,344***		

The proposed projects and their cost exceed the estimated revenues available to build every project. The City must determine which projects to fund and identify within what timeframe they will be built. The funded projects will be designated as Tier 1 and those remaining as Tier 2. The Tier 2 projects are needed; however they exceed the City's financial capabilities. As Council begins to rank projects, staff will total the overall cost in order to make sure revenues are not exceeded.

Criteria to Evaluate Projects

During the September 2017 study session, it was requested that a set of criteria be established to rank projects. Staff presented Council with a list of fifteen criteria to choose from and asked the Council to indicate (yes or no) if the criterion should be used or not. The Mayor and seven out of eight Councilors were present that evening and provided their input on the list. The following criteria had a majority of "yes" votes however staff removed four of them. ***See Exhibit 1*** The reasons for their removal are noted to the right of the criterion.

1.	Is the project needed to help meet the City's Level of Service (LOS) standard? What timeframe in the project needed?	Preserved
2.	Does the project improve the comfort and safety for all users?	Preserved
3.	Does the project connect neighborhoods to activity centers with facilities for walking and/or biking?	Preserved
4.	Does the project increase the safety of pedestrian crossings?	Preserved
5.	Does the project complete sidewalks along a transit route or w/i a ¼ radius of a bus stop?	Preserved
6.	Does the project improve safety at a high-crash location?	Preserved
7.	Does the project implement Intelligent Transportation Systems (ITS) or other technology that will increase capacity of the existing system w/o adding lanes?	Staff determined that this criterion was difficult to identify and that it only pertained to projects that propose replacing intersection technology. This applies more broadly to the goals and objectives of the TSP, but not to specific projects listed as many of them do not incorporate ITS.

8.	Does the project improve connectivity for all modes?	Preserved
9.	Does the project alleviate congestion?	The intent of many of the projects is to alleviate congestion and Level of Service (LOS) is largely a measure of this success. The criterion was found to be too subjective and the majority of projects scored well.
10.	Does the project provide important links for bike/ped/transit	Preserved
11.	Does the project increase access to transit? (or can transit adapt easily)	Staff thought this criterion was too subjective and that it was redundant of the criterion measuring the proximity of a project to a transit route or bus stop.
12.	Does the project increase the system resiliency w/o overburdening the neighborhood system	Given the projects are only along arterials, collectors, and mixed-use paths, staff thought each project would score high and the other criteria seemed to cover this to some extent.
13.	Does the project improve operations on freight routes or increase access to multi-modal freight facilities	Preserved

Using the criteria above, staff incorporated them into a spreadsheet that includes every project within the Transportation System Plan. The spreadsheet groups each of the projects by project type. The project types include Urban Upgrades, Roadway Widening, New Roadways, Intersection Improvements, Pedestrian, Multi-Use Paths, and Bicycle. The project types are described in more detail below.

An **Urban Upgrade** project is one that improves an existing unimproved street (without curb and gutter) to the current cross-section by installing needed facilities such as travel lanes, curb and gutter, bicycle facilities, sidewalks, and storm drainage. There are fifty-six (56) Urban

Upgrade projects proposed with twelve identified as Tier 1 projects by the City's consultant.

A **Roadway Widening** project is one that provides additional travel lanes on the roadway. The lanes are typically needed in order to provide additional vehicle capacity. There are five proposed Roadway Widening projects with three being ranked as Tier 1 projects by the consultant.

A **New Roadway** project which includes roadway extensions are generally ones that support future growth and development and also provide vehicle congestion relief and pedestrian and bicycle improvements. There are thirty-seven New Roadway projects identified in the project list. Seven were ranked as Tier 1 projects.

An **Intersection Improvement** project may include the construction of roundabouts, traffic signals, turn lanes, and equipment upgrades. These projects assist to provide additional vehicle capacity and safety features for all roadway users. There are fifty-nine Intersection Improvements identified in the project list and twenty-two were ranked as Tier 1 projects.

A **Pedestrian** improvement project includes the infill and installation of sidewalk mainly near school sites. There are eight distinct Pedestrian projects proposed and all were ranked as Tier 1 projects except for one. One of the projects is a generic annual project to install sidewalk at high-priority locations determined by the City.

A **Multi-Use Path** project provides for the installation of separated and dedicated paths for pedestrian and bicycle use and is associated with the trails proposed in the Leisure Services Plan. Forty-one Multi-Use Path projects are identified in the plan. All were identified as Tier 2 projects.

A **Bicycle** project provides several different options for the addition of bicycle facilities on a roadway. For some of the projects, signage and paint (such as the addition of sharrows) will be used to designate neighborhood bikeways. In some instances, the bicycle facilities are being added as part of a widening or re-striping project. There are fifty-five Bicycle projects proposed in the plan. Thirteen were identified as Tier 1 projects.

The criteria in the spreadsheet were scored in the following manner. If the project supported the criteria noted then it received a checkmark, if the project was neutral on meeting the criteria it was marked with a dash, and if the project undermined the criteria it was marked with an X. Staff meticulously went through each project and ranked them. The spreadsheet is found in ***Exhibit 2***.

The spreadsheet includes the following information:

- Project Number
- Tier (as ranked by the City's consultant, KAI)
- Project Location
- Project Type
- Project Description
- Cost estimates (Multi-use path estimates pending)
- Number of votes from Ward Open Houses
- 8 Project Criteria
- Project text in red indicates the street received 30 or more public comments/selections as part of the community survey conducted online

PUBLIC FEEDBACK FROM OPEN HOUSES

Over the course of four evenings in January, Staff and Council hosted a series of Open Houses in each ward to provide the public an opportunity to view the proposed projects and give feedback. The projects for all four wards were available at each of the events and residents were asked to identify the projects they supported by providing a dot next to the project on the board. Based on the sign in sheets, eighty-six residents attended the open houses and their comments are reflected on the spreadsheet.

A majority of the projects received less than ten votes. The following projects received ten or more votes:

- Highland Road (Siskiyou Boulevard to Keene Way Drive), Tier 2, Urban Upgrade
- Foothill Road (Hillcrest Road to McAndrews Road), Tier 1, Urban Upgrade
- South Stage Road (South Pacific Highway to North Phoenix Road), Tier 1, New Roadway
- Highland Drive and East Main Street, Tier 1, Intersection
- Springbrook Road and Spring Street, Tier 1, Intersection
- Foothill Road and Lone Pine Road, Tier 1, Intersection
- Foothill Road and Delta Waters Road, Tier 1, Intersection
- General project noting sidewalk gap infill, Tier 1, Pedestrian
- Crater Lake Highway, Tier 2, Multi-use path

- South Stage Extension, Tier 2, Multi-use path
- Columbus Avenue, Tier 2, Multi-use path
- General project noting bicycle network gap infill, Tier 1, Bicycle

The spreadsheet and public input are provided to help guide the Council's review of the project list and help weigh project priorities.

PRIORITIZATION OF PROJECTS BY WARDS

Staff would like to meet with City Council and review the projects by wards through a series of mini-meetings in March. A breakdown of the projects by project type and ward may make the review and prioritization of projects more manageable. A copy of the maps by project type for each ward is attached as ***Exhibit 3***. At the conclusion of the mini meetings, staff will assemble the information for the March study session in order for City Council to begin discussing the projects and prioritizing them.

QUESTIONS

1. Does the Council want to make changes to the project list spreadsheet? (Add or remove criteria, organize the projects by type and ward)
2. Does the Council want to select their top 5 to 10 projects by type and ward and then review as a group the projects that rise to the top?
3. Does the Council want to meet and discuss the projects during a series of mini meetings with staff?
4. Does Council want staff to provide recommendations for prioritization that Council can then comment on?
5. Does the Council have a different approach to reviewing and prioritizing the projects?

EXHIBITS

1 – Scoring of potential criteria for project prioritization

2 - Transportation Project List spreadsheet

3- Proposed projects separated by type and ward

Exhibit 1

Potential Criteria to use for Project Prioritization

Circle **Yes** if you think we should use. Circle **No** if you don't think we should use it.

Is the project needed to help meet the City's Level of Service (LOS) standard? What timeframe in the project needed?	Yes	5	No	1	Maybe/No response/?	2
Does the project improve the comfort and safety for all users?	Yes	5	No	3	Maybe/No response/?	0
Does the project expand wayfinding for all modes to essential or popular destinations?	Yes	3	No	4	Maybe/No response/?	1
Does the project connect neighborhoods to activity centers with facilities for walking and/or biking?	Yes	7	No	1	Maybe/No response/?	0
Does the project help reduce the bicycle level of stress on a high volume roadway?	Yes	3	No	4	Maybe/No response/?	1
Does the project increase the safety of pedestrian crossings?	Yes	5	No	3	Maybe/No response/?	0
Does the project complete sidewalks along a transit route or w/i a ¼ radius of a bus stop?	Yes	7	No	1	Maybe/No response/?	0
Does the project improve safety at a high-crash location?	Yes	6	No	2	Maybe/No response/?	0
Does the project implement Intelligent Transportation Systems or other technology that will increase capacity of the existing system w/o adding lanes?	Yes	6	No	1	Maybe/No response/?	1
Does the project improve connectivity for all modes?	Yes	5	No	3	Maybe/No response/?	0
Does the project alleviate congestion?	Yes	5	No	2	Maybe/No response/?	1
Does the project provide important links for bike/ped/transit (bike was scratched off on one sheet)	Yes	7	No	1	Maybe/No response/?	0
Does the project increase access to transit? (or can transit adapt easily)	Yes	5	No	1	Maybe/No response/?	2
Does the project increase the system resiliency w/o overburdening the neighborhood system	Yes	5	No	3	Maybe/No response/?	0
Does the project improve operations on freight routes or increase access to multi-modal freight facilities	Yes	7	No	1	Maybe/No response/?	0

Councilors present: Mayor Wheeler, Kay Brooks, Kim Wallan, Tim Jackle, Kevin Stine, Tim D'Alessandro, Dick Gordon, & Michael Zarosinski; Bearnson was absent

Exhibit 2

Project text in red received 30+ public comments/selections within Outreach efforts.				Key: ✓(Supports Criteria) – (Neither Supports or Worsens) ✖(Undermines criteria)									
2018-2038 Medford Transportation System Plan Project List - DRAFT													
Project #	Tier	Project Location	Project Type	Project Description	Cost ($1,000)	Number of Votes from Open Houses	Project provides regional connections/benefits	Project needed to meet City's "LOS D" standard?	Improves safety at a high-crash location?	Improves safety/comfort for all modes	Connects neighborhoods to activity centers with facilities for walking and/or biking	Increases safety of pedestrian crossings?	Completes walking/biking facilities along a transit route and/or within 1/4 radius of a transit stop	Improves connectivity to or mobility along a designated freight route
Project Type -Urban Upgrade: to include bicycle facilities, sidewalks, and storm drainage which are generally needed to provide safe bicycle and pedestrian facilities, including access to transit and essential destinations, on existing roadways													
437	Tier 1	Delta Waters Road, Nome Court to Foothill Road	Urban Upgrade	Complete street improvements to Major Collector standard where one or both sides are not already completed	$3,860	0	✓	–	–	✓	✓	–	✓	–
441	Tier 1	Black Oak Drive, Hillcrest Road to Acorn Way	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$1,510	5	–	–	–	✓	–	–	–	–
446	Tier 1	Springbrook Road, Pheasant Lane to Cedar Links Drive	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$4,000	1	✓	–	–	✓	✓	✓	✓	–
I26	Tier 1	Springbrook Road & Cedar Links Drive	Intersection	Install traffic signal or roundabout when warranted (Cost included in Roadway Project 446)	-	3	–	–	–	✓	✓	✓	✓	–
447	Tier 1	Table Rock Road, Merriman Road to Interstate 5	Urban Upgrade	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$3,575	6	✓	–	–	✓	✓	–	✓	✓
468	Tier 1	Spring Street, Sunrise Avenue to Pierce Road	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$4,210	2	–	–	–	✓	✖	✓	✖	–
469	Tier 1	Foothill Road, Hillcrest Road to McAndrews Road	Urban Upgrade	Upgrade to regional arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks	$13,000	10	✓	–	–	✓	–	✖	✖	✓
I22	Tier 1	McAndrews Road at Foothill Road Ramps	Intersection	Install traffic signals (included in Roadway Project 469)	-	2	✓	✓	–	–	–	✖	✖	✓
472	Tier 1	Cedar Links Drive, Callaway Drive to Foothill Road	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$2,035	0	–	–	–	✓	✖	–	✖	–
496	Tier 1	Stewart Avenue, Lozier Lane to Dixie Lane	Urban Upgrade	Upgrade to major arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks	$2,645	3	✓	–	–	✓	✓	✖	✓	✓
606	Tier 1	Kings Highway, South Stage Road to Stewart Avenue	Urban Upgrade	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$8,495	4	–	–	–	✓	–	–	✓	–
609	Tier 1	Foothill Road, McAndrews Road to Delta Waters Road	Urban Upgrade	Upgrade to regional arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks	$50,000	3	✓	–	–	✓	–	✖	✖	✓
610	Tier 1	Foothill Road, Delta Waters Road to North UGB	Urban Upgrade	Upgrade to regional arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks	$670	2	✓	–	–	✓	✖	✖	✖	✓

Project text in red received 30+ public comments/selections within Outreach efforts.

Key: ✓(Supports Criteria) – (Neither Supports or Worsens) ✖(Undermines criteria)

2018-2038 Medford Transportation System Plan Project List - DRAFT

Project #	Tier	Project Location	Project Type	Project Description	Cost ($1,000)	Number of Votes from Open Houses	Project provides regional connections/benefits	Project needed to meet City's "LOS D" standard?	Improves safety at a high-crash location?	Improves safety/comfort for all modes	Connects neighborhoods to activity centers with facilities for walking and/or biking	Increases safety of pedestrian crossings?	Completes walking/biking facilities along a transit route and/or within 1/4 radius of a transit stop	Improves connectivity to or mobility along a designated freight route
612	Tier 1	Barneburg Road, Highland Drive to Sunrise Avenue connection	Urban Upgrade	Upgrade to major collector standard from Highland Drive to E. Main Street including one lane in each direction, center-turn lane, bike facilities, and sidewalks and upgrade to minor collector standard from E. Main Street to Sunrise Avenue including one lane in each direction, bike facilities, and sidewalks	$1,985	2	✓	–	–	✓	–	–	✖	–
613	Tier 1	Highland Drive, Keene Drive to Main Street	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$2,810	7	✓	–	–	✓	✓	–	✖	–
445	Tier 2	Cherry Lane, Old Cherry Lane to Hillcrest Road	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$11,500	0	✖	–	–	✓	✖	–	✖	–
456	Tier 2	Sunset Drive, South Stage Road to Orchard Home Drive	Urban Upgrade	Major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$4,010	0	✖	–	–	✓	–	–	✖	–
457	Tier 2	Pierce Road, Hillcrest Road to Spring Street	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$2,800	4	✖	–	–	✓	✖	–	✖	–
458	Tier 2	Diamond Street, Columbus Avenue to Kings Highway	Urban Upgrade	Upgrade to major collector standard from McKenzie Drive to Kings Highway, including one lane in each direction, center turn-lane, bike facilities, and sidewalk. Stripe to major collector standard from Columbus Avenue to McKenzie Drive, including one lane in each direction, center turn-lane and bike facilities.	$2,150	1	✖	–	–	✓	✓	–	✖	–
460	Tier 2	12th Street, Central Avenue to Cottage Street	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$695	1	–	–	–	✓	✓	–	✓	–
462	Tier 2	Edwards Street, Court Street/Central Avenue to Riverside Avenue	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$1,665	2	–	–	–	✓	✓	✓	✓	–
465	Tier 2	Columbus Avenue, South Stage Road to Stewart Avenue	Urban Upgrade	Upgrade to major arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks	$10,510	6	✓	–	–	✓	✓	✖	✓	✓
466	Tier 2	Spring Street, Crater Lake Avenue to Sunrise Avenue	Urban Upgrade	Major collector standard including one lane in each direction, center turn-lane, bike facilities, and sidewalks	$4,510	7	–	–	✓	✓	✓	–	✓	–
478	Tier 2	Coker Butte Road, eastern UGB to Springbrook Road	Urban Upgrade	Realign and upgrade to major collector standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks	$1,545	1	✓	–	–	✓	✓	✖	✖	✓

Project text in red received 30+ public comments/selections within Outreach efforts.	Key: ✓(Supports Criteria) – (Neither Supports or Worsens) ✖(Undermines criteria)												

2018-2038 Medford Transportation System Plan Project List - DRAFT

Project #	Tier	Project Location	Project Type	Project Description	Cost ($1,000)	Number of Votes from Open Houses	Project provides regional connections/benefits	Project needed to meet City's "LOS D" standard?	Improves safety at a high-crash location?	Improves safety/comfort for all modes	Connects neighborhoods to activity centers with facilities for walking and/or biking	Increases safety of pedestrian crossings?	Completes walking/biking facilities along a transit route and/or within 1/4 radius of a transit stop	Improves connectivity to or mobility along a designated freight route
481	Tier 2	Coal Mine Road (realigned), North Phoenix Road to Santa Barbara Drive	Urban Upgrade	Realign and upgrade to major collector standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks	$5,975	2	✖	–	–	✓	✖	✖	✖	–
490	Tier 2	McAndrews Road, Ross Lane to Jackson Street	Urban Upgrade	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$2,045	3	–	–	–	✓	✓	✖	✓	✓
492	Tier 2	Cunningham Avenue, Orchard Home Drive to Warren Way	Urban Upgrade	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$850	0	✓	–	–	✓	✓	–	–	–
495	Tier 2	Coker Butte Road, International Way to Lear Way	Urban Upgrade	Upgrade to minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks)	$1,985	0	✓	–	–	✓	✖	–	✓	✓
497	Tier 2	Highland Road, Siskiyou Boulevard to Keene Way Drive	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$1,135	11	✓	–	–	✓	–	✓	–	–
600	Tier 2	Oak Grove Road, West Main Street to Stewart Avenue	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center turn-lane, bike facilities, and sidewalks	$4,335	1	–	–	–	✓	–	–	✓	–
603	Tier 2	West Stewart Avenue, Oak Grove Road to Lozier Lane	Urban Upgrade	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$2,715	2	✓	–	✓	✓	✓	–	–	✓
605	Tier 2	South Stage Road, Orchard Home Drive to South Pacific Highway	Urban Upgrade	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$23,985	2	✓	–	–	✓	✓	–	✓	✓
614	Tier 2	Beall Lane, Merriman Road to City limits	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$4,345	0	✓	–	–	✓	–	✓	✓	–
615	Tier 2	Stevens Street, Crater Lake Avenue to Wabash Avenue	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$2,065	1	–	–	✓	✓	✓	✓	✓	–
625	Tier 2	Justice Road, east of North Medford Industrial Road to City Limits	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$1,790	0	–	–	✓	✓	✖	✓	–	–
634	Tier 2	Crater Lake Avenue, Delta Waters Road to Coker Butte Road	Urban Upgrade	Upgrade to major collector standard including two lanes in each direction, center turn-lane, bike facilities, and sidewalks	$5,655	0	✓	–	✓	✓	✓	✓	✓	✓
640	Tier 2	Bullock Road, Crater Lake Highway to Lawnsdale Road	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	$4,065	1	–	–	✓	✓	–	✓	✓	✓
648	Tier 2	Lone Pine Road, Edgevale Avenue to Foothill Road	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center turn-lane, bike facilities, and sidewalks	$930	1	✖	–	–	✓	✖	–	✖	–

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649	Tier 2	Brookdale Avenue, McAndrews Road to Spring Street	Urban Upgrade	Upgrade to major collector standard including one lane in each direction, center turn-lane, bike facilities, and sidewalks	$1,305	1	✖	–	–	✓	✖	–	✖	–
669	Tier 2	Wabash Avenue, Stevens Street to Spring Street	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$1,460	1	✖	–	–	✓	–	–	–	–
670	Tier 2	Oregon Avenue, Stevens Street to Sunrise Avenue	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$3,615	1	✖	–	–	✓	✓	–	–	–
679	Tier 2	Orchard Home Drive, South Stage Road to Cunningham Avenue	Urban Upgrade	Construct new major collector standard (center turn-lane, bike facilities, and sidewalks)	$4,500	2	✖	–	–	✓	–	–	✖	–
680	Tier 2	South Peach Street, Garfield Street to Archer Drive	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$2,875	0	✖	–	–	✓	–	–	–	–
706	Tier 2	Barnett Road, Lone Oak Drive to eastern UGB	Urban Upgrade	Upgrade to minor arterial standard including one lane in each direction, center-turn, lane, bike facilities, and sidewalks	$6,900	0	✓	–	–	✓	–	✖	✖	–
715	Tier 2	Hondeleau Lane, Springbrook Road to City Limits	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$590	1	–	–	–	✓	✓	–	✖	–
717	Tier 2	Table Rock Road, New Interstate 5 overcrossing and overcrossing of Bear Creek and Lone Pine Creek	Urban Upgrade	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, sidewalks and new overcrossing of Interstate 5	$25,000	4	✓	–	✓	✓	–	–	–	✓
718	Tier 2	Vilas Road, Crater Lake Highway to expansion boundary	Urban Upgrade	Upgrade to major arterial standard west of Springbrook Rd including two lanes in each direction, center-turn lane, bike facilities, and sidewalks. Upgrade to minor arterial east of Springbrook Road including one lane in each direction, center-turn lane, bike facilities, and sidewalks.	$3,945	0	✓	–	✓	✓	–	✖	✓	✓
720	Tier 2	Airport Road, Table Rock Road to Biddle Road	Urban Upgrade	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$1,400	4	✓	–	–	✓	✖	–	✖	–
				Totals/Average Rating	$251,645		✓	–	–	✓	✓	–	✖	–

Project Type - Roadway Widening: to provide additional travel lanes which are generally needed to provide additional vehicle capacity

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450	Tier 1	Valley View Drive, Main Street to Hillcrest Road	Widening	Geometric improvements including but not limited to the realignment and widening of Valley View Drive to major collector standard including one lane in each direction, center turn-lane, bike facilities and sidewalks	$1,135	2	✖	–	–	✓	–	–	✖	–
536	Tier 1	Garfield Street, Holly Street to Kings Highway	Widening	Widen to minor arterial standard including one lane in each direction, center turn-lane, bike facilities, and sidewalks	$4,175	5	–	–	–	✓	✓	–	✖	–
611	Tier 1	North Phoenix Road from Barnett Road to South UGB	Widening	Widen to regional arterial standard including two lanes in each direction, center turn-lane, bike facilities, and sidewalks	$7,600	6	✓	–	–	✓	✓	✖	✖	✓
632	Tier 2	Vilas Road, Table Rock Road to eastern UGB	Widening	Widen to major arterial standard including two lanes in each direction, center turn-lane, bike facilities, and sidewalks	$17,045	0	✓	–	✓	✖	–	✖	✓	✓
645	Tier 2	Sage Road, Columbus Avenue to North Pacific Highway	Widening	Widen to major arterial standard including two lanes in each direction, center turn-lane, bike facilities, and sidewalks	$11,500	1	✓	–	–	✓	✓	✖	✖	✓
				Totals/Average Rating	$41,455		✓	–	–	✖	✓	✖	✖	✓
Project Type - New Roadways: and roadway extensions which generally support future growth and development but also provide some vehicle congestion relief and direct pedestrian and bicycle routes in some areas													
413	Tier 1	Columbus Avenue, West McAndrews Road to Sage Road	New Roadway	Realign, extend Columbus Avenue to Sage Rd, and widen to major arterial standard including center-turn lane, bike facilities, and sidewalks	$4,425	3	✓	–	–	–	✓	✖	✓	✓
467	Tier 1	Lear Way, Coker Butte Road to Vilas Road	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$6,465	0	–	–	–	✓	–	–	✓	✓
475	Tier 1	Coker Butte Road, Crater Lake Avenue to Springbrook Road	New Roadway	Realign and upgrade to major arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks.	$3,400	0	–	–	–	–	✓	✖	–	–
535	Tier 1	Barnett Road, North Phoenix Road to Lone Oak Drive	New Roadway	Realign and construct new minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks)	$4,455	2	–	–	–	✓	✓	✖	✓	–

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537	Tier 1	South Stage Road, South Pacific Highway to North Phoenix Road	New Roadway	Construct new minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks) and overcrossing of I-5 (Assumed 10% City, 90% Outside Funds)	$50,000	10	✓	–	–	✓	✓	✖	✓	✓
621	Tier 1	Owen Drive, Springbrook Road to Torrent Street	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$525	0	✖	–	–	✓	✓	–	–	✓
708	Tier 1	South Stage Road, City Limits to Orchard Home Drive	New Roadway	Realign S Stage Rd and construct new minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks)	$4,345	2	✓	–	–	✓	✓	✖	✖	✓
471	Tier 2	Spring Street, Pierce Road to Foothill Road	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$3,955	1	–	–	–	✓	✖	✖	✖	–
479	Tier 2	Manzanita Street, extension from Riverside Avenue to Spring Street and crossing Interstate 5	New Roadway	Construct new minor collector roadway (includes one lane in each direction, bike facilities, and sidewalks) and new crossing of I-5 at Manzanita or Austin	$100,000	0	✓	–	–	✓	✓	✓	✓	–
482	Tier 2	Owen Drive, Torrent Street to Foothill Road	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$5,100	2	–	–	–	✓	✓	–	✖	–
484	Tier 2	Stanford Avenue, Barnett Road to Coal Mine Road	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$6,000	0	✓	–	–	✓	✓	–	✖	–
485	Tier 2	Bellinger-Cunningham Avenue Connector, Hull Road to Orchard Home Drive	New Roadway	Construct new minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks)	$6,835	1	✓	–	–	✓	–	–	✖	–
486	Tier 2	Springbrook Road, Owen Drive to Coker Butte Road	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$4,210	1	✓	–	–	✓	✓	–	–	–

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489	Tier 2	Diamond Street, Orchard Home Drive to Sandstone Drive	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$640	0	–	–	–	✓	✓	–	✖	–
539	Tier 2	N/S Collector Street in SE Medford TOD	New Roadway	Construct new minor collector roadway (includes one lane in each direction, bike facilities, and sidewalks)	$5,410	0	✖	–	–	✓	✖	–	✖	–
601	Tier 2	Dakota Avenue, Collinwood Court to Oak Grove Road/Madrona Lane	New Roadway	Construct new minor collector roadway (includes one lane each direction, bike facilities, and sidewalks)	$3,510	0	–	–	–	✓	–	–	–	–
604	Tier 2	Holly Street, Garfield Street to South Stage Road	New Roadway	Construct new minor collector roadway (includes one lane in each direction, bike facilities, and sidewalks)	$6,475	2	✓	–	–	✓	–	–	✖	–
607	Tier 2	Stevens Street connection to Oregon Avenue	New Roadway	Construct new minor collector roadway (includes one lane each direction, bike facilities, and sidewalks)	$310	1	✖	–	–	✓	✓	–	–	–
624	Tier 2	Wilson Road, Table Rock Road to City Limits	New Roadway	Construct new minor collector roadway (includes one lane each direction, bike facilities, and sidewalks)	$3,885	1	✓	–	✓	✓	✖	–	✖	–
627	Tier 2	Crater Lake Avenue, Coker Butte Road to northern UGB	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$8,580	0	✓	–	–	✓	✓	–	✓	✓
628	Tier 2	Lear Way, Vilas Road to northern city limits	New Roadway	Construct new minor collector roadway (includes one lane each direction, bike facilities, and sidewalks)	$1,900	0	–	–	–	✓	–	–	–	✓
629	Tier 2	International Way, Vilas Road to Coker Butte Road	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$9,345	1	–	–	–	✓	✖	–	✓	–

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630	Tier 2	Springbrook Road, Coker Butte Road to Vilas Road	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$8,055	2	✓	–	–	✓	✖	–	✖	–
631	Tier 2	East-West collector between Coker Butte Road and Vilas Road, Crater Lake Highway to eastern UGB	New Roadway	Construct new minor collector roadway (includes one lane each direction, bike facilities, and sidewalks)	$3,950	1	✖	–	✓	✓	–	–	✓	–
677	Tier 2	Golf View Drive, Juanipero Way to southern expansion boundary	New Roadway	Construct new major collector (minor collector south of South Stage Road extension) roadway (includes center turn-lane, bike facilities, and sidewalks)	$10,760	1	✓	–	–	✓	–	–	✖	–
678	Tier 2	East-West collector along southern UGB, Golf View Drive to North Phoenix Road	New Roadway	Upgrade to minor collector standard including one lane in each direction, bike facilities, and sidewalks	$2,140	0	–	–	–	✓	✖	–	✖	–
681	Tier 2	Experiment Station Road, Kings Highway to Holly Street	New Roadway	Construct new minor collector standard (includes one lane in each direction, bike facilities, and sidewalks)	$3,830.00	2	✖	–	–	✓	✖	–	✖	–
703	Tier 2	Dakota Avenue extension to Lozier Lane	New Roadway	Construct new minor collector standard (includes one lane in each direction, bike facilities, and sidewalks)	$2,290.00	1	–	–	–	✓	✓	–	✓	–
704	Tier 2	N/S Collector Street in SE Medford TOD	New Roadway	Construct new minor collector standard (includes one lane in each direction, bike facilities, and sidewalks)	$3,310.00	0	✖	–	–	✓	–	–	✖	–
705	Tier 2	Lone Oak Drive Extension	New Roadway	Construct new major collector standard (includes center turn-lane, bike facilities, and sidewalks)	$8,160.00	0	✖	–	–	✓	✓	–	✖	–
709	Tier 2	Owen Drive, Torrent Street to McLoughlin Drive	New Roadway	Construct new major collector roadway (includes center turn-lane, bike facilities, and sidewalks)	$3,845.00	0	–	–	–	✓	–	–	–	–

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710	Tier 2	McLoughlin Drive, Ford Drive to Northern Expansion Boundary	New Roadway	Construct new major collector roadway (includes one lane in each direction, center-turn lane, bike facilities, and sidewalks)	$1,935.00	0	✖	–	–	✓	✓	–	–	–
711	Tier 2	Spring Street, Foothill Road to Urano Lane	New Roadway	Construct new minor collector roadway (includes one lane in each direction, bike facilities, and sidewalks)	$2,645.00	2	✖	–	–	✓	✖	–	✖	–
712	Tier 2	Urano Lane, Hillcrest Road to Spring Street	New Roadway	Construct new minor collector roadway (includes one lane in each direction, bike facilities, and sidewalks)	$1,835.00	0	✖	–	–	✓	✖	–	✖	–
713	Tier 2	Fairfax Street, Delta Waters Road to northern expansion boundary	New Roadway	Construct new minor collector roadway (includes one lane in each direction, bike facilities, and sidewalks)	$4,180.00	0	✖	–	–	✓	✖	–	✖	–
714	Tier 2	Cheltenham Way, Ford Drive to northern expansion boundary	New Roadway	Construct new minor collector roadway (includes one lane in each direction, bike facilities, and sidewalks)	$2,370.00	0	✖	–	–	✓	–	–	–	–
716	Tier 2	Hondeleau Lane, City Limits to eastern expansion boundary	New Roadway	Construct new minor collector roadway (includes one lane in each direction, bike facilities, and sidewalks)	$1,045.00	1	✖	–	–	✓	✓	–	✖	–
				Totals/Average Rating	$300,120		✓	–	–	✓	✓	–	✖	–
Project Type - Intersection Improvements: including roundabouts, traffic signals, turn lanes, and equipment upgrades which are generally needed to provide both increased vehicle capacity and safety for all roadway users														
I03	Tier 1	12th Street & Riverside Avenue	Intersection	Replace/upgrade traffic signal and increase vertical clearance	$400	1	✓	✖	–	✖	–	–	✖	✓
I04	Tier 1	Biddle Road & Lawnsdale Road	Intersection	Update signal phasing and install protected/permitted signal heads in northbound and southbound directions	$160	1	✓	✓	✓	✖	✖	–	✖	✓
I05	Tier 1	Biddle Road & Stevens Street	Intersection	Replace/upgrade traffic signal	$400	1	✓	–	✓	✖	–	–	✖	✓

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I06	Tier 1	Columbus Avenue & Prune Street	Intersection	Monitor warrants for enhanced pedestrian crossing or traffic signal	$50	2	–	✖	✓	✓	–	✓	✖	–
I07	Tier 1	Court Street & Ohio Street	Intersection	Modify existing signal to add westbound left turn lane	$400	4	–	✓	–	✖	–	–	✖	✓
I08	Tier 1	Crater Lake Avenue & Brookhurst Street	Intersection	Replace/upgrade traffic signal to increase vertical clearance and optimize signal timing/phasing	$400	0	✓	✖	–	✖	✖	–	✖	✓
I12	Tier 1	Crater Lake Avenue & Owens Drive	Intersection	Install traffic signal or roundabout when warranted	$2,200	6	✓	✓	–	✓	–	✓	–	✓
I13	Tier 1	Creek View Drive & North Phoenix Road	Intersection	Install traffic signal when warranted. Remove traffic signal at Albertson's access and convert to right-in/right-out only (See SE Plan)	$400	1	✓	✓	–	–	–	–	✖	✓
I14	Tier 1	Highland Drive & East Main Street	Intersection	Install traffic signal or roundabout when warranted	$400	13	✖	✓	–	✓	✖	✓	✖	–
I15	Tier 1	Hillcrest Road & Pierce Road	Intersection	Install traffic signal or roundabout when warranted	$400	1	✖	✓	–	✓	✖	✓	✖	–
I17	Tier 1	South Pacific Highway & Stewart Avenue	Intersection	Intersection improvements such as second southbound left and second eastbound left-turn lanes, or an alternative intersection configuration with displaced lefts on the north and south legs.	$960	6	✓	–	✓	✖	–	✓	✖	✓
I21	Tier 1	Main Street & Lindley Street	Intersection	Replace/upgrade traffic signal	$400	0	–	✖	–	✖	–	–	✓	–
I24	Tier 1	Phoenix Road & Barnett Road	Intersection	Intersection improvements such as second SBTH lane, WBTH lane, and phasing all lefts as perm+prot	$880	0	✓	✓	–	✖	–	–	✖	✓
I27	Tier 1	Springbrook Road & Spring Street	Intersection	Install traffic signal or roundabout when warranted	$525	10	✓	✓	–	✓	–	✓	✖	–
I39	Tier 1	Crater Lake Avenue & East Vilas Road	Intersection	Re-align Crater Lake Ave to the east and install traffic signal	$400		✓	✓	✓	✓	–	–	✓	✓

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I40	Tier 1	Crater Lake Highway & East Vilas Road	Intersection	Monitor needs after construction of Crater Lake Highway Bypass	$5	0	✓	–	–	–	–	–	✖	–
I45	Tier 1	Foothill Road & Lone Pine Road	Intersection	Intersection control improvements such as right-in/right-out only due to proximity to planned signal at McAndrews ramp - TBD by intersection further analysis and safety analysis	$400	10	✓	✓	–	✓	–	✖	✖	–
I58	Tier 1	Main Street & Barneburg Road	Intersection	Install traffic signal or roundabout when warranted	$400	8	✓	✓	–	✓	–	✓	✖	–
I69	Tier 1	South Columbus Avenue & South Stage Road	Intersection	Install traffic signal or roundabout when warranted	$2,200	2	✓	–	–	✓	✓	–	✖	✓
I73	Tier 1	Foothill Road & Delta Waters Road	Intersection	Install turn lanes and traffic signal or roundabout when warranted	$2,200	10	✓	✓	–	✓	–	✓	✖	–
I75	Tier 1	Valley View Drive & Hillcrest Road	Intersection	Install traffic signal or roundabout when warranted	$2,200	4	✖	✓	–	✓	–	✓	✖	–
I78	Tier 1	Highland Drive & Barnett Road	Intersection	Intersection improvements such as second northbound right-turn lane (protected) - intersection may need alternative mobility target	$405	2	✓	–	✓	–	–	✖	✖	✓
I02	Tier 2	10th Street & Cottage Street	Intersection	Install traffic signal or roundabout when warranted	$400.00	1	–	✓	–	✓	✓	✓	✓	–
I19	Tier 2	Keene Way & Barneburg Road	Intersection	Install traffic signal or roundabout when warranted	$2,200	2	✓	–	–	✓	✖	✓	✖	–
I28	Tier 2	10th Street & Columbus Avenue	Intersection	Install traffic signal or roundabout when warranted	$400	2	✓	–	✓	✓	–	✓	✓	✓
I29	Tier 2	4th Street & Oakdale Avenue	Intersection	Install traffic signal or roundabout when warranted	$400	3	–	–	–	✓	✓	✓	–	–
I30	Tier 2	8th Street & Hamilton Street	Intersection	Monitor warrants for enhanced pedestrian crossing or traffic signal.	$5	1	✖	✖	–	✓	–	✓	✓	–

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I31	Tier 2	8th Street & Orange Street	Intersection	Monitor warrants for enhanced pedestrian crossing or traffic signal.	$5	0	✖	✖	–	✓	–	✓	✓	–
I33	Tier 2	Biddle Road & Airport Road	Intersection	Install traffic signal or roundabout when warranted	$400	6	✓	–	–	✓	✖	✓	✖	✓
I35	Tier 2	Brookdale Avenue & Spring Street	Intersection	Install traffic signal or roundabout when warranted	$400	0	✖	–	–	✓	✖	✓	✖	–
I36	Tier 2	Coker Butte Road & Springbrook Road	Intersection	Install traffic signal or roundabout when warranted	$400	1	✓	–	–	✓	✓	✓	✖	✓
I37	Tier 2	Columbus Avenue & 4th Street	Intersection	Install traffic signal or roundabout when warranted	$400	3	✓	–	–	✓	–	✓	✓	✓
I38	Tier 2	Cottage Street & Main Street	Intersection	Install traffic signal or roundabout when warranted	$400	3	–	–	–	✓	✓	✓	✓	✓
I41	Tier 2	Diamond Street & Kings Highway	Intersection	Install traffic signal or roundabout when warranted	$400	0	✖	–	–	✓	✖	✓	✖	–
I42	Tier 2	Diamond Street & South Columbus Avenue	Intersection	Install traffic signal or roundabout when warranted	$400	0	✓	–	–	✓	✓	✓	✖	✓
I43	Tier 2	East Vilas Road & Industry Drive	Intersection	Install traffic signal or roundabout when warranted	$400	0	–	–	–	✓	–	✓	✖	✓
I44	Tier 2	East Vilas Road & Lear Way	Intersection	Install traffic signal or roundabout when warranted	$400	2	–	–	–	✓	–	✓	✓	✓
I46	Tier 2	Foothill Road & Spring Street (extension)	Intersection	Install traffic signal when warranted	$400	1	✓	–	–	✓	✖	✓	✖	✓
I47	Tier 2	Garfield Street & Kings Highway	Intersection	Install traffic signal or roundabout when warranted	$400	4	✓	–	–	✓	✖	✓	–	–

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I48	Tier 2	Garfield Street & South Holly Street	Intersection	Install traffic signal or roundabout when warranted	$400	1	✓	–	–	✓	✓	✓	✖	–
I49	Tier 2	Garfield Street & South Peach Street	Intersection	Install traffic signal or roundabout when warranted	$400	1	✓	–	–	✓	–	✓	✖	–
I50	Tier 2	Hillcrest Road & Barneburg Road & Crown Avenue	Intersection	Geometric improvements such as re-alignment or roundabouts	$4,400	1	✓	–	–	✓	✓	✓	✖	–
I52	Tier 2	Hillcrest Road & Sunrise Avenue	Intersection	Geometric improvements such as re-alignment or roundabouts	$2,200	3	✓	–	–	✓	✓	✓	✖	–
I54	Tier 2	Juanipero Way and North Phoenix Road	Intersection	Install traffic signal or roundabout when warranted	$400	0	✓	–	–	✓	–	✓	✖	✓
I56	Tier 2	Kings Highway & South Stage Road	Intersection	Install traffic signal or roundabout when warranted	$400	0	✓	–	–	✓	–	✓	✖	✓
I57	Tier 2	Lozier Lane & Cunningham Avenue	Intersection	Install traffic signal or roundabout when warranted	$400	0	✓	–	–	✓	–	✓	✖	–
I59	Tier 2	Main Street & Hamilton Street	Intersection	Monitor warrants for enhanced pedestrian crossing or traffic signal.	$400	1	✖	✖	–	✓	✓	✓	✓	–
I63	Tier 2	McAndrews Road & Riverside Avenue	Intersection	Intersection improvements such as re-striping westbound approach to one through, a shared through/right, and a right-turn lane, signal modifications, and second westbound right-turn lane when needed	$245	2	✓	–	–	✖	✖	✖	✖	✓
I65	Tier 2	Oak Grove Road & Stewart Avenue	Intersection	Install traffic signal or roundabout when warranted	$2,200	0	✓	–	–	✓	–	✓	✖	✓
I66	Tier 2	Orchard Home Drive & South Stage Road	Intersection	Install traffic signal or roundabout when warranted	$2,200	0	✓	–	–	✓	✓	✓	✖	✓

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I67	Tier 2	Orchard Home Drive & Sunset Drive	Intersection	Install traffic signal or roundabout when warranted	$2,200	0	–	–	–	✓	–	✓	✖	–
I68	Tier 2	Owen Drive & Springbrook Road	Intersection	Install traffic signal or roundabout when warranted	$2,200	1	✓	–	–	✓	✓	✓	–	–
I70	Tier 2	West Jackson Street & West McAndrews Road	Intersection	Install traffic signal or roundabout when warranted	$2,200	1	–	–	–	✓	✓	✓	✓	✓
I71	Tier 2	Willamette Avenue & Main Street	Intersection	Install traffic signal or roundabout when warranted	$2,200	1	–	–	–	✓	✓	✓	✓	–
I72	Tier 2	Calle Vista Drive & North Phoenix Road	Intersection	Install center median that will result in right-in/right-out turns only and install sidewalk along North Phoenix Road (See SE Plan)	$357	1	✓	–	–	✓	–	✓	✖	✓
I74	Tier 2	Shamrock Drive & North Phoenix Road	Intersection	Install center median that will result in right-in/right-out turns only (See SE Plan)	$210	0	✓	–	–	–	–	✓	✖	✓
I85	Tier 2	Willamette Avenue and Siskiyou Boulevard	Intersection	Install traffic signal when warranted	$400	1	–	–	–	✓	✓	✓	–	–
				Totals/Average Rating	$47,407.00		✓	–	–	✓	–	✓	✖	✓
Project Type - Pedestrian: includes a sidewalk infill program; project which will include the City dedicating $300,000 annually to high priority sidewalk infill projects.													
546	Tier 1	Lone Pine School Area (Spring Street, Springbrook Road to Brookdale Avenue, excluding segment between Valley View Drive and Modoc Avenue)	Pedestrian	Install sidewalks	$1,240	8	–	–	–	–	✓	✓	✖	–
547	Tier 1	Washington School area (Plum Street, 11th Street to Prune Street)	Pedestrian	Install sidewalks	$210	6	–	–	–	–	✓	✓	✓	–
550	Tier 1	Washington School area (11th Street, Lincoln Street to Hamilton Street)	Pedestrian	Install sidewalks	$530	5	–	–	–	–	✓	✓	✓	–

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551	Tier 1	Howard School area (Mace Road, Connell Avenue to North Pacific Highway)	Pedestrian	Install sidewalks	$390	3	–	–	–	–	✓	✓	–	–
552	Tier 1	Roosevelt School area (Ashland Avenue, Oregon Avenue)	Pedestrian	Install sidewalks	$2,085	1	–	–	–	–	✓	✓	✓	–
553	Tier 1	Wilson School area (Grand Avenue)	Pedestrian	Install sidewalks	$920	0	–	–	–	–	✓	✓	✓	–
Pr1	Tier 1	Various sidewalk gap locations with focus on high-priority areas including schools, activity centers and essential destinations, transit routes, and transit oriented development areas	Pedestrian	Construct sidewalks or other pedestrian facilities at high-priority locations ($300,000 annually)	$6,000	30	✓	–	–	–	✓	✓	✓	–
647	Tier 2	Lone Pine Road, Springbrook Road to Edgevale Avenue Sidewalk Infill	Pedestrian	Install sidewalks	$1,940	1	–	–	–	–	✓	✓	–	–
				Totals/Average Rating	$13,315		–	–	–	–	✓	✓	✓	–
Project Type - Multi-Use Paths: separated and dedicated paths providing for bicycle and pedestrian traffic flow.														
P-1	Tier 2	Swanson Creek	Multi-Use Path	Construct Multi-Use Path		6	✓	–	✓	–	–	✓	✓	✓
P-2	Tier 2	Vilas Road	Multi-Use Path	Construct Multi-Use Path		6	✓	–	–	–	–	✓	–	–
P-3	Tier 2	Crater Lake Highway	Multi-Use Path	Construct Multi-Use Path		10	✓	–	✓	–	✓	✓	✓	✓
P-4	Tier 2	Owen to Foothills	Multi-Use Path	Construct Multi-Use Path		6	✓	–	–	–	✓	✓	–	–
P-5	Tier 2	Lone Pine Creek	Multi-Use Path	Construct Multi-Use Path		5	✓	–	–	–	✓	✓	✓	–
P-6	Tier 2	Cedar Links	Multi-Use Path	Construct Multi-Use Path		4	–	–	–	–	–	✓	✓	–
P-7	Tier 2	Foothills Road	Multi-Use Path	Construct Multi-Use Path		3	✓	–	–	–	–	✓	✖	–

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P-8	Tier 2	Delta Waters to Prescott Park	Multi-Use Path	Construct Multi-Use Path		3	✓	–	–	–	✓	✓	–	–
P-8A	Tier 2	Cedar Links Connector	Multi-Use Path	Construct Multi-Use Path		3	✓	–	–	–	–	✓	✖	–
P-9	Tier 2	Lone Pine to Prescott Park	Multi-Use Path	Construct Multi-Use Path		5	✓	–	–	–	✖	✓	✖	–
P-10	Tier 2	Dunbar Irrigation Canal	Multi-Use Path	Construct Multi-Use Path		7	✓	–	–	–	–	✓	✖	–
P-11	Tier 2	Hillcrest	Multi-Use Path	Construct Multi-Use Path		5	✓	–	–	–	–	✓	✖	–
P-12	Tier 2	Vista Point	Multi-Use Path	Construct Multi-Use Path		4	✓	–	–	–	–	✓	✖	–
P-13	Tier 2	Roxy Ann Drive	Multi-Use Path	Construct Multi-Use Path		4	–	–	–	–	✖	✓	✖	–
P-13A	Tier 2	Roxy Ann Connector	Multi-Use Path	Construct Multi-Use Path		4	–	–	–	–	✖	✓	✖	–
P-13B	Tier 2	Chrissy Park	Multi-Use Path	Construct Multi-Use Path		4	–	–	–	–	✖	✓	✖	–
P-14	Tier 2	Irrigation Canal	Multi-Use Path	Construct Multi-Use Path		5	–	–	–	–	✓	✓	✖	–
P-15	Tier 2	Village Center Greenway	Multi-Use Path	Construct Multi-Use Path		6	–	–	–	–	✓	✓	✖	–
P-16	Tier 2	Larson Creek Connector	Multi-Use Path	Construct Multi-Use Path		7	–	–	–	–	✓	✓	✖	–
P-17	Tier 2	Summerfield Greenway	Multi-Use Path	Construct Multi-Use Path		6	–	–	–	–	–	✓	✖	–
P-18	Tier 2	North Larson Creek	Multi-Use Path	Construct Multi-Use Path		8	–	–	–	–	–	✓	✖	–
P-19	Tier 2	Larson Creek	Multi-Use Path	Construct Multi-Use Path		6	–	–	–	–	✓	✓	✓	–
P-20	Tier 2	Larson Creek	Multi-Use Path	Construct Multi-Use Path		6	–	–	–	–	✓	✓	✓	–
P-21	Tier 2	Larson Creek	Multi-Use Path	Construct Multi-Use Path		6	–	–	–	–	✓	✓	✖	–
P-21A	Tier 2	Larson Creek Connector	Multi-Use Path	Construct Multi-Use Path		5	–	–	–	–	–	✓	✖	–
P-22	Tier 2	Coal Mine Road	Multi-Use Path	Construct Multi-Use Path		7	–	–	–	–	–	✓	✖	–
P-23	Tier 2	North Phoenix Road	Multi-Use Path	Construct Multi-Use Path		8	–	–	–	–	–	✓	✖	–
P-24	Tier 2	Stage Road Extension	Multi-Use Path	Construct Multi-Use Path		17	✓	–	–	–	–	✓	✖	–

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P-25	Tier 2	Stage Road	Multi-Use Path	Construct Multi-Use Path		7	✓	–	–	–	✓	✓	✓	–
P-26	Tier 2	South 99W Corridor	Multi-Use Path	Construct Multi-Use Path		8	✓	–	–	–	✓	✓	✓	✓
P-27	Tier 2	KOGAP Development	Multi-Use Path	Construct Multi-Use Path		7	✓	–	✓	–	✓	✓	✓	✓
P-28	Tier 2	Center Drive Connector	Multi-Use Path	Construct Multi-Use Path		6	–	–	–	–	✓	✓	✓	✓
P-29	Tier 2	Columbus Avenue	Multi-Use Path	Construct Multi-Use Path		11	✓	–	✓	–	✓	✓	✓	✓
P-30	Tier 2	Griffen Creek Extension	Multi-Use Path	Construct Multi-Use Path		4	✓	–	–	–	–	✓	✖	–
P-31	Tier 2	Dakota Avenue	Multi-Use Path	Construct Multi-Use Path		2	–	–	–	–	✓	✓	✓	–
P-32	Tier 2	Oak Grove Road	Multi-Use Path	Construct Multi-Use Path		3	✓	–	–	–	✓	✓	✓	–
P-33	Tier 2	Midway Park	Multi-Use Path	Construct Multi-Use Path		6	–	–	✓	–	✓	✓	✓	–
P-34	Tier 2	Midway Road	Multi-Use Path	Construct Multi-Use Path		6	–	–	–	–	✓	✓	✓	–
P-35	Tier 2	Airport Connector	Multi-Use Path	Construct Multi-Use Path		2	–	–	–	–	–	✓	–	–
P-36	Tier 2	Airport Connector	Multi-Use Path	Construct Multi-Use Path		4	✖	–	–	–	✖	✓	–	–
P-37	Tier 2	Table Rock Road	Multi-Use Path	Construct Multi-Use Path		5	✓	–	–	–	✓	✓	–	–
				Totals/Average Rating	$0.00		–	–	–	–	✓	✓	✖	–
Project Type - Bicycle: on or off street dedicated bicycle facilities, or a combination of paint and signage to designate neighborhood greenways														
B10	Tier 1	Dellwood Avenue, west of Black Oak Drive to Murphy Road	Bicycle	Sign and Stripe Neighborhood Bikeway	$11.30	1	✖	–	–	–	✓	–	✓	–
B145	Tier 1	Springbrook Road, Cedar Links to Roberts Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$930.00	1	✖	–	–	✓	✓	✓	✓	–
B2	Tier 1	Prune Street, Lozier Lane to Plum Street; Plum Street, Prune Street to Dakota Avenue	Bicycle	Sign and Stripe Neighborhood Bikeway	$16.00	1	✖	–	–	–	✓	–	✓	–
B3	Tier 1	Beatty Street, Manzanita Street, Niantic Street, Maple Street, Bartlett Street from McAndrews Road to Jackson Street	Bicycle	Sign and Stripe Neighborhood Bikeway	$24.42	4	–	–	–	–	✓	–	✓	–

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B4	Tier 1	Holly Street, Jackson Street to Monroe Street	Bicycle	Sign and Stripe Neighborhood Bikeway	$23.50	3	–	–	–	–	✓	–	✓	–
B5	Tier 1	Main Street, Oakdale Drive to Almond Street	Bicycle	Sign and Stripe Neighborhood Bikeway	$12.79	4	✓	–	–	–	✓	–	✓	–
B56	Tier 1	Main Street, Willamette Avenue to Valley View Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Lanes	$6,705.00	5	–	–	–	✓	–	✓	✓	–
B6	Tier 1	Keene Way Drive, Bradbury Street; Crater Lake Avenue to Roberts Road	Bicycle	Sign and Stripe Neighborhood Bikeway	$14.42	2	–	–	–	–	✓	–	✓	–
B67	Tier 1	Table Rock Road, North of Merriman Road to Adams Lane	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,685.00	0	✓	–	–	✓	✓	✓	✓	✓
B7	Tier 1	Keene Way Drive, Brookhurst Street to Camelia Avenue	Bicycle	Sign and Stripe Neighborhood Bikeway	$2.55	2	✖	–	–	–	✓	–	✓	–
B8	Tier 1	Keene Way Drive, Camelia Avenue to Keene Drive	Bicycle	Sign and Stripe Neighborhood Bikeway	$29.83	3	✖	–	–	–	✓	–	–	–
B9	Tier 1	Fortune Drive, Eastwood Drive, Keene Way Drive, Keene Drive, Groveland Avenue, Dellwood Avenue; Willamette Avenue to Modoc Avenue	Bicycle	Sign and Stripe Neighborhood Bikeway	$27.68	2	✖	–	–	–	✓	–	–	–
Pr2	Tier 1	Various bicycle network gap locations with focus on high-priority areas including schools, activity centers and essential destinations, transit routes, and transit oriented development areas	Bicycle	Evaluate and construct potential roadway reconfigurations to accommodate bicycle facilities through re-striping and/or minor reconstruction at high-priority locations ($500,000 annually)	$10,000	42	✓	–	–	✓	✓	✓	✓	–
B1	Tier 2	South Columbus Avenue, South of Swayze Lane to North of Brentcrest Drive	Bicycle	Construct Bike Facilities when Roadway is Improved	$865.00	3	✓	–	–	✓	–	✓	–	✓
B107	Tier 2	Biddle Road, South of Knutson Avenue to Morrow Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$13,315.00	0	✓	–	✓	✓	✓	✓	✓	✓
B108	Tier 2	10th Street, Oakdale Drive to Front Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$2,135.00	3	–	–	–	✓	✓	✓	✓	–
B109	Tier 2	Crater Lake Avenue, McAndrews Road to Stevens Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$4,635.00	2	✓	–	✓	✓	✓	✓	✓	✓
B11	Tier 2	Diamond Street, Orchard Home Road to Columbus Avenue	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$2,995.00	1	✖	–	–	✓	✓	✓	✖	–
B110	Tier 2	Main Street, Columbus Avenue to Oakdale Drive	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$5,255.00	2	–	–	–	✓	✓	✓	✓	–

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2018-2038 Medford Transportation System Plan Project List - DRAFT

Project #	Tier	Project Location	Project Type	Project Description	Cost ($1,000)	Number of Votes from Open Houses	Project provides regional connections/benefits	Project needed to meet City's "LOS D" standard?	Improves safety at a high-crash location?	Improves safety/comfort for all modes	Connects neighborhoods to activity centers with facilities for walking and/or biking	Increases safety of pedestrian crossings?	Completes walking/biking facilities along a transit route and/or within 1/4 radius of a transit stop	Improves connectivity to or mobility along a designated freight route
B12	Tier 2	Ellendale Drive, Barnett Road to Hospitality Way	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$995.00	0	✖	–	–	✓	–	✓	✓	–
B13	Tier 2	Jackson Street, Central Avenue to East of Pearl Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$11,330.00	6	✓	–	✓	✓	✓	✓	✓	✓
B14	Tier 2	Stevens Street, Biddle Road to Crater Lake Avenue	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$3,590.00	3	–	–	✓	✓	✓	✓	✓	–
B143	Tier 2	Coker Butte Road, Crater Lake Highway to Crater Lake Avenue	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,445.00	1	✓	–	–	✓	✖	✓	✓	✓
B148	Tier 2	Hillcrest Road, Highcrest Drive to McAndrews Road	Bicycle	Construct Bike Facilities within existing curb	$965.00	3	✖	–	–	✓	✖	✓	✖	–
B149	Tier 2	Hillcrest Road, Foothill Road to Bel Air Court	Bicycle	Construct Bike Facility in the uphill direction.	$25.00	4	–	–	–	✓	✖	✓	✖	–
B15	Tier 2	Siskiyou Boulevard, Interstate 5 to Willamette Avenue	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$3,635.00	2	–	–	–	✓	✓	✓	✓	–
B151	Tier 2	Columbus Avenue, Prune Street to McAndrews Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$11,490.00	3	✓	–	✓	✓	–	✓	✓	✓
B152	Tier 2	Cardinal Avenue, Lear Way to Crater Lake Highway	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,835.00	0	–	–	–	✓	✓	✓	✓	✓
B16	Tier 2	Court Street, Rossanley Drive to Edwards Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$7,410.00	1	–	–	–	✓	–	✓	✓	✓
B17	Tier 2	Central Avenue, McAndrews Road to Jackson Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$8,290.00	0	✓	–	–	✓	✓	✓	✓	✓
B18	Tier 2	Oak Street, Jackson Street to 2nd Street; 2nd Street, Oak Street to Rose Avenue; Rose Avenue, 2nd Street to 4th Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$405.00	2	✖	–	–	✓	✓	✓	✓	–
B19	Tier 2	Ridge Way, Wabash Avenue to Keene Way Drive	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$845.00	1	✖	–	–	✓	–	✓	–	–
B20	Tier 2	Corona Avenue, Grand Avenue to McAndrews Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,310.00	1	✖	–	–	✓	✓	✓	✓	–
B21	Tier 2	Biddle Road, Table Rock Road to Airport Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$7,295.00	1	✓	–	✓	✓	✖	✓	✖	✓
B22	Tier 2	Poplar Drive, Crater Lake Highway to Morrow Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$5,310.00	0	–	–	✓	✓	✓	✓	✓	–
B23	Tier 2	Morrow Road, Biddle Road to Corona Avenue	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$6,900.00	0	–	–	–	✓	✓	✓	✓	–
B24	Tier 2	Corona Avenue, Roberts Road to Grand Avenue	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$2,455.00	1	✖	–	–	✓	✓	✓	✓	–
B25	Tier 2	Roberts Road, Corona Avenue to Melody Lane	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$2,755.00	0	✖	–	–	✓	✓	✓	✓	–
B26	Tier 2	Melody Lane, Roberts Road to Brookhurst Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$805.00	0	✖	–	–	✓	–	✓	✓	–

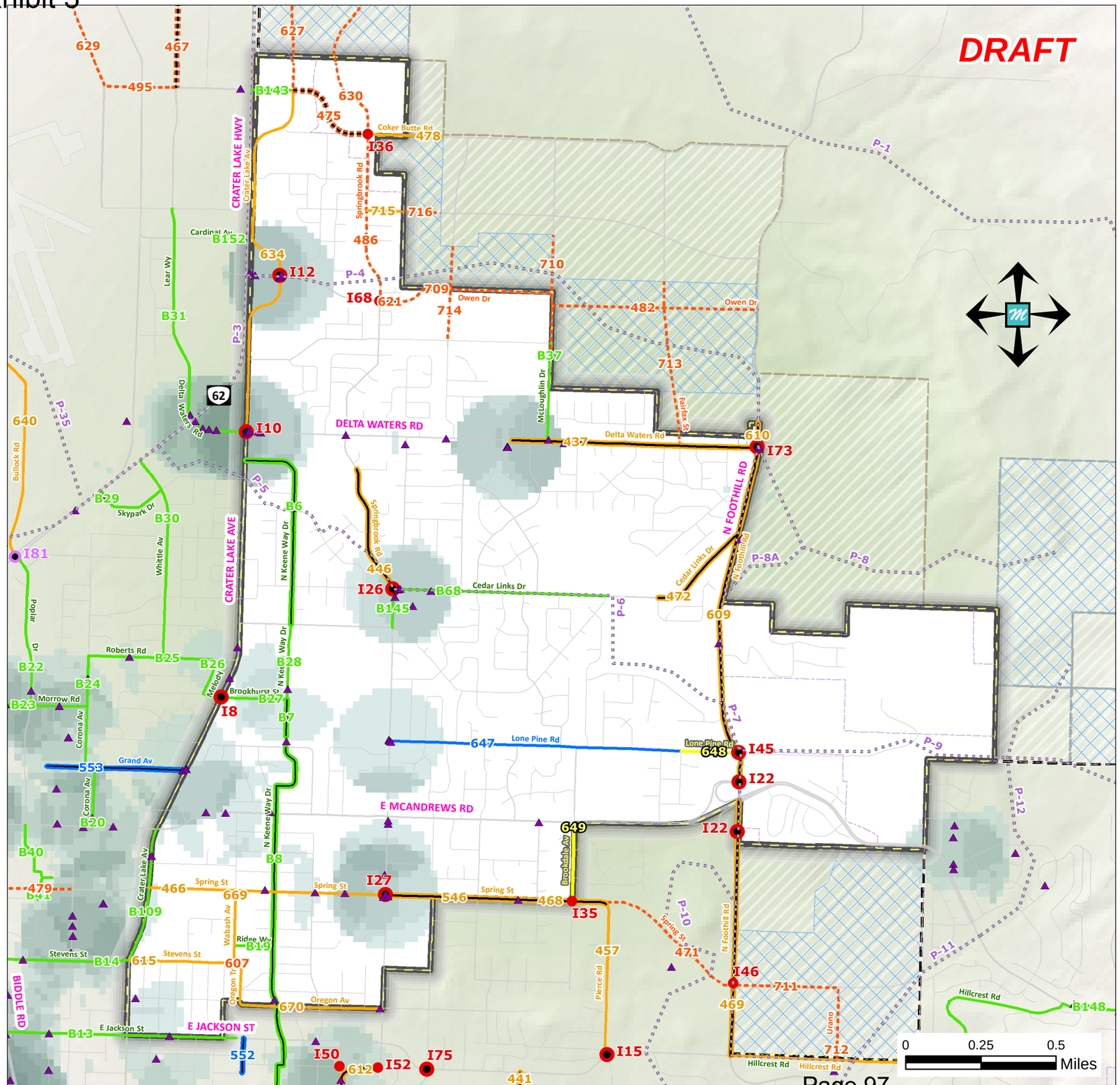
Project text in red received 30+ public comments/selections within Outreach efforts.

Key: ✓(Supports Criteria) – (Neither Supports or Worsens) ✖(Undermines criteria)

2018-2038 Medford Transportation System Plan Project List - DRAFT

Project #	Tier	Project Location	Project Type	Project Description	Cost ($1,000)	Number of Votes from Open Houses	Project provides regional connections/benefits	Project needed to meet City's "LOS D" standard?	Improves safety at a high-crash location?	Improves safety/comfort for all modes	Connects neighborhoods to activity centers with facilities for walking and/or biking	Increases safety of pedestrian crossings?	Completes walking/biking facilities along a transit route and/or within 1/4 radius of a transit stop	Improves connectivity to or mobility along a designated freight route
B27	Tier 2	Brookhurst Street, Melody Lane to Keene Way Drive	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,875.00	1	–	–	–	✓	✓	✓	✓	–
B28	Tier 2	Keene Way Drive, Roberts Road to Brookhurst Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,660.00	1	–	–	–	✓	✓	✓	✓	–
B29	Tier 2	Sky Park Drive, Crater Lake Highway to Whittle Avenue	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,650.00	0	–	–	–	✓	✖	✓	✓	–
B30	Tier 2	Whittle Avenue, Crater Lake Highway to Roberts Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$4,540.00	0	–	–	–	✓	✖	✓	✓	–
B31	Tier 2	Delta Waters Road, Commerce Drive to Crater Lake Avenue	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$9,390.00	3	✓	–	✓	✓	✓	✓	✓	–
B37	Tier 2	McLoughlin Drive, Ford Drive to Delta Waters Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,530.00	1	–	–	–	✓	✓	✓	–	–
B39	Tier 2	Hillcrest Road, Roxy Ann Road to eastern UGB Boundary	Bicycle	Construct Bike Facilities when Roadway is Improved	$810.00	2	✖	–	–	✓	✖	✓	✖	–
B40	Tier 2	Public Access, McAndrews Road to Royal Avenue	Bicycle	Planned Public Access Easement	NA	0	–	–	–	–	✓	–	✖	–
B41	Tier 2	Public Access, Royal Avenue to Market Street	Bicycle	Planned Public Access Easement	NA	0	–	–	–	–	✓	–	✖	–
B45	Tier 2	Dakota Avenue, Columbus Avenue to Hamilton Street	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$7,830.00	2	–	–	–	✓	✓	✓	✓	–
B48	Tier 2	10th Street, Elm Street to Oakdale Drive	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$11,310.00	7	–	–	–	✓	✓	✓	✓	–
B58	Tier 2	Cottage Street, 9th Street to South of 10th Street	Bicycle	Construct Bike Facilities when Roadway is Improved	$270.00	1	–	–	–	✓	✓	✓	✓	–
B61	Tier 2	4th Street, Columbus Avenue to Oakdale Drive	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$7,855.00	2	–	–	–	✓	✓	✓	✓	–
B68	Tier 2	Cedar Links Drive, Springbrook Road to Wilkshire Drive	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$10,465.00	4	✖	–	–	✓	✖	✓	✓	–
B81	Tier 2	Bullock Road, Lawnsdale Road to Biddle Road	Bicycle	Reconfigure/Reconstruct to Provide Bike Facilities	$1,290.00	0	–	–	–	✓	✖	✓	✖	–
B85	Tier 2	Cottage Street, Main Street to 9th Street	Bicycle	Construct Bike Facilities when Roadway is Improved	$1,210.00	1	–	–	–	✓	✓	✓	✓	–
				Totals/Average Rating	$189,457.49		–	–	–	✓	✓	✓	✓	–

Exhibit 3



City of **Medford**

TRANSPORTATION SYSTEM PLAN UPDATE

WARD 1

All Projects with Public Comments

Legend

- Location of Comments
- Comment Point Density

Intersection Projects (Proposed Priority Project Type)

- Medford Tier I Intersection Projects
- Medford Tier II Intersection Projects
- ODOT Intersection Projects

Street Projects (Proposed Priority Project Type)

- Pedestrian, Tier 1
- Pedestrian, Tier 2
- Tier 1 Widening Projects
- Tier 2 Widening Projects
- Tier 1 Urban Upgrade Projects
- Tier 2 Urban Upgrade Projects
- Tier 1 New Roadway Projects
- Tier 2 New Roadway Projects
- ODOT Jurisdiction Projects

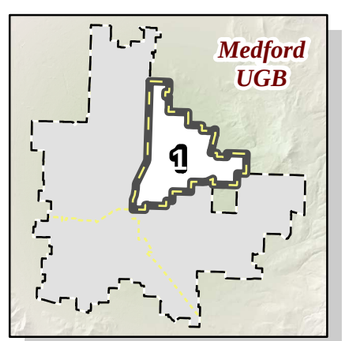
Bike Projects (Proposed Priority)

- Tier 1 Bike Projects
- Tier 2 Bike Projects

- Ward 1
- Trails Projects (Leisure Services Plan)
- UGB
- City Limits
- Expansion Area Boundary
- Urban Reserve Areas

MAGENTA STREET LABEL

= Most Avoided Street from Public Comments

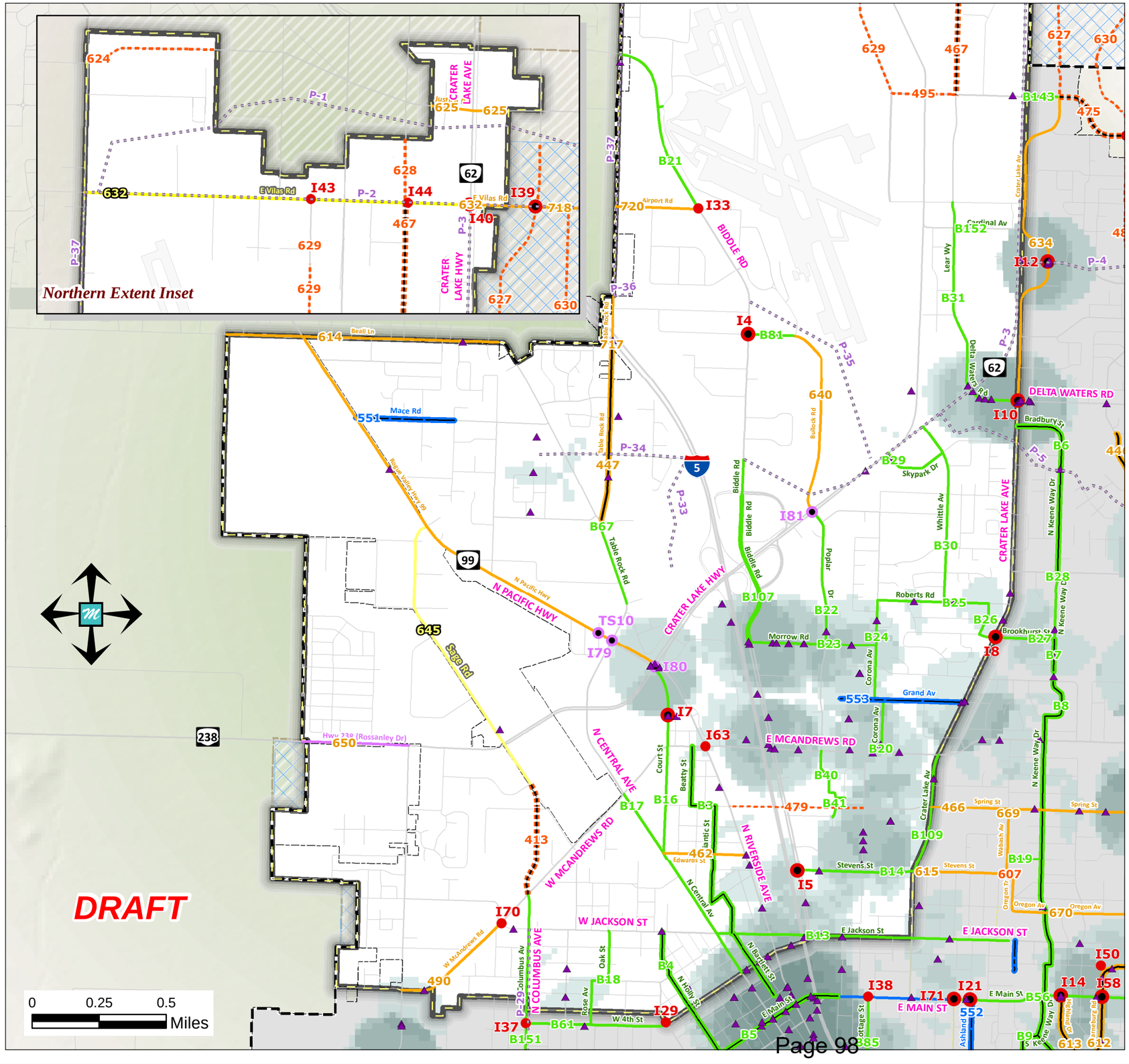


1/31/2018

City of Medford — TRANSPORTATION SYSTEM PLAN UPDATE

WARD 3

All Projects with Public Comments



Legend

- Comment Point Density
- Location of Comments

Intersection Projects (Proposed Priority Project Type)

- Medford Tier I Intersection Projects
- Medford Tier II Intersection Projects
- ODOT Intersection Projects

Street Projects (Proposed Priority Project Type)

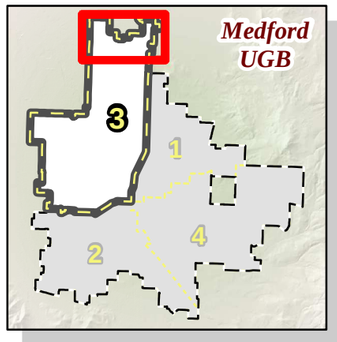
- Pedestrian, Tier 1
- Pedestrian, Tier 2
- Tier 1 Widening Projects
- Tier 2 Widening Projects
- Tier 1 Urban Upgrade Projects
- Tier 2 Urban Upgrade Projects
- Tier 1 New Roadway Projects
- Tier 2 New Roadway Projects
- Ward 3
- ODOT Jurisdiction Project

Bike Projects (Proposed Priority)

- Tier 1 Bike Projects
- Tier 2 Bike Projects
- UGB
- Trails Projects (Leisure Services Plan)
- City Limits
- Expansion Area Boundary
- Urban Reserve Areas

MAGENTA STREET LABEL

= Most Avoided Street from Public Comments



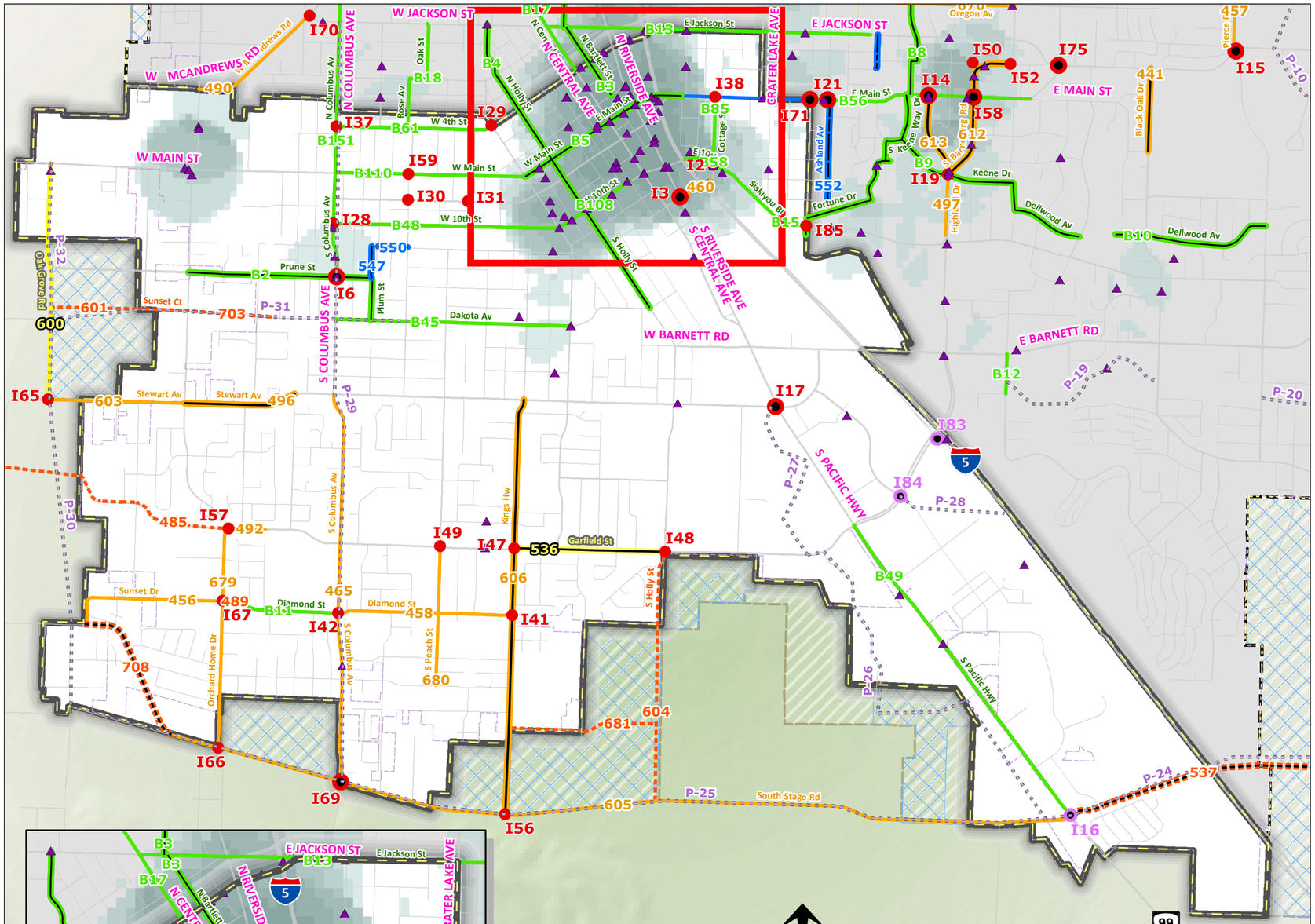
CITY OF MEDFORD OREGON

1/31/2018

City of Medford — TRANSPORTATION SYSTEM PLAN UPDATE

WARD 2

All Projects with Public Comments



Legend

- Location of Comments
- Comment Point Density

Intersection Projects (Proposed Priority Project Type)

- Medford Tier I Intersection Projects
- Medford Tier II Intersection Projects
- ODOT Intersection Projects

Street Projects (Proposed Priority Project Type)

- Pedestrian, Tier 1
- Pedestrian, Tier 2
- Tier 1 Widening Projects
- Tier 2 Widening Projects
- Tier 1 Urban Upgrade Projects
- Tier 2 Urban Upgrade Projects
- Tier 1 New Roadway Projects
- Tier 2 New Roadway Projects

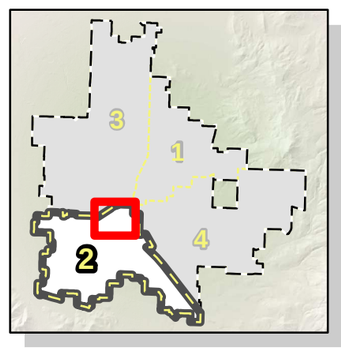
Bike Projects (Proposed Priority)

- Tier 1 Bike Projects
- Tier 2 Bike Projects

- Ward 2
- Trails Projects (Leisure Services Plan)
- UGB
- City Limits
- Expansion Area Boundary
- Urban Reserve Areas

MAGENTA STREET LABEL

= Most Avoided Street from Public Comments



1/31/2018

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City of Medford — TRANSPORTATION SYSTEM PLAN UPDATE

WARD 4

All Projects with Public Comments

Legend

- Location of Comments
- Comment Point Density

Intersection Projects (Proposed Priority Project Type)

- Medford Tier I Intersection Projects
- Medford Tier II Intersection Projects
- ODOT Intersection Projects

Street Projects (Proposed Priority Project Type)

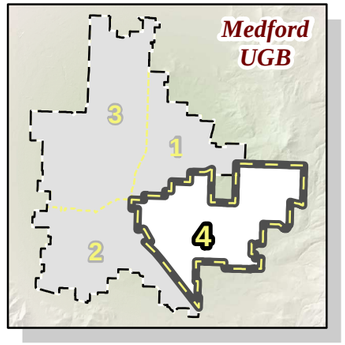
- Pedestrian, Tier 1
- Pedestrian, Tier 2
- Tier 1 Widening Projects
- Tier 2 Widening Projects
- Tier 1 Urban Upgrade Projects
- Tier 2 Urban Upgrade Projects
- Tier 1 New Roadway Projects
- Tier 2 New Roadway Projects
- Ward 4

Bike Projects (Proposed Priority)

- Tier 1 Bike Projects
- Tier 2 Bike Projects
- UGB
- Trails Projects (Leisure Services Plan)
- City Limits
- Expansion Area Boundary
- Urban Reserve Areas

MAGENTA STREET LABEL

= Most Avoided Street from Public Comments



0 0.25 0.5 Miles

1/31/2018

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City of Medford

TRANSPORTATION SYSTEM PLAN UPDATE

WARD 1

Bicycle and Pedestrian Projects

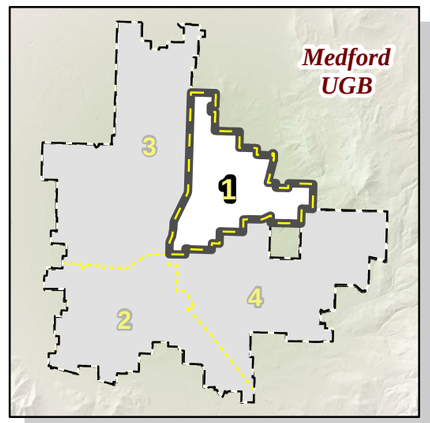
Legend

Pedestrian Projects (Proposed Priority)

- Tier 1 Pedestrian Projects
- Tier 2 Pedestrian Projects

Bike Projects (Proposed Priority)

- Tier 1 Bike Projects
- Tier 2 Bike Projects
- Trails Projects (Leisure Services Plan)
- Ward 1
- UGB
- City Limits
- Expansion Area Boundary
- Urban Reserve Areas



0 0.25 0.5 Miles

1/30/2018

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City of Medford

TRANSPORTATION SYSTEM PLAN UPDATE

WARD 2

Bicycle and Pedestrian Projects

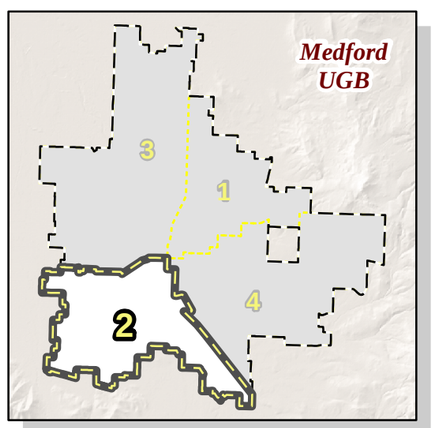
Legend

Pedestrian Projects (Proposed Priority)

- Pedestrian, Tier 1
- Pedestrian, Tier 2

Bike Projects (Proposed Priority)

- Tier 1 Bike Projects
- Tier 2 Bike Projects
- Trails Projects (Leisure Services Plan)
- Ward 2
- UGB
- City Limits
- Expansion Area Boundary
- Urban Reserve Areas



1/30/2018

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City of Medford

TRANSPORTATION SYSTEM PLAN UPDATE

WARD 4

Bicycle and Pedestrian Projects

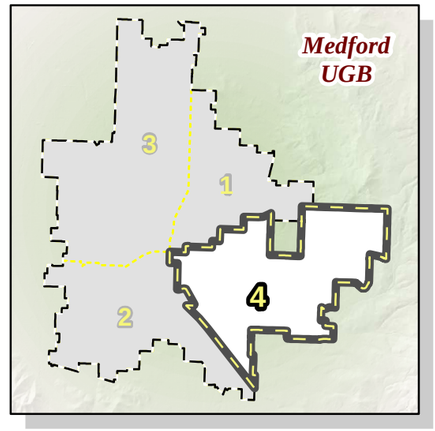
Legend

Pedestrian Projects (Proposed Priority)

- Tier 1 Pedestrian Projects
- Tier 2 Pedestrian Projects

Bike Projects (Proposed Priority)

- Tier 1 Bike Projects
- Tier 2 Bike Projects
- Trails Projects (Leisure Services Plan)
- Ward 4
- UGB
- City Limits
- Expansion Area Boundary
- Urban Reserve Areas



0 0.25 0.5 Miles

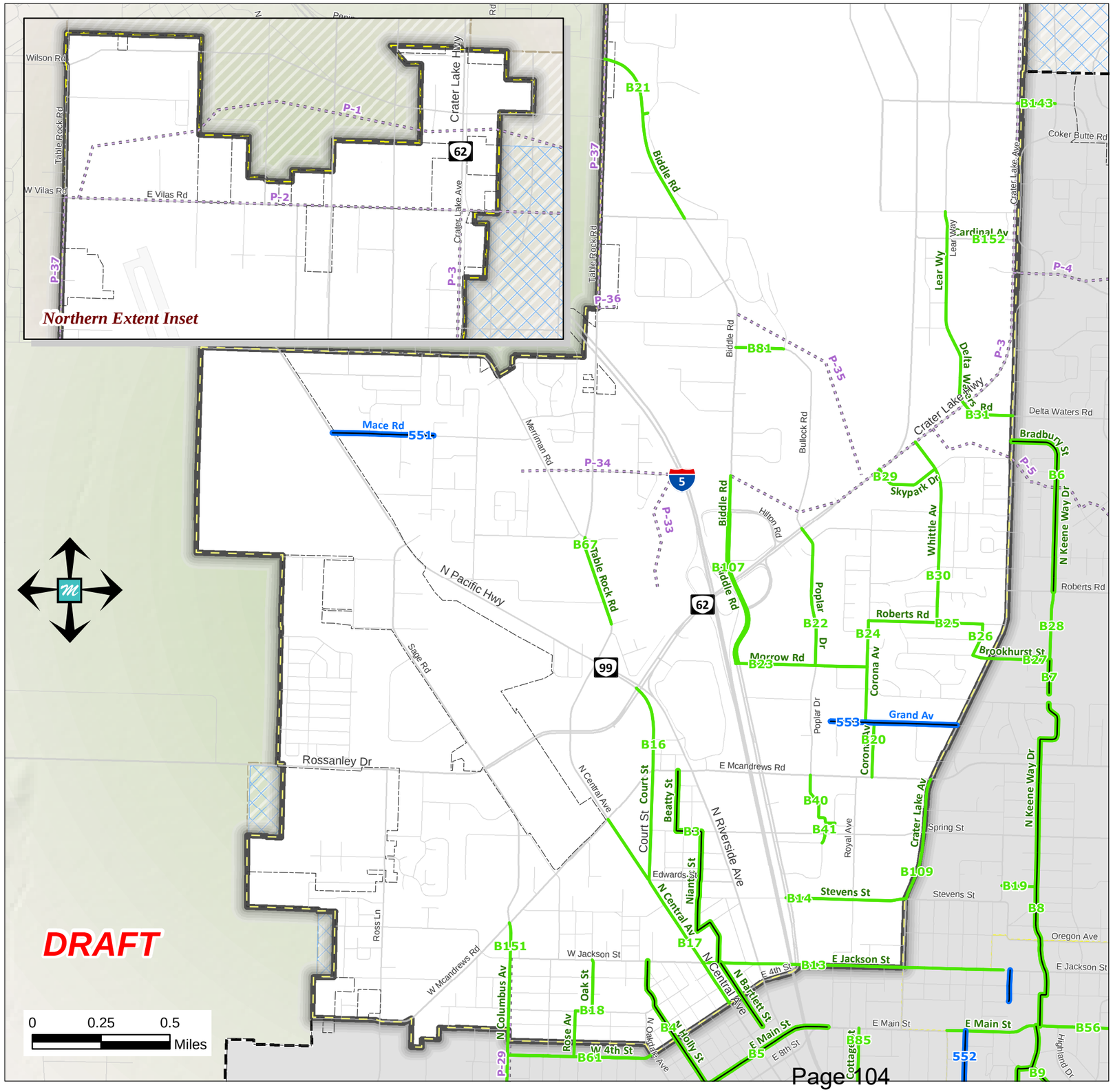
1/30/2018

City of **Medford**

TRANSPORTATION SYSTEM PLAN UPDATE

WARD 3

Bicycle and Pedestrian Projects



DRAFT

0 0.25 0.5 Miles

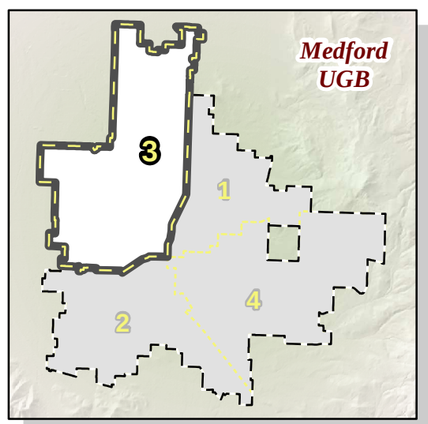
Legend

Pedestrian Projects (Proposed Priority)

- Pedestrian, Tier 1
- Pedestrian, Tier 2

Bike Projects (Proposed Priority)

- Tier 1 Bike Projects
- Tier 2 Bike Projects
- Trails Projects (Leisure Services Plan)
- Ward 3
- UGB
- City Limits
- Expansion Area Boundary
- Urban Reserve Areas



1/30/2018

City of Medford

Planning Department

Working with the community to shape a vibrant and exceptional city

MEMORANDUM

Subject	Transportation System Plan Vision Statement, Goals, Objectives, and Actions
File no.	CP-16-036
To	Mayor and City Council
From	Carla Angeli Paladino CFM, Principal Planner
Date	February 12, 2018 *for 02/22/2018 Study Session*

COUNCIL DIRECTION

Staff is seeking direction from the Council to finalize the Vision Statement and Goals, Objectives, and Actions and incorporate them into the draft Transportation System Plan.

PRESENTATION OUTLINE

Introduction and Presentation – Carla Paladino
Discussion and Direction - Mayor and City Council

IMPORTANCE OF VISION, GOALS, AND OBJECTIVES

The vision statement and goals and objectives of the Transportation System Plan will guide the implementation and development of the transportation system for the next twenty years. These principles are broad statements that help guide how the transportation system looks and functions over time and provides a benchmark to support future decisions on the construction and funding of projects within the City. The goals and objectives must encompass the diversity and complexity of the transportation system and how each relates to the other. They are the framework of the plan and acceptance of them from the Council is necessary in order to move this project forward.

The adoption of the Transportation System Plan is directly related to the City's plans to expand its Urban Growth Boundary. The development of those expansion areas must be supported by an adopted transportation plan that contemplates and supports future roadways and the buildings and uses that will surround them. The finalization of the goals and objectives is one step toward completing the plan.

BACKGROUND

The original set of goals and objectives were developed by the Joint Transportation Subcommittee, the Citizen Advisory Committee for the Transportation System Plan project. These goals and objectives were reviewed by the both the Bicycle and Pedestrian Advisory Committee and Planning Commission before being presented to City Council in August 2017. After the study session, staff collected additional comments from the public and through meetings with the City Council revised the draft goals, objectives, and actions. In November, an updated set of goals were presented to the City Council that address six broad topics including public health and safety; connectivity, convenience, and efficiency; fiscal health and long term sustainability; economic development; neighborhood livability; and environmental stewardship. Through a series of mini-meetings with Councilors in January 2018 and review by the Citizen Advisory Committee and Technical Advisory Committee, the goals, objectives, and actions have been amended to reflect the comments heard.

TOPICS DISCUSSED DURING MINI MEETINGS WITH COUNCILORS

In January 2018, staff was able to meet with the Mayor and a majority of the members of the City Council to discuss the goals and objectives for the plan. Each of the three meetings held focused on different aspects and concerns of the plan and the goals and objectives were modified based on those conversations.

Ward 1

The main themes from the Ward 1 meeting included discussion about the following topics:

- Compliance with the Regional Transportation Plan and alternative measures
- The importance of making better sidewalk connections for pedestrians
- Emphasize pedestrian infrastructure over bike infrastructure
- Functional Classification Map and City concurrency standards
- Concerns with adding projects to the plan that won't be built in the planning period
- Establishing and building the arterial ring around the City of Medford
- Reviewing cross sections to accommodate legacy streets (Spring and Delta Waters were identified)
- Discussion about building a portion of Owen Drive that connects an existing neighborhood to a new subdivision
- Preserving neighborhoods

- Support was given for staff's legacy street proposal

Ward 4

The conversation for Ward 4 started off by discussing and examining the statement in Action item 4-g and concerns the plan is too heavily focused on bicycle facilities.

> 4-g: Implement roadway designs on existing and new streets that reduce the level of traffic stress for cyclists and pedestrians such as lowering vehicle speeds, including physical separation or buffers, evaluating number of travel lanes, and creating safer pedestrian crossings.

The discussion evolved into identifying a hierarchy of review for such facilities. The addition of bicycle facilities to a project or on a roadway should be evaluated by considering the following options in the identified order:

1. Bicycle facilities need to be considered on lower order, lower volume streets first; establish a bicycle network.
2. If the facility is needed, separate the bicycle facility from the roadway by using a multi-use path or other separated off-road facility.
3. Review the standard cross section and implement the facility as appropriate

At the January 25, 2018, study session regarding legacy streets and the new cross sections, Council supported the considerations above based on the cross sections chosen.

Other items of note from the meeting included:

- Providing maps at the open houses that show existing bicycle and pedestrian facilities and where the gaps are
- Incorporating the trail system from the Leisure Services Plan and showing trails such as Larson Creek and other trail commitments identified during the Urban Growth Boundary amendment process
- Wayfinding (signage) was noted as needing to be emphasized in the plan
- Concerns were raised about Phoenix interchange
- Other specific changes to language in the Goals and Objectives have been added for review

Ward 2

During the Ward 2 mini meeting the following concerns were raised for consideration and discussion:

- Pair down language in the plan related to bicycle facilities
- Balance the message toward all modes of transportation
- Support for off-road bicycle facilities
- Sidewalk infill needs to be a priority
- Combine or synthesize proposed bicycle projects in the plan
- Provide better bicycle facilities on higher order streets
- Support was given for developing roundabout policies

Staff and Ward 3 Councilors were unable to meet prior to the Open Houses and did not meet to discuss the goals and objectives.

REVISED GOALS & OBJECTIVES FORMAT

The revised goals and objectives are provided in two formats. The first is in Word Track change format in order for the Council to see comments received from members of the advisory committees and the Council themselves. This format is intended to help put the comments into perspective from the viewpoint of the author and provide an opportunity for dialogue among City Council during the study session. The second is a clean version so the document can be read as it would appear in the Transportation System Plan.

QUESTIONS

1. Is the Council in agreement with the changes/additions made to the document?
2. Does the Council want to see any other changes (additions or deletions) made to the document?
3. Does staff have majority support from the Council to incorporate this document into the draft Transportation System Plan?

EXHIBITS

1 – Track change version of Vision Statement, Goals, Objectives, and Actions showing changes made and by whom

2 - Clean copy of Vision Statement and Goals, Objectives, and Actions for Council review and comments

Vision Statement

In 2038, the City of Medford will be served by a transportation system that is safe, efficient, and pleasant to use. The City's many different neighborhoods, districts, and destinations will be conveniently connected with another, just as this network connects the City of Medford with neighboring communities and the surrounding region. In Medford, you will be able to drive, walk, bike, or use public transportation to reach stores, restaurants, parks, schools, work and other common destinations. Streetscapes will welcome visitors and invite people to walk.

Goal 1 – The transportation system shall protect public health and safety for users of all modes of transportation.

Objective 1: Whenever possible, replace, mitigate, or enhance transportation facilities and conditions where the safety of the travelling public is at risk.

Action Items:

1-a: Create and adopt a policy to reduce, and ultimately eliminate, traffic fatalities and serious injuries.

1-b: Continuously identify and install physical measures and improvements needed to eliminate safety hazards along high-crash corridors and at high-crash intersections, including a focus on improvements to protect more vulnerable users, such as children and those with disabilities.

1-c: Identify high-traffic bicycle routes for more frequent street sweeping to remove debris that puts bicyclist at risk of accidental crashes.

1-d: Design bike facilities that separate bicycle traffic from vehicular traffic on Major Arterials by providing off road, multiuse pathways or by diverting bicycle traffic onto parallel roads with adequate on road facilities.

1-e: Develop traffic-calming design standards and implementation program for reconstruction projects within existing residential neighborhoods and new roads within proposed residential neighborhoods, while providing safe freight infrastructure within neighborhood commercial elements (locations).

Objective 2: Remove impediments to mobility for more vulnerable citizens including those with disabilities, children, and older adults.

Action Items:

2-a: Continue to ensure all new transportation facilities, and improvements comply with the Americans with Disabilities Act (ADA) of 1990.

2-b: Implement necessary policies and procedures from the ADA project action plan. ~~transition plans by 20__.~~

2-c: Coordinate with local hospitals, schools, social service providers and similar organizations to identify the transportation needs of the groups they serve.

2-d: Evaluate the safety of heavily used pedestrian crossings and implement best practices to increase safety, whenever possible.

Comment [CGP1]: Mayor Wheeler supportive of this action item

Comment [CGP2]: Mike Montero's comment.

Comment [CGP3]: Staff suggests replacing elements with locations

Comment [CGP4]: Mayor Wheeler supportive of this action item

Comment [CGP5]: Discussed with Bonnie Huard

2-e: Identify low-stress routes for bicycle travel throughout the City to inform designation of neighborhood greenways.

Objective 3: Promote active transportation as a means of improving public health.

Action Items:

3-a: Actively participate in the Safe Routes to School Program(s), and implement programs, as appropriate.

3-b: Participate in and promote active transportation programs and outreach like RVTD's Go by Bike Week, the Drive Less Challenge, Safe Routes to Schools programs, Rogue Valley Bike Share, or similar programs.

3-c: Collaborate with health professionals to identify opportunities for improving public health through transportation planning.

3-d: Coordinate and implement a bicycle diversion program. (Such programs allow a person issued a bicycle citation to attend a bicycle safety class instead of appearing in court or paying a fine).

3-e: Develop an action plan for development of the Citywide Path and Trail Network outlined in the City's Leisure Services Plan.

Goal 2 – The multi-modal transportation system shall provide convenient, efficient connections throughout the City and beyond its borders for users of all modes of transportation.

Objective 4: Improve connectivity, reduce congestion, and improve traffic operations whenever possible.

Actions

4-a: Work with private and public sector partners (Metropolitan Planning Organization (MPO), Rogue Valley Area Commission on Transportation (RVACT), Jackson County) to complete the major street network as shown on the Functional Classification Map, prioritizing completion of the City's "Arterial Ring", major arterials, and regionally significant transportation projects like the South Stage Overcrossing/Extension.

4-b: Implement street design standards for all new development that provide facilities for all modes of transportation, including walking and bicycling, and that promote safe driving. Implement street design standards for existing facilities that allow for flexibility and application of alternative street designs where construction of facilities to the City's adopted design standard for new development would not be feasible economically and/or could reasonably be anticipated to cause undue impacts to existing adjacent development and neighborhoods.

4-c: Develop and implement a formal "roundabout first" policy by 2020.

4-d: Identify future opportunities to increase the number of direct north-south connections east of I-5 in order to reduce congestion along parallel routes and at intersections.

4-e: Implement wayfinding programs (through Transportation Options Planning) using conventional signage and emerging technologies to assist travelers in efficiently reaching

Comment [CGP6]: Also supports conversation at Ward 1 mini meeting

Comment [CGP7]: Haley Cox's (Parks Planner) comment

Comment [CGP8]: Sidewalk infill deemed important in Ward 1 mini meeting

Comment [CGP9]: Mayor Wheeler supportive of this action item

Comment [CGP10]: Mike Montero's comment "Work with Transportation Options planning and investigate the "walking school bus" program with school districts.

Comment [CGP11]: Haley Cox's (Parks) comment

Comment [CGP12]: Mayor Wheeler supportive of this action item

Comment [CGP13]: Mike Montero's comment

Comment [CGP14]: Arterial ring noted as important in Ward 1 mini meeting

Comment [CGP15]: Mayor Wheeler supportive of this action item

Comment [CGP16]: Mike Montero's comment

destinations including downtown, historic districts, retail and dining destinations, multi-use paths and other recreational destinations; and ensure consistent signage with other City efforts. Identify signage needed to inform citizens about natural hazards and evacuation routes.

4-f: Expand measurement of trips made by walking, biking, and driving, and investigate and adopt emerging technologies that enable accurate, cost-effective assessment of various types of transportation activity and phenomena including traffic congestion, infrastructure conditions, etc.

4-g: Implement roadway designs on existing and new streets that reduce the level of traffic stress for cyclists and pedestrians such as lowering vehicle speeds, including physical separation or buffers, evaluating number of travel lanes, and creating safer pedestrian crossings. In regard to the installation of bicycle infrastructure specifically, the City should identify lower order street network connections first, off road/separated multi-use path locations second, and the typical cross section last when determining the appropriate mitigation measures to implement.

4-h: Establish a policy that ensures intervening streets not yet built between existing and new development are constructed and compensated with the adjacent development or prioritized and built by the City.

Objective 5: Improve access (on or off roadway) for people to walk and bike to public places especially schools, parks, employment centers, commercial areas, and other public facilities.

Actions:

5-a: Prepare and implement policies that enable~~require~~ the development of off street improvements (such as urban trails, greenways, etc.) while considering a fee in-lieu as a condition of approval for development applications and land use actions in areas where these facilities are planned to serve as a connection.

5-b: Coordinate locally and regionally to develop trails, multi-use paths and other active transportation facilities that better connect the City's neighborhoods, schools, parks, and various activity centers. Identify local and regional partners (ODOT, Jackson County, Greenway Foundation, Medford Police Department)

5-c: Facilitate and provide for a high degree of pedestrian and bicycle connectivity to current and proposed major shared-use paths, such as the Bear Creek Greenway; this shall include land acquisition and dedication from private and public land owners to implement trail connections where needed.

5-d: Identify gaps (e.g. missing bike~~-lanes~~facilities, sidewalks, etc~~.)~~.) in the transportation network ~~along all types of streets major corridors~~ and systematically upgrade the ~~roadways~~ network to correct deficiencies.

Objective 6: Connect vehicle, pedestrian, and bicycle networks with current and planned public transportation routes and improve public transportation service.

Actions:

6-a: Identify and prioritize sidewalk infill projects to and along transit routes within a quarter-mile radius of current and planned ~~a~~ transit routes and/or stops.

Comment [CGP17]: Wayfinding noted as important in Ward 4 mini meeting

Comment [CGP18]: Mike Montero's comment "should specify timeline for update publication"

Comment [CGP19]: This action item was discussed at length during the mini meeting for Ward 4. I think the study session discussion on 1/25/18 regarding the appropriate cross sections and legacy streets supports this action item. Additional language added after the word crossings to further reiterate Kim Wallen's talking points during the mini meeting

Comment [CGP20]: Addresses Andrea Napoli's comment

Comment [CGP21]: Important topic raised during the Ward 1 mini meeting. Action trying to address Owen Drive situation with Hayden Homes development

Comment [CGP22]: Addresses Zarosinski's comments

Comment [CGP23]: Addresses Zarosinski's comment

Comment [CGP24]: Mike Montero notes to be aware of Dolan exposure

Comment [CGP25]: Action 5-a and 5-b were noted in Ward 4 mini meeting as needing review. Topic of discussion for Council

Comment [CGP26]: Mayor Wheeler supportive of this action item

Comment [CGP27]: Mike Montero's comment

Comment [CGP28]: Addresses Zarosinski's comment. Changed to new language after Ward 4 mini meeting discussion

Comment [CGP29]: Add definition of bicycle network in TSP document

6-b: Coordinate public transportation facility design and development with RVTD that considers the design of stop locations and facilities, transit pull-outs and other similar features.

6-c: Work with RVTD to provide locations for transit transfer centers outside of downtown Medford consistent with RVTD's long range plan.

Comment [CGP30]: Mayor Wheeler supportive of this action item and 6-d

6-d: Work with RVTD to assess the feasibility of developing park-and-ride facilities in strategic locations around the City.

6-e: Work with RVTD to improve public transportation connections between the airport and population centers, such as downtown and neighborhoods.

6-f: Participate in RVTD system planning efforts and amend the TSP as necessary in order to ensure consistency with that plan.

Objective 7: Maintain active roles in regional planning efforts for the continued development of the Rogue Valley's transportation system.

Actions:

7-a: Continue to collaborate with other local jurisdictions and agencies, especially the Rogue Valley Metropolitan Planning Organization and Rogue Valley ACT, to ensure coordinated efforts on regional transportation projects.

Comment [CGP31]: Mayor Wheeler supportive of item

Objective 8: Routinely monitor progress toward achieving Goals and Objectives.

Actions:

~~8-a: Expand measurement of trips made by walking, biking, and driving, and investigate and adopt emerging technologies that enable accurate, cost-effective assessment of various types of transportation activity and phenomena including traffic congestion, infrastructure conditions, etc.~~

Comment [CGP32]: Moved to 4-f

8-a: Evaluate the goals and objectives with other Comprehensive Plan updates to ensure the elements are integrated and supportive of one another.

Comment [CGP33]: TRADCO comment

Goal 3 – Transportation system investments shall be fiscally sound and economically sustainable over the long term.

Objective 9: Systematically and regularly acquire needed public right-of-way in order to implement the adopted Functional Classification Map.

Actions

9-a: Allocate funding resources through the biennial budgetary process to acquire properties needed to construct the street network as proposed by this TSP.

Comment [CGP34]: Mayor Wheeler supportive of item

9-b: Ensure future development includes building and extending local streets to enhance street connectivity within neighborhoods and to the higher order street network.

Comment [CGP35]: Addresses Paige West's (RVTD) comment

Objective 10: Deploy and promote new technologies that safely increase the efficiency of existing street facilities without unnecessary roadway expansion.

Actions

10-a: Continue to implement Intelligent Transportation Systems (ITS) to maximize capacity while identifying key corridors for ITS implementation.

10-b: Coordinate with RVTD to identify potential Transit Signal Priority corridors and implement Transit Signal Priority corridors when appropriate.

10-c: By 2023, develop policies that anticipate the impact of autonomous vehicles, Transportation Network Companies, and other similar emerging technologies on the transportation system.

Objective 11: ~~Reduce~~ Minimize the costs of constructing and maintaining transportation projects ~~by 50% by 2020~~.

Actions

11-a: Review and adopt new policies and procedures as needed that ensure coordination of transportation project development and construction with other infrastructure improvements.

Comment [CGP36]: Mayor Wheeler supportive of item; 11-c also

11-b: Unless otherwise indicated, construct roads to the appropriate cross section according to the adopted Functional Classification Map to avoid rebuilding streets or portions of the street multiple times.

11-c: Adopt policy and procedures to ensure that "lowest lifecycle costs" are always considered in the design of transportation facilities.

11-d: Continue to implement the pavement maintenance program to extend the life of pavements and limit the need to completely rebuild streets.

11-e: Pursue self-certification qualification to deal with transportation environmental planning obligations.

Comment [CGP37]: Mike Montero's comment

Objective 12: Partner with local jurisdictions, state and federal agencies, and private sector partners to maximize the City's transportation investments whenever possible.

Actions

12-a: Continue to work with ODOT, Jackson County, RVTD, and neighboring cities to improve roads and pedestrian and bicycle facilities along State and regional highways/roadways and major transit routes.

12-b: Partner with schools to identify impediments to walking to school and implement Safe Routes to School solutions.

12-c: Continue active membership in the Rogue Valley Metropolitan Planning Organization (RVMPO) and associated planning efforts, and routinely participate in updating the MPO Transportation Improvement Program (TIP) to ensure that the City transportation projects are eligible for discretionary and special funding.

Comment [CGP38]: Mayor Wheeler supportive of item

12-d: Collaborate with private developers through public-private-partnerships to fund public transportation infrastructure that supports proposed development.

12-e: Maintain project prioritization flexibility to capture transportation funding opportunities, such as development specific Sanitary Sewer System Development Charges, Statewide Transportation Improvement Program (STIP) funding and other.

Comment [CGP39]: Mike Montero's comment

Objective 13: Support the development of stable and flexible transportation financing that provides adequate funding sources for Medford's transportation system while supporting the TSP's economic development goal.

Actions:

13-a: Collect transportation system development charges (SDC's), as defined by Oregon Revised Statutes and local ordinances, to mitigate impacts of new development on Medford's Transportation System.

13-b: Assess the effectiveness of current funding sources and identify new funding sources during preparation of biennial budgets including the use of tax increment financing and interjurisdictional agreements. Update policies and regulations to accommodate changes as needed.

Goal 4 – The transportation system shall support economic development and vitality within the City and throughout the Region.

Objective 14: Maintain and improve the efficiency of the movement of freight and goods by ground, rail, air, pipeline, and transmission infrastructure.

Actions:

14-a: Assess land use conflicts affecting freight service providers and develop best practices that prioritize safe, efficient, and reliable freight connections while reducing environmental and neighborhood impacts.

14-b: Review and consider revisions to the existing truck route designations within the City of Medford and implement street design standards that meet the weight and dimensional needs of trucks for streets that serve industrial and commercial areas and those designated as "truck routes."

14-d: ~~Encourage the use of rail and air freight services throughout the Rogue Valley.~~ Strive to balance the needs of moving freight with community livability.

14-e: Actively support special State and Federal priority freight route designations.

14-f: Assess and identify deficient rail crossings for vehicles, pedestrians, and bicycles.

Objective 15: Increase resilience of local freight and logistics network to natural disaster.

Actions:

15-a: Using the City's Hazard Mitigation Plan and other resources, assess local freight network for vulnerabilities to natural disaster (example locations include but are not limited to Foothill Road, North Phoenix, and South Stage Road), in particular a Cascadia Event, develop and implement a mitigation strategy by 2020.

Objective 16: Identify and improve transportation facilities that support the Region's tourism industry

Actions:

16-a: Support the efforts of the Rogue Valley International-Medford Airport and the airport's associated master plan.

Comment [CGP40]: Mayor Wheeler supportive of item

Comment [CGP41]: Mayor Wheeler supportive of item

Comment [CGP42]: Addressing Zaronsinski's comment

Comment [CGP43]: Ian Horlacher's (ODOT) comment

Comment [CGP44]: Mayor Wheeler supportive of item

Comment [CGP45]: Mike Montero's comment

Comment [CGP46]: Mayor Wheeler supportive of item

16-b: Strategically implement the Citywide Path and Trail Network found in the Leisure Services Plan to support recreational tourism in the City and region.

Comment [CGP47]: Haley Cox's comment

Objective 17: Support initiatives to redevelop Downtown, Liberty Park, and other existing neighborhoods through transportation infrastructure investments.

Actions:

17-a: Evaluate the feasibility of expanding the Downtown Parking District.

Comment [CGP48]: Mayor Wheeler supportive of item; 17-b also

17-b: Implement transportation infrastructure improvement projects recommended by the Downtown, Liberty Park, and other neighborhood plans. Amend the TSP as necessary to ensure consistency between neighborhood plans and the TSP.

Goal 5 – The transportation system shall enhance the livability of the City's neighborhoods.

Objective 18: Avoid disruption of existing neighborhoods and nonresidential districts, and minimize impacts to individual properties whenever possible when improving streets to current City design standards.

Actions:

18-a: Limit Major Arterial streets to a total cross-section width of no more than five travel lanes, except at intersections. Accommodate travel demand that would otherwise require a width of more than five lanes through increased system connectivity, transit service, use of transportation demand management (TDM) strategies, and other alternative modes of transportation.

18-b: Prior to upgrading a street classification in residential and mixed-use areas to a higher order classification, the City shall consider the impacts to neighborhood livability. Alternatives that allow existing neighborhoods to remain intact shall be considered. If reclassification is necessary, mitigation measures and/or street-design alternatives shall be considered.

Comment [CGP49]: Mayor Wheeler supportive of item

18-c: Incorporate context-sensitive street and streetscape design techniques in order to balance the needed street function for all users and modes with the needs of the surrounding built environment. The proposed design to take into consideration whether the street is new or an existing "legacy" street.

Comment [CGP50]: Worded based on Mike Montero's comment "Add legacy street language as an example

18-d: Implement transportation demand management strategies, when appropriate, to mitigate congestion prior to roadway expansion.

Objective 19: Increase the number of walkable, bikeable, mixed-use, transit oriented and supportive neighborhoods while promoting connectivity to existing neighborhoods.

Actions:

19-a: Complete West Main Transit Oriented Development (TOD) plan and begin developing TOD plans for established TOD districts including downtown and North Medford.

Comment [CGP51]: Mayor Wheeler supportive of item; 19-c also

19-b: Review the maximum and minimum block length perimeter standards to ensure direct street routes and connectivity and reduce travel distances to all users.

19-c: Develop standards and incentives to promote mixed-use and transit oriented development.

19-d: Develop at least one neighborhood-scaled, pedestrian, and/or bicycle mode specific plan(s) every biennium, including implementation recommendations, for neighborhoods throughout the City.

19-e: Identify Medford's multimodal mixed-use areas (MMAs) and prioritize pedestrian, bicycle, and transit investments within targeted employment and residential areas that foster mixed-use development. Develop and implement incentives to increase the number of dwelling units within a quarter-mile of transit routes.

19-f: Ensure implementation of the Southeast Medford Area Plan with regard to greenways, land use, paths, trails, roadways, and other transportation related facilities.

19-g: Develop an action plan for implementing the Citywide Path and Trail Network found in the Leisure Services Plan.

Comment [CGP52]: Haley Cox's comment

Goal 6 – The transportation system shall promote environmental stewardship.

Objective 20: Reduce environmental impacts of the transportation infrastructure.

Actions:

20-a: Create alternative transportation facility design standards that reduce impervious surfaces and favor management of stormwater runoff using Low Impact Development (LID) techniques.

20-b: Determine the feasibility of incorporating renewable energy technologies into publicly owned transportation facilities to offset cost and impacts.

20-c: Develop monitoring criteria for existing oil/water separators in City parking lots and facilities and assess performance annually.

20-d: Incorporate riparian and stream restoration into multi-use path and trail development projects as opportunities present themselves.

Comment [CGP53]: Mayor Wheeler supportive of item

Objective 21: Adopt policies designed to reduce Vehicle Miles Traveled (VMT), reliance on Single-Occupant Vehicle (SOV) trips, and roadway congestion throughout the City of Medford.

Actions:

21-a: Develop parking strategies that aim to reduce SOV and VMT to mixed-use neighborhoods, downtown and other major travel destinations.

Comment [CGP54]: Mike Montero's comment: Great care need be applied to downtown parking strategies. Commercial areas that depend on vehicle parking.

21-b: Assess off-street parking standards ~~and modify requirements~~ to reduce minimum off – street parking requirements ~~discourage Single Occupant Vehicle trips and Vehicle Miles Traveled~~ within Activity Centers (as identified in Chapter 5.5 of the Regional Transportation Plan) and other multimodal mixed-use areas.

Comment [CGP55]: Changed to address public comments from social media

21-c: Partner with employers and others to implement travel demand management strategies that encourage modes of travelling to work other than SOV trips, including carpooling; employer-supported public transportation passes; incentives for bicycle and pedestrian commuting; telecommuting and other alternatives.

Comment [CGP56]: Karl MacNair's comment

21-d: Identify, in conjunction with RVTD, areas where transit route expansion could be added to alleviate congestion, SOV, and VMT.

Comment [CGP57]: Mayor Wheeler supportive of item; 21-d also

21-e: Develop and implement incentives (such as free or subsidized transit passes for employees or alternative work schedules) for large employment and residential developments to implement alternative transportation programs that reduce SOV trips.

Objective 22: Reduce emissions of atmospheric pollutants including greenhouse gas emissions and particulate matter while complying with State and Federal law.

Actions:

22-a: Analyze the feasibility of converting or replacing publicly owned vehicles (at time of scheduled fleet vehicle replacement) to those using renewable, low emitting, and/or non-emitting technologies (such as electric plug in hybrid, Compressed Natural Gas (CNG), or Renewable Natural Gas (RNG) fuels).

22-b: Establish incentives for developer-provided neighborhood Electric Vehicle charging stations.

22-c: Continue to develop tree canopy along higher-order streets.

22-d: Review landscape requirements within the Land Development Code to allow flexibility with the amount and type of landscaping and ground cover installed while still ensuring beautification and storm water benefits along the roadways.

22-e: Promote active transportation through development of the Citywide Path and Trail Network and associated education/incentive campaigns

Comment [CGP58]: Mike Montero suggested providing specific examples

Comment [CGP59]: Mike Montero's comment

Comment [CGP60]: Mayor Wheeler supportive of item

Comment [CGP61]: Mike Montero noted "In the past implementation of Medford code has denied these in TODs (SE Plan)"

Comment [CGP62]: Partially addresses Tim Stevens (Parks Asst.Director) comments

Comment [CGP63]: Haley Cox's comment

Vision Statement

In 2038, the City of Medford will be served by a transportation system that is safe, efficient, and pleasant to use. The City's many different neighborhoods, districts, and destinations will be conveniently connected with another, just as this network connects the City of Medford with neighboring communities and the surrounding region. In Medford, you will be able to drive, walk, bike, or use public transportation to reach stores, restaurants, parks, schools, work and other common destinations. Streetscapes will welcome visitors and invite people to walk.

Goal 1 – The transportation system shall protect public health and safety for users of all modes of transportation.

Objective 1: Whenever possible, replace, mitigate, or enhance transportation facilities and conditions where the safety of the travelling public is at risk.

Action Items:

1-a: Create and adopt a policy to reduce, and ultimately eliminate, traffic fatalities and serious injuries.

1-b: Continuously identify and install physical measures and improvements needed to eliminate safety hazards along high-crash corridors and at high-crash intersections, including a focus on improvements to protect more vulnerable users, such as children and those with disabilities.

1-c: Identify high-traffic bicycle routes for more frequent street sweeping to remove debris that puts bicyclist at risk of accidental crashes.

1-d: Design bike facilities that separate bicycle traffic from vehicular traffic on Major Arterials by providing off road, multiuse pathways or by diverting bicycle traffic onto parallel roads with adequate on road facilities.

1-e: Develop traffic-calming design standards and implementation program for reconstruction projects within existing residential neighborhoods and new roads within proposed residential neighborhoods, while providing safe freight infrastructure within neighborhood commercial elements (locations).

Objective 2: Remove impediments to mobility for more vulnerable citizens including those with disabilities, children, and older adults.

Action Items:

2-a: Continue to ensure all new transportation facilities, and improvements comply with the Americans with Disabilities Act (ADA) of 1990.

2-b: Implement necessary policies and procedures from the ADA project action plan. 2-c: Coordinate with local hospitals, schools, social service providers and similar organizations to identify the transportation needs of the groups they serve.

2-d: Evaluate the safety of heavily used pedestrian crossings and implement best practices to increase safety, whenever possible.

2-e: Identify low-stress routes for bicycle travel throughout the City to inform designation of neighborhood greenways.

Objective 3: Promote active transportation as a means of improving public health.

Action Items:

3-a: Actively participate in the Safe Routes to School Program(s), and implement programs, as appropriate.

3-b: Participate in and promote active transportation programs and outreach like RVTD's Go by Bike Week, the Drive Less Challenge, Safe Routes to Schools programs, Rogue Valley Bike Share, or similar programs.

3-c: Collaborate with health professionals to identify opportunities for improving public health through transportation planning.

3-d: Coordinate and implement a bicycle diversion program. (Such programs allow a person issued a bicycle citation to attend a bicycle safety class instead of appearing in court or paying a fine).

3-e: Develop an action plan for development of the Citywide Path and Trail Network outlined in the City's Leisure Services Plan.

Goal 2 – The multi-modal transportation system shall provide convenient, efficient connections throughout the City and beyond its borders for users of all modes of transportation.

Objective 4: Improve connectivity, reduce congestion, and improve traffic operations whenever possible.

Actions

4-a: Work with private and public sector partners (Metropolitan Planning Organization (MPO), Rogue Valley Area Commission on Transportation (RVACT), Jackson County) to complete the major street network as shown on the Functional Classification Map, prioritizing completion of the City's "Arterial Ring", major arterials, and regionally significant transportation projects like the South Stage Overcrossing/Extension.

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4-c: Develop and implement a formal "roundabout first" policy by 2020.

4-d: Identify future opportunities to increase the number of direct north-south connections east of I-5 in order to reduce congestion along parallel routes and at intersections.

4-e: Implement wayfinding programs (through Transportation Options Planning) using conventional signage and emerging technologies to assist travelers in efficiently reaching destinations including downtown, historic districts, retail and dining destinations, multi-use paths and other recreational destinations; and ensure consistent signage with other City

efforts. Identify signage needed to inform citizens about natural hazards and evacuation routes.

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Objective 5: Improve access (on or off roadway) for people to walk and bike to public places especially schools, parks, employment centers, commercial areas, and other public facilities.

Actions:

5-a: Prepare and implement policies that enable the development of off street improvements (such as urban trails, greenways, etc.) while considering a fee in-lieu as a condition of approval for development applications and land use actions in areas where these facilities are planned to serve as a connection.

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5-d: Identify gaps (e.g. missing bikefacilities, sidewalks, etc.) in the transportation network and systematically upgrade the network to correct deficiencies.

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Actions:

6-a: Identify and prioritize sidewalk infill projects to and along transit routes within a quarter-mile radius of current and planned transit routes and/or stops.

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Actions:

7-a: Continue to collaborate with other local jurisdictions and agencies, especially the Rogue Valley Metropolitan Planning Organization and Rogue Valley ACT, to ensure coordinated efforts on regional transportation projects.

Objective 8: Routinely monitor progress toward achieving Goals and Objectives.

Actions:

8-a: Evaluate the goals and objectives with other Comprehensive Plan updates to ensure the elements are integrated and supportive of one another.

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Objective 9: Systematically and regularly acquire needed public right-of-way in order to implement the adopted Functional Classification Map.

Actions

9-a: Allocate funding resources through the biennial budgetary process to acquire properties needed to construct the street network as proposed by this TSP.

9-b: Ensure future development includes building and extending local streets to enhance street connectivity within neighborhoods and to the higher order street network.

Objective 10: Deploy and promote new technologies that safely increase the efficiency of existing street facilities without unnecessary roadway expansion.

Actions

10-a: Continue to implement Intelligent Transportation Systems (ITS) to maximize capacity while identifying key corridors for ITS implementation.

10-b: Coordinate with RVTD to identify potential Transit Signal Priority corridors and implement Transit Signal Priority corridors when appropriate.10-c: By 2023, develop policies that anticipate the impact of autonomous vehicles, Transportation Network Companies, and other similar emerging technologies on the transportation system.

Objective 11: Minimize the costs of constructing and maintaining transportation projects .

Actions

11-a: Review and adopt new policies and procedures as needed that ensure coordination of transportation project development and construction with other infrastructure improvements.

11-b: Unless otherwise indicated, construct roads to the appropriate cross section according to the adopted Functional Classification Map to avoid rebuilding streets or portions of the street multiple times.

11-c: Adopt policy and procedures to ensure that "lowest lifecycle costs" are always considered in the design of transportation facilities.

11-d: Continue to implement the pavement maintenance program to extend the life of pavements and limit the need to completely rebuild streets.

11-e: Pursue self-certification qualification to deal with transportation environmental planning obligations.

Objective 12: Partner with local jurisdictions, state and federal agencies, and private sector partners to maximize the City's transportation investments whenever possible.

Actions

12-a: Continue to work with ODOT, Jackson County, RVTD, and neighboring cities to improve roads and pedestrian and bicycle facilities along State and regional highways/roadways and major transit routes.

12-b: Partner with schools to identify impediments to walking to school and implement Safe Routes to School solutions.

12-c: Continue active membership in the Rogue Valley Metropolitan Planning Organization (RVMPO) and associated planning efforts, and routinely participate in updating the MPO Transportation Improvement Program (TIP) to ensure that the City transportation projects are eligible for discretionary and special funding.

12-d: Collaborate with private developers through public-private-partnerships to fund public transportation infrastructure that supports proposed development.

12-e: Maintain project prioritization flexibility to capture transportation funding opportunities, such as development specific Sanitary Sewer System Development Charges, Statewide Transportation Improvement Program (STIP) funding and other.

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Actions:

13-a: Collect transportation system development charges (SDC's), as defined by Oregon Revised Statutes and local ordinances, to mitigate impacts of new development on Medford's Transportation System.

13-b: Assess the effectiveness of current funding sources and identify new funding sources during preparation of biennial budgets including the use of tax increment financing and interjurisdictional agreements. Update policies and regulations to accommodate changes as needed.

Goal 4 – The transportation system shall support economic development and vitality within the City and throughout the Region.

Objective 14: Maintain and improve the efficiency of the movement of freight and goods by ground, rail, air, pipeline, and transmission infrastructure.

Actions:

14-a: Assess land use conflicts affecting freight service providers and develop best practices that prioritize safe, efficient, and reliable freight connections while reducing environmental and neighborhood impacts.

14-b: Review and consider revisions to the existing truck route designations within the City of Medford and implement street design standards that meet the weight and dimensional needs of trucks for streets that serve industrial and commercial areas and those designated as "truck routes."

14-d: Strive to balance the needs of moving freight with community livability.

14-e: Actively support special State and Federal priority freight route designations.

14-f: Assess and identify deficient rail crossings for vehicles, pedestrians, and bicycles.

Objective 15: Increase resilience of local freight and logistics network to natural disaster.

Actions:

15-a: Using the City's Hazard Mitigation Plan and other resources, assess local freight network for vulnerabilities to natural disaster (example locations include but are not limited to Foothill Road, North Phoenix, and South Stage Road), in particular a Cascadia Event, develop and implement a mitigation strategy by 2020.

Objective 16: Identify and improve transportation facilities that support the Region's tourism industry

Actions:

16-a: Support the efforts of the Rogue Valley International-Medford Airport and the airport's associated master plan.

16-b: Strategically implement the Citywide Path and Trail Network found in the Leisure Services Plan to support recreational tourism in the City and region.

Objective 17: Support initiatives to redevelop Downtown, Liberty Park, and other existing neighborhoods through transportation infrastructure investments.

Actions:

17-a: Evaluate the feasibility of expanding the Downtown Parking District.

17-b: Implement transportation infrastructure improvement projects recommended by the Downtown, Liberty Park, and other neighborhood plans. Amend the TSP as necessary to ensure consistency between neighborhood plans and the TSP.

Goal 5 – The transportation system shall enhance the livability of the City's neighborhoods.

Objective 18: Avoid disruption of existing neighborhoods and nonresidential districts, and minimize impacts to individual properties whenever possible when improving streets to current City design standards.

Actions:

18-a: Limit Major Arterial streets to a total cross-section width of no more than five travel lanes, except at intersections. Accommodate travel demand that would otherwise require a width of more than five lanes through increased system connectivity, transit service, use of transportation demand management (TDM) strategies, and other alternative modes of transportation.

18-b: Prior to upgrading a street classification in residential and mixed-use areas to a higher order classification, the City shall consider the impacts to neighborhood livability. Alternatives that allow existing neighborhoods to remain intact shall be considered. If reclassification is necessary, mitigation measures and/or street-design alternatives shall be considered.

18-c: Incorporate context-sensitive street and streetscape design techniques in order to balance the needed street function for all users and modes with the needs of the surrounding built environment. The proposed design to take into consideration whether the street is new or an existing "legacy" street.

18-d: Implement transportation demand management strategies, when appropriate, to mitigate congestion prior to roadway expansion.

Objective 19: Increase the number of walkable, bikeable, mixed-use, transit oriented and supportive neighborhoods while promoting connectivity to existing neighborhoods.

Actions:

19-a: Complete West Main Transit Oriented Development (TOD) plan and begin developing TOD plans for established TOD districts including downtown and North Medford.

19-b: Review the maximum and minimum block length perimeter standards to ensure direct street routes and connectivity and reduce travel distances to all users.

19-c: Develop standards and incentives to promote mixed-use and transit oriented development.

19-d: Develop at least one neighborhood-scaled, pedestrian, and/or bicycle mode specific plan(s) every biennium, including implementation recommendations, for neighborhoods throughout the City.

19-e: Identify Medford's multimodal mixed-use areas (MMAs) and prioritize pedestrian, bicycle, and transit investments within targeted employment and residential areas that foster mixed-use development. Develop and implement incentives to increase the number of dwelling units within a quarter-mile of transit routes.

19-f: Ensure implementation of the Southeast Medford Area Plan with regard to greenways, land use, paths, trails, roadways, and other transportation related facilities.

19-g: Develop an action plan for implementing the Citywide Path and Trail Network found in the Leisure Services Plan.

Goal 6 – The transportation system shall promote environmental stewardship.

Objective 20: Reduce environmental impacts of the transportation infrastructure.

Actions:

20-a: Create alternative transportation facility design standards that reduce impervious surfaces and favor management of stormwater runoff using Low Impact Development (LID) techniques.

20-b: Determine the feasibility of incorporating renewable energy technologies into publicly owned transportation facilities to offset cost and impacts.

20-c: Develop monitoring criteria for existing oil/water separators in City parking lots and facilities and assess performance annually.

20-d: Incorporate riparian and stream restoration into multi-use path and trail development projects as opportunities present themselves.

Objective 21: Adopt policies designed to reduce Vehicle Miles Traveled (VMT), reliance on Single-Occupant Vehicle (SOV) trips, and roadway congestion throughout the City of Medford.

Actions:

21-a: Develop parking strategies that aim to reduce SOV and VMT to mixed-use neighborhoods, downtown and other major travel destinations.

21-b: Assess off-street parking standards to reduce minimum off –street parking requirements within Activity Centers (as identified in Chapter 5.5 of the Regional Transportation Plan) and other multimodal mixed-use areas.

21-c: Partner with employers and others to implement travel demand management strategies that encourage modes of travelling to work other than SOV trips, including carpooling; employer-supported public transportation passes; incentives for bicycle and pedestrian commuting; telecommuting and other alternatives.

21-d: Identify, in conjunction with RVTD, areas where transit route expansion could be added to alleviate congestion, SOV, and VMT.

21-e: Develop and implement incentives (such as free or subsidized transit passes for employees or alternative work schedules) for large employment and residential developments to implement alternative transportation programs that reduce SOV trips.

Objective 22: Reduce emissions of atmospheric pollutants including greenhouse gas emissions and particulate matter while complying with State and Federal law.

Actions:

22-a: Analyze the feasibility of converting or replacing publicly owned vehicles (at time of scheduled fleet vehicle replacement) to those using renewable, low emitting, and/or non-

emitting technologies (such as electric plug in hybrid, Compressed Natural Gas (CNG), or Renewable Natural Gas (RNG) fuels).

22-b: Establish incentives for developer-provided neighborhood Electric Vehicle charging stations.

22-c: Continue to develop tree canopy along higher-order streets.

22-d: Review landscape requirements within the Land Development Code to allow flexibility with the amount and type of landscaping and ground cover installed while still ensuring beautification and storm water benefits along the roadways.

22-e: Promote active transportation through development of the Citywide Path and Trail Network and associated education/incentive campaigns