

MEETING AGENDA

Citywide Transportation Advisory Committee Meeting #12

MEETING DATE: Wednesday, August 28, 2019

MEETING TIME: 1:00-4:15 p.m.

LOCATION: Downtown Bend Library, 601 NW Wall Street

Objectives

- Review Draft Project and Program Prioritization Evaluation Results and Recommended Prioritization “Buckets”
- Hear update on Funding Work Group revenue assessments

Agenda

Time	Topic	Desired CTAC Action (major actions in bold)	Lead
1:00 p.m.	Welcome and introductory items (10 min) <ul style="list-style-type: none"> • Introductions/conflict declaration • Approve previous meeting summary • Council liaison comments 	Approve meeting summary	Joe Dills – Meeting Facilitator, APG Gena Goodman-Campbell, Bend City Council
1:10 p.m.	Public comment <i>15 minutes will be divided equally among those who sign in to give comment prior to the 1 p.m. start time. Maximum time will be 3 minutes per person.</i>	N/A	CTAC Co-Chair Mike Riley
1:25 p.m.	Draft Project and Program Prioritization and Evaluation Results Workshop Staff Briefing (30 minutes) <ul style="list-style-type: none"> • Provide overview of 2040 Project & Program List Modeling and Evaluation • Present initial recommendation on Prioritization “buckets” CTAC Work Session (105 minutes, including a 10 minute break at approximately 2:30 p.m.)	CTAC Work Session and Project Priority Direction	Matt Kittelson, Chris Maciejewski, Joe Dills

Time	Topic	Desired CTAC Action (major actions in bold)	Lead
	<p><i>Note: CTAC will be seated in co-chair groups and provide feedback in the following steps:</i></p> <ul style="list-style-type: none"> • Determination of Near Term projects that are broadly supported by CTAC (using keypads or a similar exercise, in all-CTAC group format) • Discussion, in small groups, of short-listed projects that should be considered for a different priority. • Small group reports and prioritization tallies - The small group outcomes will be reported out and recorded using keypads or similar technique. <p><i>CTAC's priorities from the workshop will be used by the Funding Work Group to create funding recommendations for a "round 2" priorities discussion at CTAC 13 on Oct 15.</i></p>		
3:40 p.m.	<p>Funding Work Group Meeting 5 Report</p> <p>Staff Briefing (10 min)</p> <ul style="list-style-type: none"> • Provide update on FWG work revenue assumptions and ongoing work <p>CTAC Discussion and Feedback (15 min)</p>	CTAC Discussion	Lorelei Juntunen
4:05 p.m.	Public Comment (10 min)	N/A	CTAC Co-Chair Mike Riley
4:15 p.m.	<p>Close and next meeting</p> <ul style="list-style-type: none"> • CTAC 13, October 15th 1:00-4:00 PM, Trinity Episcopal Church 	No action	Joe Dills

Accessible Meeting Information

This meeting/event location is accessible. Sign language interpreter service, assistive listening devices, materials in alternate format such as Braille, large print, electronic formats and audio cassette tape, or any other accommodations are available upon advance request. Please contact Jenny Umbarger no later than August 26th at jeumbarger@bendoregon.gov or 541-323-8509. Providing at least 3 days' notice prior to the event will help ensure availability.

Public Comment

To manage meeting time, one comment period will be provided at the beginning and one at the end of the meeting. We will divide allotted time equally amongst those who wish to speak with a maximum of three minutes per speaker. Speakers are encouraged to provide longer comments in writing.

Agenda Item No. 1:
Minutes from CTAC #11,
June 18, 2019

Minutes

CTAC Meeting #11

Bend's Transportation Plan

June 18, 2019

Trinity Episcopal Church

469 NW Wall Street, Bend, Oregon

CTAC Members

Katie Brooks, *Member (absent)*
Louis Capozzi, *Member (absent)*
Garrett Chrostek, *Member*
Casey Davis, *Member*
Karna Gustafson, *Co-Chair*
Hardy Hanson, *Member (absent)*
Steve Hultberg, *Co-Chair*
Sally Jacobson, *Member*
Suzanne Johannsen, *Member*
Gavin Leslie, *Member*
Nicole Mardell, *Member (absent)*
Katie McClure, *Member (absent)*

Ariel Mendez, *Member (absent)*
Mike Riley, *Co-Chair*
Richard Ross, *Member*
Mel Siegel, *Member*
Iman Simmons, *Member (absent)*
Sid Snyder, *Member*
Glenn VanCise, *Member*
Dale Van Valkenburg, *Member*
Ruth Williamson, *Co-Chair*
Sharlene Wills, *Member*
Dean Wise, *Member*

Ex-Officio Member

Dale Peer, *(absent)*
Gregory Bryant
Carolyn Carry-McDonald, *(absent)*

City Staff / Elected Officials

David Abbas, *Transportation Services Director*
Nick Arnis, *Growth Management Director*
Barb Campbell, *City Councilor*
Tyler Deke, *MPO Manager*
Gena Goodman-Campbell, *City Councilor*
Ben Hemson, *Business Advocate*
Susanna Julber, *Senior Policy Analyst*
Robin Lewis, *Transportation Engineer*
Elizabeth Oshel, *Assistant City Attorney*
Ryan Oster, *City Engineer*
Joshua Romero, *Community Relations Manager*
Brian Rankin, *Principal Planner*
Sally Russell, *Mayor*
Karen Swirsky, *Senior Planner*
Jenny Umbarger, *Administrative Support Specialist*

Consultants

Joe Dills, *Angelo Planning Group*
Matt Kittelson, *Kittelson & Associates*
Chris Maciejewski, *DKS Associates*
Libby Barg Bakke, *Barney & Worth*
John Horvick, *DHM Research*

Nicole Vetter, *Legal Intern*

1. Welcome and introductory items

Mr. Dills called the meeting to order at 12:01pm. He indicated conflicts of interest should be declared at the agenda item level.

Mr. Dills requested approval of the April 24, 2019 and May 22, 2019 meeting minutes. Member Snyder moved for approval. Member Hultberg seconded the motion. Minutes were approved unanimously.

2. Public comment

Ken Atwell, SE Bend Neighborhood Association, spoke about transportation concerns in southeast Bend.

Sharon Smith, Bend-La Pine School District (BLSD), recommended edits to Safe Routes to School and Low Stress Network criteria.

Andrea Breault, Cascades East Transit (CET), spoke about formation of a subcommittee for CET's Master Plan.

Moey Newbold, Central Oregon LandWatch, expressed support for the Citywide Transportation Advisory Committee's (CTAC) draft work to date.

Scott Nunns, encouraged CTAC to listen to general public opinion versus special interest opinion.

3. Project Prioritization Criteria Revisions

Mr. Kittelson reviewed Updated Project Prioritization Criteria, as outlined in the presentation. Ms. Swirsky indicated there may be additional road projects, policies and actions as a result of the Transportation Safety Action Plan (TSAP) finalization in August. Staff will provide CTAC with a summary. Mr. Dills indicated CTAC will ultimately review and forward a funding plan strategy to the Steering Committee (SC).

Member Gustafson moved to recommend the Project Prioritization Criteria memorandum to the SC. Member Jacobson seconded. Voting resulted in 14 in favor, one opposed, and two abstentions.

4. 2040 Project List

Mr. Kittelson reviewed the 2040 Project List, as outlined in the presentation. Ms. Swirsky indicated the project list remains available for modifications. Mr. Maciejewski indicated any

projects generated by other processes and brought to CTAC would include results of modeling, where available. Mr. Maciejewski indicated decisions have not been made regarding the Parkway, and assumptions are for modeling purposes. Member Riley recommended safety be addressed in project N-13. Member Snyder recommended staff contact Arnold Irrigation District (AID) regarding project R25, due to AID's plan to pipe the related section of the canal. Staff to check alignment between maps and project lists for accuracy. Member Riley recommended a mobility hub project be added to the project list as N-19. Mr. Maciejewski indicated the parkway study will address circulation; staff will gather information, once available.

Member Hultberg disclosed his legal representation of clients affected by project N-18, among others.

Ms. Lewis indicated there will be sidewalks and shared-use paths for bicycles and pedestrians at railroad crossings.

Member Gustafson disclosed her employment with Central Oregon Builders Association (COBA). Member Van Valkenberg disclosed his employment with a company that owns property within the city. Member Chrostek disclosed his legal representation of clients within the city.

Ms. Oshel indicated Central Oregon Intergovernmental Council (COIC) owns the property where Cascades East Transit (CET) is located.

Member Gustafson moved to recommend to the Steering Committee that the 2040 Project List, with refinements, be evaluated by the travel demand model and by the project prioritization criteria. Member Johannsen seconded.

For clarification, Mr. Dills indicated refinements include what was presented in the packet, in the handout titled "2040 Project List – Recommended Additions", and the following items recorded during the meeting:

- Call out mobility hubs as a specific project
- Consider Hawthorne Station specifically
- Add "safety" to the Portland Avenue project
- Look at increase in demand from Sisemore connection

Voting resulted in 15 in favor, one opposed, and one abstention.

5. Equity Policies / Transit, Technology, TDM Policies

Ms. Swirsky reviewed Equity Policies, as outlined in the presentation. Member Gustafson recommended additional work be done on Equity Policy 1. Member Snyder recommended the concept of "catching up" be included at the introduction versus policy level. Member Leslie

recommended language consistency when referring to populations. Member Johannsen recommended economic equity be considered in policy language.

Ms. Swirsky reviewed Transit, Technology and Travel Demand Management (TDM) Policies, as outlined in the presentation. Member Leslie recommended TDM Policy 1 be more concise and imperative, and further work on TDM Policy 2. Member Riley recommended additional work be done on TDM Policy 3. Member Wills recommended including policy language that requires autonomous vehicles to have audible systems. Member Riley recommended referring to parking districts as “parking benefit districts”, and identifying a schedule for reviewing parking requirements.

6. Complete Streets Policies

CTAC members worked in small groups to discuss Complete Streets / Bicycle / Pedestrian policies. Mr. Maciejewski indicated his table discussed the use of “should” versus “will” in policy language, and where new technologies belong regarding pedestrian and bicycle masterplans. Ms. Lewis indicated her table discussed adding multi-use paths and trails, winter maintenance, and BLSD and BPRD paying for more facilities. Mr. Kittelson indicated his table discussed micro-mobility technologies, broadening policy to slow vehicles, and use of the term “collaboration” when referring to working with other agencies. Ms. Julber indicated her table discussed the possibility of hardship or waiver criteria regarding sidewalk improvements to neighborhoods, an incentive program for property owners to provide sidewalks in areas that currently create missing links, and including key routes in a year-round maintenance program that creates a network.

7. Transportation Outreach Strategy

Councilor Goodman-Campbell introduced the Transportation Outreach Strategy presentation.

Ms. Bakke and Mr. Horvick reviewed the Transportation Outreach Strategy, as outlined in the presentation. Ms. Julber indicated the telephone survey is the first piece of an iterative process.

8. Cascades East Transit Intergovernmental Agreement Overview

Ms. Oshel provided an overview of the Cascades East Transit Intergovernmental Agreement. Ms. Breault indicated the CET Master Plan that adoption is anticipated for March 2020.

9. Public Comment

Steve Porter spoke about the transportation telephone survey.

Denise LaBuda, Council on Aging, shared support for work on equity and safety.

Josh Gatling spoke about connecting 3rd Street and Colorado Avenue.

10. Close and next meeting

Meeting adjourned at 4:24pm.

Respectfully submitted,

Jenny Umbarger
Growth Management Department



Accessible Meeting/Alternate Format Notification

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Agenda Item No. 2:
Draft Project and
Program Prioritization
and Evaluation



2040 Transportation System Plan

Project & Program Evaluation and Preliminary Priorities

August 22, 2019

Introduction

Purpose

This memorandum summarizes the evaluation of the Bend TSP 2040 Project & Program List and presents initial project and program recommendations for timeframes of implementation, or “phasing buckets.” This evaluation was conducted consistent with the Project & Program Prioritization Criteria, which were approved by the Steering Committee in June 2019.

Request to CTAC and the Process Ahead

This memorandum is preparatory material for the Citywide Transportation Advisory Committee (CTAC) meeting on August 28, 2019 (CTAC Meeting 12). **CTAC is asked to review this memo prior to the meeting** and participate at CTAC 12 to confirm and adjust proposed project and program phasing using the recommendations from the project team as a starting place.

The outcomes from CTAC Meeting 12 will then be taken through several iterative steps to further hone the prioritization and funding recommendations. Those steps are:

- Funding Work Group (FWG) Meeting 6 – prepare funding sources and amounts to align with CTAC’s project and program priorities
- CTAC Meeting 13 – review of FWG input and refinement of priorities, creating a 2040 Prioritized Project List V1
- FWG Meetings 7-8 – creation of the draft TSP Funding Plan and Strategies Report
- CTAC 14 – finalize the draft TSP Funding Plan and Strategies Report and 2040 Prioritized Project List V2, for recommendation to the Steering Committee

The Role of the TSP in Prioritization and Funding

The TSP is a long-term planning document. It addresses a comprehensive set of Bend’s transportation system needs, integrated with land use and other community needs and aspirations. The priorities and funding plans in the current TSP update will create clarity for Bend regarding **what** projects and programs are most important, **when** they should be constructed/implemented, and **how** they should be funded. However, it is important to note that those are planning-level recommendations and subject to refinement and change over time. Typical factors influencing refinements include population and employment growth rates (high vs. low); growth in specific locations of the Urban Growth Boundary (UGB); community priorities;

City Council priorities expressed through goals, budgets, and the Capital Improvement Program (CIP); partner agency projects; annual fluctuations in revenue collections; and outside grants or funding opportunities. The specific authorization and timing of individual projects is made through Bend's CIP and similar Council-directed decision making—using the TSP as guidance.

Project & Program Evaluation Overview

Defining the Timing of Priorities - “Phasing Buckets”

The City has identified phasing categories (herein referred to as “phasing buckets”) described below. Each bucket contains projects and programs¹ that can be financed with existing funding sources as well as projects and programs that will need additional funding sources not yet secured by the City. Part of the FWG charge is to identify these additional funding sources the City needs to fund all the planned projects and programs.

- (1) **Near-term Priorities (Implementation Years 1-10):** Bucket 1 (Table 4a and 4b and Figure 2) addresses near term priorities spanning 10 years to implement both the current 5-year CIP (2019-2023²) as well as additional projects and programs that rank as high priorities and are appropriate for the 6-10 year timeframe.³ Additional projects and programs may also be added in the 1-5 year timeframe to complement, operate, and/or maintain those projects and programs already committed to by the City—within the delivery capacity and available revenue in that timeframe.
- (2) **Mid-term Priorities (Implementation Years 11-15):** Bucket 2 (Table 5a and 5b and Figure 3) includes projects and programs identified by CTAC and the project team that support TSP goals and economic and community health or that are anticipated to be triggered by growth in the mid-term horizon.
- (3) **Long-term Priorities (Implementation Years 16-20):** Bucket 3 (Table 6a and 6b and Figure 4) includes projects and programs identified by CTAC and the project team that are of lower priority for the community or are not likely triggered by growth or system needs until the long-term horizon. Even with that long-term frame of reference, these projects and programs help meet long-term transportation system needs and implement the Bend Comprehensive Plan.
- (4) **Expansion Area Driven Projects (previously called Development Driven Projects):** The key distinction for Bucket 4 (Table 7 and Figure 5) projects is that their timing will be driven primarily by the timing of significant development near the project or program location, as opposed to City-initiated improvements of the transportation system. These projects may address important system needs, such as neighborhood streets needed to connect pedestrians, cyclists, and motorists in growth areas with the regional arterial and collector roadway system. They may also include “public” funding sources, such as Transportation System Development Charge (TSDC) funding, determined as part of development review, negotiated developer agreements, or an area-planning process.

¹ As described later in this memorandum, all programs are recommended for inclusion in the Near-term “bucket.”

² Current CIP projects identified as part of the 2019 Council Goals are not included in near term priorities (Table 4a) as they are fiscally committed via Franchise Fees and Transportation System Development Charges.

³ The City's fiscal commitment in the TSP is for project planning. All actual funding authorizations are subject to subsequent Council action.

Specific timing for implementation is dependent on market conditions related to the pace of development in specific areas. These projects and programs contribute to the overall multimodal system and are an important component of the TSP. In evaluating these projects, the team discovered they were all associated with Bend's UGB expansion areas, so the bucket title was revised.

Each of the identified 2040 Projects and Programs has been categorized into one of the phasing buckets based on the following set of questions:

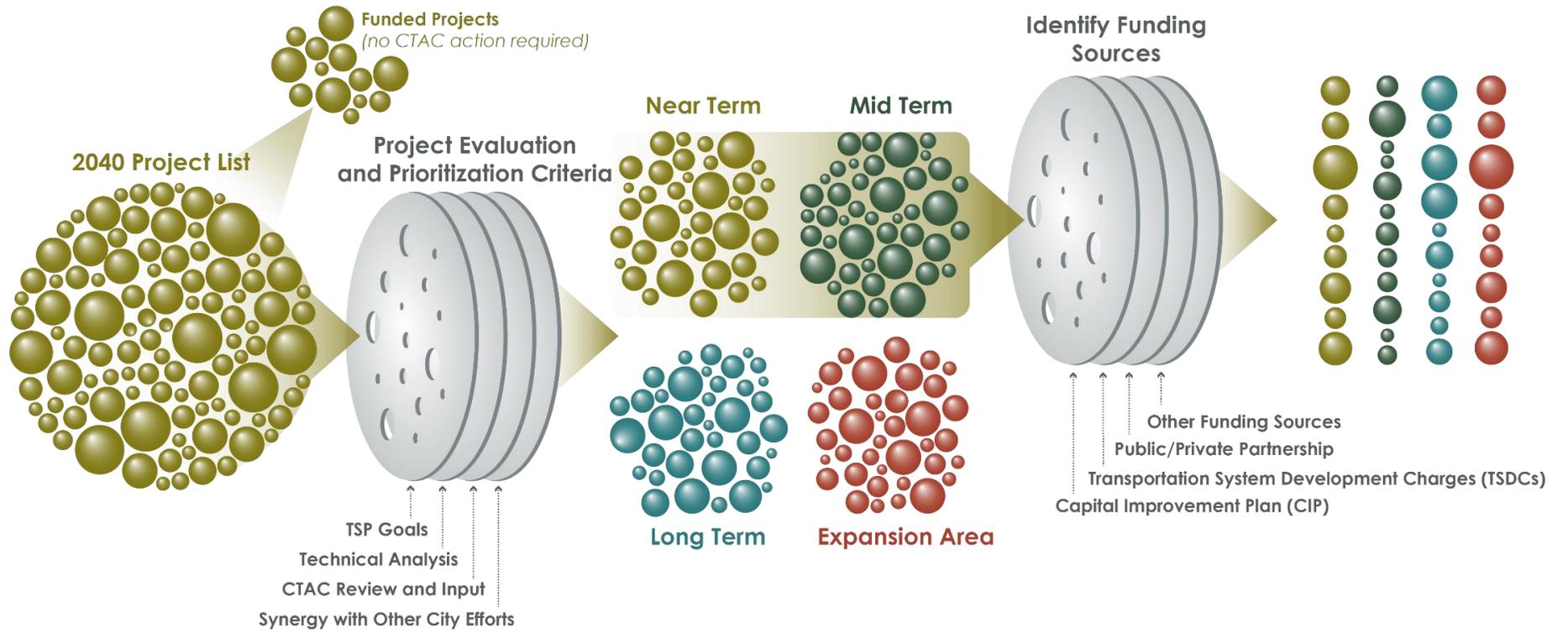
- Which projects most meaningfully address the project and program prioritization criteria?
- What is the likely funding available for each of the "buckets" and how can the City "right-size" the project and program list to best match the funding sources? (Note: this evaluation is based on initial estimate for available funding. These estimates will continue to be revised as the FWG refines revenue forecasts.)
- What projects and programs build upon and/or rely on synergies provided by other capital improvements projects within each bucket?

The categorization of each project and program into the phasing bucket categories requires an iterative process to ensure each bucket is both effective at addressing TSP goals and fits within the funding strategy. This iterative effort assumes that the near-term priorities comprise the TSP's 'fiscally committed' list and will be accompanied by a funding plan (identifying funding sources, amounts, timing) developed by the FWG for inclusion in the TSP. The mid-term and long-term project lists will have more general funding strategies and an assessment of what is "reasonably likely to be funded" with projected revenue streams to meet State planning requirements, reflecting the need to be flexible and adaptable over the long term.

The TSP is a living document that is updated every 5-7 years, including various amendments over time as needed based on new information or changing conditions. In concept, the mid- and long-term projects will move up in priority over time if the community grows as projected.

The general prioritization process is shown in Figure 1.

Figure 1. Prioritization Process Chart



How Projects & Programs Were Evaluated and Rated

Goals-based Criteria

The prioritization criteria were used to differentiate, compare, and identify trade-offs associated with the projects and programs in the 2040 Project List. The criteria used for this analysis, listed in Table 1, are based directly on the Goals & Objectives developed by CTAC and approved by the Steering Committee.⁴ The prioritization criteria have been rated based on the scale shown in Table 2, using a “consumer reports” method of project rating. Please see Appendix A for the full text of the goals.

Table 1. Goals- Based Prioritization Criteria

Goal	Application to Prioritization Criteria
Increase System Capacity, Quality, and Connectivity for All Users (e.g. drivers, walkers, bicyclists, transit riders, mobility device users, commercial vehicles, and other forms of transportation)	Does the project or program: <i>Streets, transit, bicycle, & pedestrian to be evaluated independently</i> <ul style="list-style-type: none"> • Add to or enhance the street network? • Address known areas of existing or future congestion or bottlenecks? • Add to or enhance the transit network? • Add to or enhance the bicycle network? • Add to or enhance the pedestrian network? • Increase the reliability of transit, on-time freight operations and vehicular travel? • Address a near-term or long-term need?
Ensure Safety for All Users	Will the project or program: <ul style="list-style-type: none"> • Reduce the potential for fatalities and serious injuries? • Address known safety concern areas?
Facilitate Housing Supply, Job Creation, and Economic Development to Meet Demand/Growth	Does the project or program: <ul style="list-style-type: none"> • Serve all Opportunity Areas or Expansion Areas, including those prioritized by City Council? • Allow the development of other priority areas identified areas for employment or housing?

⁴ The project goals were approved by the Steering Committee on September 11, 2018. The prioritization criteria were approved by the Steering Committee on January 20, 2019.

Goal	Application to Prioritization Criteria
Protect Livability and Ensure Equity and Access	Does the project or program: <i>Protect Livability:</i> <ul style="list-style-type: none"> Support livability by helping ensure roads are used for their classification (i.e. reduce cut-through traffic on local streets)? <i>Ensure Equity and Access:</i> <ul style="list-style-type: none"> Eliminate transportation related disparities such as high and adverse human health or environmental effects, high negative safety impacts, negative social and economic effects on disadvantaged or underserved populations? Improve access to safe, appealing, affordable and reliable transportation choices to meet daily transportation needs of disadvantaged or underserved populations?
Steward the Environment	Does the project or program: <ul style="list-style-type: none"> Limit impacts to natural features and the environment? Reduce VMT and/or increase non-single occupancy vehicle travel)? Preserve the functionality or quality of habitat areas?
Have a Regional Outlook and Future Focus	Does the project or program: <ul style="list-style-type: none"> Support regional economic health and regional connectivity? Help prepare Bend for future technology? Help to implement other planned infrastructure projects within the City of Bend or by a partner agency?

Table 2. Prioritization Rating Scale

Rating	Description
●	The project/program clearly supports the criterion and/or makes substantial improvements in the criteria category
◐	The project/program idea partially addresses the criterion and/or makes moderate improvements in the criteria category
○	The project/program idea does not support the intent of, provides minor or incidental benefit and/or negatively impacts the criteria category
N/A	The project/program idea neither meets nor does not meet intent of criterion. The project idea has no effect, or criterion does not apply

Methods Used for Rating the Projects and Programs

The evaluation was informed by technical and qualitative evaluations, including data from the Bend-Redmond Regional Travel Demand Model (BRM). Using this information, each of the projects or programs was rated to assess its ability to meet the TSP Goals as guided by the prioritization criteria. The sections below provide a brief description of how the projects were rated using the prioritization criteria. A summary of this evaluation is included in Appendix B.

Evaluating the Capacity, Quality and Connectivity Goal and Criteria

As shown in Table 1 the first goal listed is:

Increase System Capacity, Quality, and Connectivity for All Users (e.g. drivers, walkers, bicyclists, transit riders, mobility device users, commercial vehicles, and other forms of transportation)

This goal and its criteria were evaluated using a number of methods, including modeling analysis with the BRM and qualitative system evaluation.

The BRM is a modeling tool that utilizes inputs of planned land use, demographics, transit service, regional travel growth, and the characteristics of the area transportation network to forecast travel and network performance such as roadway volume and congestion at a regional corridor scale. The model was developed (and is maintained by) ODOT and the Bend MPO and is a required analytical tool for evaluating compliance with Oregon's Transportation Planning Rule. The model is a helpful tool for quantifying differences between varying scenarios of projected land use or transportation system or service improvements. For a detailed discussion on the scenarios that were modeled in the project prioritization process, see Appendix C.

The model was used to evaluate projects and programs in two ways:

1. Model demand-to-capacity plots⁵ (as shown in Appendix C) helped identify whether the project or programs addressed a projected area of congestion by comparing the proposed 2040 TSP Scenario⁶ the 2040 Baseline Scenario. For example, a roadway extension project was evaluated by determining how much traffic it would attract, if that attracted traffic was diverted from a nearby congested link, and if that shift would result in a significant difference in that areas' demand-to-capacity ratio. Program improvements such as parking pricing in downtown Bend were evaluated in a similar way by evaluating the level of traffic differences on surrounding roadway links. This methodology, while quantitative with model information, requires judgement as the large number of projects and programs create overlapping benefits and impacts.
2. Model demand-to-capacity plots were also used to help determine when a regional corridor capacity need would be triggered. In this application, existing conditions⁷, interim year⁸, and future year 2040 plots were compared to assess which projects and programs address near-term, mid-term, or long-term needs. Projects or programs with benefits on corridors that were over capacity in each scenario were given a higher rating

⁵ The model demand-to-capacity plots show both projected peak hour roadway volume (varying by line thickness) and the corresponding level of corridor congestion (varying by line color).

⁶ The 2040 TSP Scenario includes all of the projects and programs that have been identified for the TSP.

⁷ From the 2010 Base Year Scenario

⁸ The interim year scenario represents land use and growth consistent with the UGB expansion work and most of the Baseline Scenario projects. Since the BRM was also used to model the Bend MPO transportation plan, which must be fiscally constrained, the following projects from the Baseline Scenario were not included in the Interim Year Scenario: South frontage road connecting to Murphy interchange area (Project 18) and Preliminary engineering and right of way acquisition for an overcrossing or interchange at US 97/Powers Road (Project 14).

for addressing congestion than projects or programs with benefits on corridors that were shown as under capacity in that model scenario.

When rating the impact of projects and programs on enhancing the pedestrian and bicyclist network, projects along the Low Stress Bicycle Network and Key Walking and Biking Routes were rated more highly than projects that did not improve conditions along those routes. In addition, projects that would make the pedestrian or bicyclist network higher-stress or decrease safe crossing opportunities were rated lower. Projects and programs that improved the transit network or the reliability of transit were also rated more highly.

For each project and program, the prioritization rating scale in Table 2 was applied, with notes recording highlights of the technical team rationale for the ratings. Please see Appendix B for the ratings and notes.

Evaluating Additional Goals and Criteria

As shown in Table 1, the additional goals include:

Ensure Safety for all Users;

Facilitate Housing Supply, Job Creation, and Economic Development to Meet Demand/Growth;

Protect Livability and Ensure Equity and Access;

Steward the Environment;

Have a Regional Outlook and Future Focus; and

Implement a Comprehensive Funding and Implementation Plan.

Each of the projects and programs was evaluated relative to the screening criteria summarized in Table 1 using both qualitative and quantitative data. A variety of technical analyses and the activities of ongoing planning studies helped inform this evaluation, such as the outcomes of the travel demand modeling efforts, ODOT's Parkway Study, the City's Transportation Safety Action Plan (TSAP), and various sub-area planning efforts within the City. The evaluation also benefited from feedback gleaned from various City staff members as well as other agency stakeholders about overall community needs and the trade-offs associated with a variety of long-term solutions. Using all of these sources, the team reviewed each of the projects and programs and applied their professional judgement regarding the prioritization ratings to be applied. The rationale for each rating was recorded and is included in Appendix B.

Funding Revenue Assumptions

At a Funding Work Group (FWG) meeting on July 24, 2019, the project team shared draft funding projections for the nine funding tools recommended in the 2018 Initial Funding Assessment (IFA). The project team facilitated a conversation to confirm or amend the recommended tools, rates, and funding amounts from the IFA that should be used for this phase of planning. This discussion informed initial recommendations for the funding sources that are most appropriate for each generalized time period (particularly for years 1-10 and 11-15). As more is known about priority projects in each bucket, the assumptions will be revisited and adjusted to match specific projects to specific funding sources. A summary of the FWG conversation follows.

(1) **Near-term Funding Plan (Implementation Years 1 – 10):** In the near-term, the City will rely on several existing sources⁹ and new revenue tools to fund capital projects and operations, maintenance (O&M), and program plans. Of the new tools under consideration, and based on input from the FWG, a general obligation bond and a Transportation Utility Fee (TUF) seemed most likely to be implemented in the near-term. The FWG recommended the following assumptions:

- a. **General Obligation Bond:** The FWG agreed that \$200m¹⁰ is a reasonable top-end assumption for a general obligation bond to fund capital projects.
- b. **Transportation Utility Fee (TUF):** The Funding Work Group agreed that a TUF would be a reasonable near-term tool and suggested that it should be targeted to prioritized O&M projects and programs. A TUF could generate up to \$5m per year (\$50m in years 1-10) given current TUF rates and assumptions.
- c. **Vehicle registration fee (VRF):** If Deschutes County implements a VRF, the City could use those dollars towards projects of regional significance that are prioritized for funding in the near-term.
- d. **Urban Renewal:** Assuming a new urban renewal area is adopted in the Core Area, these funds¹¹ may be used to fund a limited number of eligible capital projects in the urban renewal area as they become available; however, little urban renewal funding is likely to be available in the near-term.
- e. **Other:** Additional core tools (a food and beverage sales tax or a fuel tax) could be possible in the near-term if needed to cover priority projects.

(2) **Mid-term Funding Plan (Implementation Years 11 – 15):** Additional funding sources will be needed in the mid-term. The FWG supported the following assumptions:

- a. **General Obligation Bond:** An additional general obligation bond of about \$200m could be possible for capital projects needed in the mid-term.
- b. **Transportation Utility Fee:** If implemented, the TUF would continue to generate about \$5m per year (in constant \$2018) for O&M and programs in years 11-15.
- c. **Urban Renewal:** Additional funding from the urban renewal area in the Core Area (if implemented in the near-term) will be available in the mid-term to fund eligible capital projects within the urban renewal area.

⁹ Existing sources include State Highway Fund dollars, Surface Transportation Block Grant dollars, general fund dollars, garbage franchise fees, water/sewer franchise fees, existing transportation-system development charges (TSDCs), and miscellaneous "other" dollars. Note that recently approved increases to the TSDC (up to \$8,000 per Peak Hour Trip or PHT as of January 1, 2020) are included in the assumptions of existing funding. We note that these dollars are already allocated to specific transportation funding needs (over the 20-year planning horizon) per City policy. Some near-term projects have funding allocated from existing sources; others do not.

¹⁰ The FWG provided direction that, for the purposes of estimating near-term funding capacity to support project prioritization, the upper bounds for a general obligation bond should not surpass \$200m. It is likely that two \$200m bonds could be implemented in the 20-year planning horizon. Per FWG discussion, we assume one \$200m bond would be implemented in the near-term and a second \$200m bond would be implemented in the mid-term.

¹¹ Projects eligible for urban renewal funding (preliminarily estimated at about \$29m over the 20-year planning horizon) must be capital projects and they must be located within the urban renewal area. Little funding is likely to be available in years 1-10. Funding allocations for eligible transportation projects will be refined through BURA / Core Area Process.

- d. **Transportation SDC:** Council could consider increasing the existing transportation-system development charge (TSDC) again in the mid-term to fund additional TSDC-eligible projects.
- (3) **Other:** Additional revenue from other core tools (food / beverage sales tax, fuel tax, county VRF) could be available – if implemented in the near-term – or could be implemented in the mid-term. **Long-term Funding Strategy (Implementation Years 16 – 20):** In the long-term, revenue expectations are more ambiguous. New revenue tools (such as the food and beverage sales tax, fuel tax, urban renewal funding, or vehicle registration fee) could be implemented at this time. The City could also consider a third general obligation bond if necessary or additional increases to TSDC rates. TUF dollars will continue to be available (about \$5m per year for O&M and program plans, assuming one has been implemented). In years leading up to Year 16, the City will begin to have a much clearer picture of the types of projects still requiring funding. At this time, the City will need to revisit the conversation to craft a more tangible funding plan for the final years of TSP implementation.
- (4) **Expansion Area Projects (Implementation Years 1 – 20):** Because projects comprising this bucket will be implemented as development occurs, the foundational assumption for this bucket is that revenue would primarily derive from TSDCs¹² (including potential supplemental TSDCs that apply in specific expansion areas) and potentially local improvement districts (LIDs).¹³

The next phases of work will match projects to funding sources based on eligibility and available dollars.

Evaluation Findings

Capacity, Quality and Connectivity

The results of the 2040 TSP Project List Scenario analysis, combined with the findings from the existing conditions analysis, the 2040 Baseline Scenario analysis, and the Interim Land Use Scenario analysis, helped the project team identify the impacts of projects on system capacity, quality, and connectivity. This analysis also helps inform when certain projects may be needed, for prioritizing as a near term, mid-term or long-term project. *In particular, the timing of when needs would be triggered helped differentiate between projects and programs for this Goal.* The following sections highlight some of the key findings and needs from this analysis and how they informed project prioritization.

¹² Any new revenue generated from a TSDC rate increase surpassing \$8,000 per PHT.

¹³ Local street infrastructure improvements that benefit specific properties, in a defined area, may be funded by LID assessments. We cannot definitively know if or when property owners will opt-into forming a LID. Our initial projections suggest that about \$14m could be made available through LIDs over the 20-year planning horizon. This assumes about two LIDs, worth \$350,000 each, are implemented per year.

Existing Needs

A handful of key system needs were identified in the Existing Conditions and Needs Technical Memorandum¹⁴. The following list highlights the needs identified for existing conditions, which may be used to determine priorities to consider for the Near-term bucket:

- **Bend Parkway (US 97) Congestion and Safety:** Significant congestions occurs today on US 97, particularly on the northern end near the Cooley Road and Robal Road signalized intersections. There are also safety concerns at many of the at-grade intersections along US 97 and the right-in and right-out access points.
- **East-West Corridor Congestion:** A handful of key east-west corridors through the City were identified as not meeting current mobility standards, including areas around the Reed Market Road corridor and along US 20/Greenwood Avenue. Along east-west routes that do meet mobility standards today, many of them experience significant queuing during the p.m. peak hour.
- **Bicycle and Pedestrian Facilities:** Regional-level pedestrian and bicycle corridor connectivity is limited by major barriers and there are many corridors that lack low-stress facilities.
- **Transit:** Existing transit service is limited, particularly in the outer sections of the City. Only half of households are within a quarter mile of transit and there are limited bicycle and sidewalk facilities to safely get people to transit stops.

Interim Mobility Needs

Based on the Interim Land Use Scenario, there are two primary areas where added growth will cause key corridors to degrade significantly further in capacity per the BRM analysis, as shown in the volume-to-capacity plots in Appendix C. The following locations were identified as areas that would have significant mobility congestion needs in the midterm:

- **Bend Parkway (US 97) Congestion:** Under the Interim Land Use Scenario, portions of the Parkway exceed capacity. The north Parkway from Cooley Road to US 20 and the central Parkway between Hawthorne Avenue and Colorado Avenue are over capacity.
- **East-West Corridor Congestion:** By the Interim Land Use Scenario, several east-west corridors are forecasted to be over capacity. These include all of the major river crossings (Portland Avenue, Newport Avenue/Greenwood Avenue, Colorado Avenue and Reed Market Road). Reed Market Road shows the most congestion with segments between Century Drive and US 97 over capacity or nearing capacity.

2040 Needs and System Performance

System-Wide Performance

In addition to addressing specific need locations (discussed in the Needs section below), the 2040 TSP Project List Scenario also addresses some of the larger, system-wide goals articulated in the TSP. The 2040 TSP Project List Scenario significantly affects some of the travel demand modeling system-wide performance measures including:

¹⁴ Existing Conditions and Needs, City of Bend Transportation System Plan Update, July 2018

- **Mode Split:** There is a significant shift to modes other than single-occupancy vehicles (SOVs) and a decrease in daily SOV trips by 3.5% with implementation of the 2040 TSP Project List Scenario over the 2040 Baseline Scenario. This shift was achieved through the combination of land use planning aligned with key services and programs, including: traffic demand management (C-16); downtown parking pricing (C-20); high capacity transit lines with mobility hubs; and investment in the bicycle Low-Stress Network and connected pedestrian system (Key Routes).
- **Vehicle Miles Travelled (VMT) per Capita:** With the additional mode shift and intentional investment in a combination of multimodal and connectivity projects, the 2040 TSP Project List Scenario decreases projected VMT per capita by over 4% when compared to the 2040 Baseline Scenario. This reduces VMT per capita to levels similar to 2010 conditions even with expansion of the Bend UGB, which is a key step forward in addressing the Statewide goal of decreasing VMT per capita.
- **Vehicle Hours of Delay:** Similarly, there is also an improvement (i.e., reduction) in vehicle hours of delay across the system during the projected pm peak hour in the 2040 TSP Project List Scenario. Total vehicle hours of delay for trips within Bend decreases by nearly 18% with the combined investment of the TSP Project List compared to the 2040 Baseline Scenario.

How Did the 2040 Project List Scenario Perform in Addressing Key System Needs?

The list below summarizes how the needs seen under existing conditions, in the Interim Land Use Scenario and in the 2040 Baseline Scenario are fully or partially addressed under the 2040 TSP Project List Scenario.

- **Bend Parkway (US 97) Congestion and Safety:** With the implementation of the North Parkway FEIS (Projects 13 and A-6), the Powers Road Interchange (A-8) and other Parkway Study Improvements (N-4) such as ramp metering and right-in right-out closures, the entire length of US 97 in Bend models as under capacity, which is a significant improvement over the 2040 Baseline Scenario. These improvements are also expected to significantly improve safety by limiting at-grade access on the Parkway.
- **East-West Corridor Congestion:** Improvement projects will make notable improvements in congestion and queuing at spot locations along east-west corridors (such as 17, A-17, C-7, N-13, C-9). Overall vehicle demand is reduced through TDM strategies (C-16, C-20), improved facilities for people walking and biking on the LSN (LSN, P-1 and P-2) and improved high capacity transit on Newport Avenue/Greenwood Avenue (C-2).

However, the system in 2040 is still constrained and over capacity at the major bridge crossings. Some solutions include:

- A study for a new long-term southern river crossing between Powers Road and Murphy Road (A-4) may help identify a solution for the continued congestion on east-west corridors. Beyond the transportation solution analysis, such a study addresses land use and natural resource considerations.
- Congestion should continue to be monitored to determine if/when additional improvements are appropriate at key locations on east-west routes. Improvements may include targeted widening or other intersection improvements

as indicated by future conditions and application of TSP policies. Improvements may also include further use of demand-management strategies, implementation of the strategies in Bend's Integrated Land Use and Transportation Plan, targeted widening or intersection improvements, or adoption of alternative mobility standards.

- **North-South Corridor Congestion in Eastern Bend:** The modeling showed that Intersection improvements along 27th Street (N-5) and 15th Street (B-17), building upon the improvements underway with the Empire Avenue Extension projects connecting from Purcell to Butler Market, will help alleviate some congestion on the north-south routes in eastern Bend.

However, these corridors are expected to still be over capacity in the 2040 TSP Project List Scenario in the long-term outlook (between Butler Market and Neff and Bear Creek and Reed Market) and should continue to be monitored to determine if/when additional improvements are appropriate. Improvements may also include further use of demand-management strategies, implementation of the strategies in Bend's Integrated Land Use and Transportation Plan, targeted widening or intersection improvements, or adoption of alternative mobility standards.

- **Bicycle and Pedestrian Facilities:** With the addition of projects on key routes of the LSN, a commitment to building complete streets and an emphasis on programmatic approaches to addressing pedestrian and bicyclist needs on all levels of the system (P-1, P-2, T-3, T-2, T-5, 1TBKE), the 2040 TSP Project List makes enormous strides in addressing the lack of a connected network of low stress facilities. Starting these programs in the shorter term will help address existing needs while continuing to make improvements into the future.
- **Transit:** The high-capacity transit backbone of Greenwood Avenue/Newport Avenue (C-2) and 3rd Street between Murphy Road and the North Triangle Area (C-3) combined with mobility hubs (C-4) makes significant improvements in the transit network in Bend. These improvements (combined with investment in low stress pedestrian and bicycle networks and TDM strategies) help contribute to the shift away from SOVs, reduces VMT per capita and reduces p.m. peak hour motor vehicle delay.

The combination of the system-wide findings and the location specific findings from the travel demand model needs analysis informed the project prioritization process. The project team used the above findings in the preliminary placement of projects in near-, mid- and long- term buckets.

Qualitative Goals and Criteria Evaluation

In addition to the travel demand model-based analyses described above, each of the projects and programs was evaluated relative to the goals summarized in Table 1. This evaluation was based on information gleaned using both qualitative and quantitative data as well as the application of general planning principles and professional engineering judgement. This work was also informed by a variety of technical analyses and the activities of other ongoing planning studies within the City. The evaluation also benefited from feedback gleaned from various City staff members as well as other agency stakeholders about overall community needs and the trade-offs associated with a variety of long-term solutions. The team's evaluation of each of the projects and programs is in Appendix B.

While some projects clearly ranked high in a certain category, most projects did not equally meet the prioritization criteria for all of the goals (e.g., Simpson Avenue/Columbia Street intersection addresses capacity, however it does not address the housing supply/economic development or the regional network). To reasonably rank projects based on overall goals and, in turn not penalize projects if they did not meet one or more specific goals, the average ranking of each project was reported (i.e., if a project addressed a goal, how well did it do so?).

The following summarizes the qualitative analysis for ranking projects based on the goal criterion.

- **Goal: Increase System Capacity, Quality, and Connectivity for All Users (e.g. drivers, walkers, bicyclists, transit riders, mobility device users, commercial vehicles, and other forms of transportation)**
 - The scoring of projects relative to this goal was described in detail in the previous section.
- **Goal: Ensure Safety for All Users**
 - Projects were evaluated based on the potential to reduce transportation-related risk for users of all ages and abilities, with a specific focus on those projects that would enhance the comfort and convenience for people walking, cycling and taking transit as well as those traveling with mobility aids. Projects with a high rating addressed the needs of all modes of travel versus those focused on only on vehicular capacity needs. The majority of the projects scored well.
- **Goal: Facilitate Housing Supply, Job Creation, and Economic Development to Meet Demand/Growth**
 - Projects within identified economic development priority areas for the City, including both expansion and opportunity areas, ranked very well in this category. Those projects that provide needed connections for these areas to existing multimodal infrastructure also scored well. Projects near planned new housing also ranked high.
- **Goal: Protect Livability and Ensure Equity and Access**
 - As noted in Table 1, livability and equity were analyzed separately as part of this goal.
 - Projects that scored well in the livability criteria are those that provide more localized benefits. These projects are generally within residential neighborhoods and improve the user's perception of "comfort" as well as filling in key connectivity gaps in the sidewalk, bicycle network and neighborhood street systems.
 - Projects that ranked highly in the equity category were those that provided key connections between transit, walking and cycling as well as filling in needed gaps in connecting these users between major destination points within the City. Vehicular-based capacity and maintenance projects did not rank highly for this goal.

- **Goal: Steward the Environment**
 - Projects that scored well were those that help to increase the percentage of trip-making by walking, cycling and transit and conversely lower single occupancy vehicle travel, VMT, and vehicular emissions within the City. Projects that did not rank well or were not rated for this criteria included roadway widening/capacity improvements, signal modifications, and new roads.
- **Goal: Have a Regional Outlook and Future Focus**
 - Regional projects that are along or connect to ODOT or County facilities scored well in this category. Improvements along City arterials and major collectors also scored well. The majority of projects on the local system did not receive a ranking (N/A).

Overall Conclusions from the Evaluation

At a high level, the Project and Program Criteria rating process revealed the following:

- Most projects and programs had a majority of ● and ◐ (good and partially good) ratings, and very few had ○ (poor) ratings. The team believes this reflects the thoughtful and iterative process that CTAC and the Bend community have used to identify key transportation needs and the best projects to address them through the earlier scenario development and improvements identification process (Phase I of the work program). Please see Appendix B for the individual project and program evaluations.
- Through implementation of the 2040 Project List, the evaluation shows that Bend has a significant opportunity to address many of its transportation needs and serve a future population of 150,000+ (the projected city population in 2040). The evaluation showed it will take a comprehensive mix of transportation strategies – increasing capacity in key locations, continued connectivity improvements, and implementation of the low stress bicycle and pedestrian network, transit improvements, and transportation demand management – to realize this opportunity.
- The relatively even performance of the projects in the evaluation also means that there were no significant “difference-makers” in the criteria or the project list.
- Even though there are no significant “difference-makers,” the evaluation helps point to strategies for CTAC to use in setting priorities. This will require a combination of professional and community judgement about those priorities, and implementation through funding strategies.
- For the preliminary priorities list in this memo, the team has applied the evaluation findings and its professional judgement using the following considerations:
 - Considerations for setting near-term priorities:
 - **Capacity-related projects that address key needs**, especially those identified in Existing Conditions and the Interim Scenario. These are solutions for the current problems and those that could become significant in the next 10 years. Examples of these projects are improvements to the US 97/Colorado Avenue Interchange (C-9), improvements to the Portland Avenue Corridor (N-13), and extension of Yeoman Road (17).

- **Identified safety needs** based on the TSP evaluation as well as the recommendations from the City's ongoing Transportation Safety Action Plan (TSAP).
- **Projects that reduce key gaps in the walking and biking system**, especially across the Deschutes River and high-stress barriers, such as the Parkway.
- **Transit-related projects** that were shown to be effective in the evaluation. Examples are Project C-13, Mobility Hubs, in combination with high capacity transit for the Newport/Greenwood Corridor (C-2) and 3rd Street Corridor (C-3)
- **Identification of "synergies" between projects**, and between projects and programs. Synergistic projects should co-exist in the buckets where the project and program outcomes will complement each other. Examples of these projects are improvements to the 15th Street corridor (B-17) coincide from a timing perspective with improvements to the 15th Street/Reed Market Road intersection (N-16). Additionally, the City will look for "opportunity projects" where construction in the right-of-way for a sewer or other improvement can be combined with a transportation improvement.
- **Initiation of programs in the near-term timeframe.** For example, Project C-16, Transportation Demand Management, is included as a near-term priority.

Please see Appendix B for the results of the criteria ratings for each individual project and program evaluated.

Preliminary Recommendations for Consideration by CTAC

The following section and tables comprise a set of preliminary recommendations for consideration by CTAC. The team's evaluation of each of the projects and programs is in Appendix B.

Approach Program Inclusion and Funding Allocation

Transportation Programs Generally

The Criteria Evaluation process revealed that each of the programs can meaningfully help toward achieving the TSP goals, and should be implemented in the near-term and continue to be refined and used throughout the duration of the TSP. These programs can help to improve roadway conditions, prioritize the continued addition of multimodal facilities throughout the City, implement key plan recommendations, and reduce vehicular demand.

As part of the evaluation process, the project team identified potential synergies amongst the list of programs considered and was able to consolidate the list to combine programs with similar purpose and intended outcomes. This will help with the overall implementation and administration over time. The recommended program list is summarized in Table 3.

Identifying consistent and appropriate levels of funding for these programs will be critical to effective implementation. The level of funding available over time will be dependent on those sources identified by the FWG and ultimately implemented by the City. The specific funding sources and funding levels will be addressed by the FWG.

Operations and Maintenance

Additionally, CTAC has recommended that the TSP incorporate the costs associated with ongoing operation and maintenance of the existing and future City's transportation infrastructure as part of the overall funding allocation. Initial estimates suggest the 2040 Project and Program list may add an additional \$500,000 to \$1 million in annualized costs to maintain the multimodal transportation system in a "state of good repair." This estimate will be continually refined as part of the final prioritization process. This cost is included in Table 3.

The project team recommends that CTAC support initiation of these programs during the Near-Term timeframe, with funding levels in that timeframe to be determined as part of the Funding Plan and Strategy.

Table 3. Recommended Program Funding Allocation

Program IDs	Combined Program	Description	Funding Approach	Notes
T-1	Address Capital Needs backlog to maintain a state of Good Repair for New Capital Projects	City program to address capital needs backlog to maintain a state of good repair for new capital projects, including reconstruction of streets, signals, bridges, and other transportation infrastructure.	Reserved funding (Estimated at \$500k to \$1 million per year)	Program to ensure operation and maintenance funding associated with new capital projects.
C-16	TDM Program for major employers and institutions	TDM program for major employers and institutions.	To-be determined based on future FWG, CTAC, and City evaluation.	Travel demand modeling has shown TDM implementation to be an effective tool for addressing future and existing congestion by limiting demand on the transportation system.
N-7, T-4	Transportation Safety Action Plan (TSAP) implementation	Safety projects and programs as defined by the Transportation Safety Action Plan including street lighting.	To-be determined based on future FWG, CTAC, and City evaluation.	Improving transportation safety is a goal of the Bend TSP and has been continually highlighted as a priority among CTAC members. Incorporating a street lighting program into the TSAP implementation program is consistent with systemic countermeasure recommendations made by the TSAP effort.
T-2, LSN, 1TBKE	Bicycle Program	This includes implementing the bicycle Low Stress Network, Neighborhood Greenways, wayfinding, crossings, and traffic calming.	To-be determined based on future FWG, CTAC, and City evaluation.	This is a comprehensive program to facilitate bicycle travel within the city. Program would include implementation and updates to the bicycle Low Stress Network Plan.
T-3, P-1, P-2, N-8	Pedestrian Program	This includes creating of a Pedestrian Master Plan to identify and prioritize pedestrian system improvements (local, collector, arterial sidewalk infill), transit access, safe routes to schools and parks, and wayfinding.	To-be determined based on future FWG, CTAC, and City evaluation.	This is a comprehensive pedestrian program to plan for and implement pedestrian infill and enhancement projects, including the Pedestrian System Master Plan and safe routes to school program. This may include enhanced access to transit facilities in collaboration with Cascades East Transit.
T-5	Bicycle and Pedestrian facility maintenance Program	City program to improve snow and debris clearing along key pedestrian and bicycle facilities.	To-be determined based on future FWG, CTAC, and City evaluation.	Program will require coordination with partner agencies, including the Bend Parks and Recreation District, which own and maintain key elements of the walking and biking system within Bend.
C-20	Parking pricing and management in downtown Bend	Implement the 2017 Downtown Parking Plan.	To-be determined based on future FWG, CTAC, and City evaluation.	Program will be coordinated with other City of Bend parking efforts and may be consolidated within a citywide program, as appropriate.
C-19, N-6	Traffic Signal Coordination improvements along signalized corridors, including freight and transit Signal Priority	Includes US 97 (mainline and ramp terminals), 3rd Street, 27th Street, Colorado/Arizona couplet, and US 20 (3rd Street and Greenwood) corridors.	To-be determined based on future FWG, CTAC, and City evaluation.	Program will require coordination with partner agencies, especially ODOT, which maintains traffic signals within the city.

Key Walking & Biking Route Priority Recommendations

Based on CTAC recommendations, the Steering Committee approved Key Routes that are essential to implementing both the bicycle Low Stress Network as well as the provision of continuous walking routes throughout the City. City staff also identified the nature of each individual project along those Routes that is needed to provide a usable, continuous, comfortable and convenient facility for walking and cycling. This information was used by the project team to identify timing of implementation priorities based on route effectiveness and synergies with other Near-term, Mid-term, or Long-term projects¹⁵. **These recommendations are included in Table 4b, Table 5b, and Table 6b and Figure 6 in the following sections.**

Recommended Near-term Priority Projects

Recommended Near-term priority projects are those that scored highly in each of the evaluation categories, addressed an identified existing or near-term need, and helped the City ensure geographic and modal diversity as part of the overall funding allocation. In some cases, projects that may be most needed in the longer term were identified for implementation in the near-term to maximize the overall effectiveness of project implementation and cost expenditures. In general, the identified Near-term projects are those that address:

- Identified existing or near-term vehicular capacity constraints. In particular, many of these projects help facilitate better access to the Parkway as well as recurring congestion along the City's east-west arterial system.
- Identified safety needs based on the TSP evaluation as well as the recommendations from the City's ongoing Transportation Safety Action Plan (TSAP).
- Gaps in the walking and biking system, especially across the Deschutes River and high-stress barriers, such as the Parkway.

In addition to the project list, the near-term priorities include the need to conduct additional planning studies to help refine future multimodal transportation needs along the Franklin Corridor, at the Reed Market Railroad Crossing, and a possible future Southern River Crossing.

Table 4a and Table 4b and Figure 2 present the recommended Near-term Priority Projects and Key Routes, respectively.

Recommended Mid-term Priority Projects

Mid-term projects are those that scored highly in each of the evaluation categories. Many, but not all, address existing or near-term needs and generally build on Near-Term projects and programs. In general, the mid-term projects help to:

- Provide additional east-west and north south street corridors to improve connectivity, safety, and reduce congestion throughout the City.
- Enhance access to the Parkway, such as at the Powers Road interchange and other implementation priorities that may be identified in the future as part of ODOT's ongoing Parkway Study.

¹⁵ Key Route 10 does not require significant capital projects to implement and will be implemented through the LSN program. For this reason Key Route 10 is not included in a priority "bucket."

- Facilitate growth and improved mobility for all transportation system users within the Core Area of the City.

Table 5a and Table 5b and Figure 3 present the recommended Mid-term Priority Projects and Key Routes, respectively.

Recommended Long-term Priority Projects

Longer-term projects generally rated lower than the near- and mid-term projects or were identified as addressing a transportation system need later in the life cycle of the TSP. Over time, these projects will help support continued economic growth and prosperity within the City, consistent with the City's Comprehensive Plan, as well as support community health and wellbeing. The need for these projects may occur sooner than anticipated to address market conditions and unanticipated additional funding sources.

Table 6a and Table 6b and Figure 4 present the recommended Long-term Priority Projects and Key Routes, respectively.

Recommended Expansion Area Driven Projects

These projects are primarily those whose implementation will occur relative to the timing of land use development in one or more of the identified urban growth boundary "expansion areas." The specific nature of these projects will be refined as subarea planning and master planning efforts within each expansion area are conducted. Further, the specific projects identified as part of the TSP may change slightly to address development patterns, topographic/environmental considerations, and needed connections to the existing City multimodal connection in a timely fashion. **Table 7 and Figure 5 present the recommended Expansion Areas Driven Projects.**

Table 4a: Recommended Near-term Priorities

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
8	Empire Avenue widening to five lanes near US 97 interchange and install traffic signal at SB ramp	Widen Empire to 5 lanes from US 20 to US 97 northbound ramp.	\$2,900,000	\$1,450,000	Near	On the LSN, improves east-west connectivity, over capacity in 2040, improves safety, supports NE expansion area and surrounding economic area.
13	US 97 North parkway extension (Phase 1: US 97 / Cooley Road area improvements)	Would construct initial phase of North Corridor Plan (project extents currently being considered by ODOT)	\$110,000,000	\$11,000,000	Near	Improves east-west connectivity, over capacity in 2040, improves safety, supports NE expansion area and surrounding economic area. Note: City and ODOT have recent allocations of state (\$50 million) and federal (\$60 million) to advance this project.
15	Powers Road / US 97 preliminary engineering and ROW acquisition for Interchange	May include interchange or overcrossing, pending outcome of the Parkway Study.	\$6,500,000	\$650,000	Near	Over capacity on Powers in 2028, reduces bottleneck along Parkway, improves ped/bike crossing opportunities of the Parkway, improves safety, supports opportunity area, improved functionality, key regional connection
17	Yeoman Road extension from 18th Street to western terminus	Includes two lane extension and bridge to cross canal.	\$5,000,000	\$5,000,000	Near	Improves connectivity for all users and reduces VMT. Includes a segment of Key Route 8 (coincides with Project 17 limits).
22	Purcell Boulevard extension From Full Moon Drive to Jackson Avenue	Includes two lane extension.	\$2,288,000	\$2,288,000	Near	Reduces demand on 27 th street, improves connectivity for all users and reduces VMT, provides access to new housing development
24	O.B. Riley Road Arterial Corridor upgrade from Hardy Road south to Archie Briggs Road	Includes upgrade to three lane arterial with curb, sidewalk and bike lane improvements.	\$6,700,000	\$6,700,000	Near	Located on LSN, supports expansion area, improves functionality, key connection to county. Includes a segment of Key Route 10 (OB Riley Empire to Archie Briggs).
26	US 97 northbound on ramp and southbound off ramp at Murphy Road	Construct northbound on ramp and southbound off ramp at Murphy Road.	\$10,000,000	\$10,000,000	Near	Improves bottleneck congestion at US 97/Powers, reduces VMT.
29	US 20 southbound Roadway widening from Cooley Road to Empire Avenue	US 20 southbound widening to two lanes.	\$4,800,000	\$4,800,000	Near	Over capacity in 2028, improves safety, supports expansion areas, key regional connection.
1TCSI	Citywide safety improvements	Includes 3rd/Hawthorne, 3rd/COID Canal, 3rd/Pinebrook, Brosterhous/Railroad bridge, and Colorado Ave/US 97 improvements.	\$1,000,000	\$1,000,000	Near	Improves safety, improves livability and access for all users, may encourage alternative modes.
1TGCI	Galveston Corridor improvements	Multi-modal transportation facility improvements from 14 th Street to Riverside Boulevard to help with pedestrian, bicycle, and vehicular connectivity in Galveston Avenue corridor. City is currently completing design effort for this project.	\$3,900,000	\$3,900,000	Near	Stormwater deficiencies, may encourage alternative modes, improved access, improves functionally
A-4	Study for southern river crossing	Study to identify new river crossing location between Powers Road and Murphy Road, connecting Century Drive to US 97 or 3rd Street.	\$500,000	\$500,000	Near	All river crossings are over capacity by 2028, improves connectivity of south Bend, supports opportunity areas, supports disparity of river crossing for southern residents, reduces VMT.

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
A-17	Aune Road extension from Bond Street to 3 rd Street	Two lane extension of Aune Road to connect 3rd Street and Bond Street. Includes intersection improvement at 3rd Street and a RAB at the intersection of Bond St and Industrial Way.	\$13,500,000	\$13,500,000	Long	On LSN, key east-west connection for all users, serves opportunity area. Includes a segment of Key Route 7 (Aune Division to 3 rd Street).
B-8	Colorado Avenue corridor capacity improvements from Simpson Avenue to Arizona Avenue	Includes incremental approach for Colorado Avenue widening, including right-of-way acquisition and monitoring for if/when widening is appropriate. Implement alternate mobility targets and identify smaller projects to incrementally improve mobility, reliability and safety. Includes intersection capacity improvements at Colorado Avenue/Simpson Avenue roundabout and Colorado Avenue/Industrial Way. Includes complete streets upgrade.	\$21,000,000	\$21,000,000	Near	Improves east-west connectivity, over capacity in 2028, improves capacity at both ends of the river crossing, on LSN, improves safety, serves opportunity area.
C-2	Newport Avenue / Greenwood Avenue corridor high-capacity transit (to be completed with C-13)	Includes HCT transit service connecting COCC to downtown to St. Charles Area. Includes improved transit connections from neighborhoods to HCT stops.	\$1,000,000	\$1,000,000	Long	High Capacity Transit has significant impact on reducing local/regional VMT, provides service for underserved populations.
C-3	3rd Street corridor high-capacity transit (to be completed with C-13)	Includes HCT transit service connecting northern Bend (the Triangle) to southern Bend. Includes improved transit connections from neighborhoods to HCT stops.	\$1,000,000	\$1,000,000	Long	High Capacity Transit has significant impact on reducing local/regional VMT, provides service for underserved populations.
C-9	Colorado Avenue / US 97 Northbound ramp intersection safety and capacity improvements	Includes traffic signal or roundabout.	\$4,300,000	\$430,000	Near	Over capacity in 2040; improves ped/bike crossing opportunities, improves safety, serves opportunity area, improves functionality
C-13	Mobility Hubs (to be completed with C-2 & C-3)	Citywide implementation of mobility hubs in coordination CET and HTC routes. Assumes up to 5 hubs.	\$5,000,000	\$5,000,000	Long	High Capacity Transit has significant impact on reducing local/regional VMT, provides service for underserved populations.
C-24	Study of at-grade railroad crossing solutions near Reed Market Road	Study the cost and feasibility of relocating the BNSF switchyards compared to a Reed Market Road overcrossing of the railroad.	\$200,000	\$200,000	Near	Improves safety at crossing, improves functionality, reduces negative social/economic impact.
CAP_T2 7	Greenwood Undercrossing Sidewalk Widening Improvements	Widen Parkway undercrossing to include improved multimodal facilities.	\$10,400,000	\$10,400,000	Near	Significantly improves ped/bike connectivity and safety, serves opportunity area, improves functionality
N-1a	Reed Market Road/US 97 Interchange improvement Study	Study at Reed Market Road/US 97 interchange.	\$500,000	\$500,000	Near	Over capacity in 2028, improves safety on key arterial, improves east-west connectivity, improves functionality.

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
N-13	Portland Avenue Corridor Project from College Way to 3 rd Street including improvements at Revere Avenue Interchange and Portland Avenue/Wall Street	Multi-modal transportation facility and safety improvements to help with pedestrian, bicycle, and vehicular connectivity.	\$26,200,000	\$26,200,000	Near	Over capacity in 2040, on LSN, significantly improves to ped/bike facilities, improved access to transit. Includes a segment of Key Route 3 (Portland College Way to Wall); Includes a segment of Key Route 10 (Wall Portland to Revere).
N-14	Improve Drake Park pedestrian bridge across the Deschutes River	Evaluate and repair/replace bridge to accommodate pedestrian and bicycle traffic.	\$1,275,000	\$1,275,000	Near	On LSN, encourages active modes, improves pedestrian connectivity
N-15a	Archie Briggs Road Bridge Replacement and Trail Crossing Improvement Design (Phase 1)	Design to improve pedestrian crossing at the Deschutes River Trail Crossing of Archie Briggs Road and replace Archie Briggs Road bridge. Phase 1 would construct trail crossing.	\$500,000	\$500,000	Near	Key motor vehicle connection in danger of failing structurally, river crossing, encourages active modes
N-17	Olney Protected Bicycle Lanes and Parkway Undercrossing	Provide protected bicycle lanes on Olney Avenue at Parkway undercrossing.	\$1,820,000	\$1,820,000	Near	On LSN and key routes, improves bicycle safety. Includes a segment of Key Route 3 (Olney Wall to RR).
N-24	Franklin Avenue Corridor Study	Conduct a corridor study to determine roadway and intersection improvement needs to serve all users.	\$200,000	\$200,000	Near	Improves pedestrian safety, improves access for bike/ped, encourages alternate modes
N-25	Olney Avenue/8th Street Intersection improvement	Improve intersection capacity.	\$3,700,000	\$3,700,000	Long	Improves safety, improves functionality
N-26	Revere Avenue/8th Street Intersection improvement	Improve intersection capacity.	\$3,700,000	\$3,700,000	Long	On LSN, improves ped/bike crossing opportunities
N-28	Butler Market Interchange Frontage Road at US 20/US97	Construct frontage road from US 97 southbound off-ramp to Division Street.	\$6,180,000	\$3,090,000	Long	Reduces congestion at US 20/Butler Market; improves connectivity for all users, improves safety, key connection to regional system. Includes a segment of Key Route 5 (coincides with limits of N-28).
R-6	Hawthorne Parkway Overcrossing	Close sidewalk gap along Hawthorne and create a grade-separated footbridge over BNSF RR and Hwy 97.	\$15,000,000	\$15,000,000	Near	On LSN and Key Route, critical east-west connection for ped/bike, improves bike/ped safety and connectivity, supports expansion/opportunity areas, supports neighborhood livability, improves equity of all users, encourages alternative modes. Includes all of Key Route 6.
R-7	3rd St at RR to Connect KorPine to 3rd St Key Route	Includes crossing improvements between RR & Wilson Avenue and RR & Franklin Avenue	\$620,000	\$620,000	Near	On LSN and Key Route 7, improves bike/ped safety and connectivity, supports expansion/opportunity areas, supports neighborhood livability, improves equity of all users, encourages alternative modes. Includes all of Key Route 7.
TSAP-1	Pettigrew Road & Bear Creek Road long term safety improvement	Construct single lane roundabout.	\$3,700,000	\$3,700,000	Near	On LSN and Key Route 2, improves safety, encourages alternate modes. Key Route 2 (on Bear Creek) crosses Purcell at this intersection.

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
TSAP-2	US 97 & Powers Road - Interim Improvements	Includes enhanced pedestrian crossings and exit ramp widening ¹⁶	\$100,000	\$100,000	Near	Improves safety, improves functionality, supports ODOT funded intersection improvements
TSAP-3a	3rd Street & Miller Avenue intersection improvements and 3rd Street modifications study (Phase 1)	Study of intersection improvements and 3rd Street modifications	\$100,000	\$100,000	Near	Improves safety, improves access, improves functionality. Specific preferred intersection improvement is not yet identified.
		Near-Term Total	\$273,583,000	\$159,873,000		
		Key Route Projects (Listed in Table 4b):		\$22,144,000		
		Total		\$182,170,000		

TSDC – Project is on current Transportation System Development Charge Project List (TSDC) and eligible for existing TSDC revenue

Core Area Urban Renewal Area – Project is within possible Core Area Urban Renewal Area and may be eligible for future funding from that area.

Murphy Crossing or Juniper Ridge Urban Renewal Area – Project is within existing urban renewal area and may be eligible for funding from that area.

TSDC and Urban Renewal Area – Project is on the current Transportation System Development Charge Project List and in one existing or proposed Urban Renewal Area.

¹⁶ Through ARTS funding is allocated for crosswalk treatments and illumination at US 97/Powers. The City is responsible for the cost of exit ramps. The cost estimate reflects the exit ramps only.

Table 4b: Recommended Near-term Key Routes*

Key Routes & Projects	Project Extents	Facility Type & Description	Cost Projection
ROUTE 1: Juniper Ridge to SE Elbow: Route runs north-south through the central portion of Bend connecting SE 15th Shared Use Path, 6th St Neighborhood Greenway, Boyd Acres Rd Shared Use Path			
R1-A	SE 9th St: Wilson Ave to Reed Market Rd	Shared use path adjacent to roadway: Close sidewalk gap and create low-stress bikeway.	\$720,000
R1-B	SE 9th St: Wilson Ave to Glenwood Ave	Buffered bike lane: Re-stripe roadway to include buffered bike lanes when roadway is repaved.	\$1,000
R1-C	NE Boyd Acres Rd: Butler Market Rd to Empire Ave	Shared use path adjacent to roadway: Close sidewalk gap and create low-stress bikeway.	\$1,250,000
R1-D	SE 15th Street: Reed Mkt Rd to 300' south of King Hezekiah	Shared use path adjacent to roadway: Convert an existing curb-tight sidewalk to a separated shared use path.	\$930,000
ROUTE 2: NW Crossing to new Affordable Housing: Route runs east-west connecting Skyliners Rd, Franklin Ave and Bear Creek Rd			
R2-A	NW Franklin Ave: Harriman Ave to RR undercrossing	Improve transition at Hill St: Project would manage the conflict between right turns and crosswalk to sidewalk under RR. Crosswalk: Create safe crossing of Franklin at Harriman.	\$1,000
R2-B	Franklin Ave Underpass: Hill St to 1st St	Shared use path adjacent to roadway: Widen sidewalk paths under RR and Hwy 97 to modernize design for roadside safety.	\$8,500,000
R2-C	Franklin Ave: 1st St to 5th St	Buffered bike lane: Re-stripe roadway to include buffered bike lane westbound; includes crosswalks at 2nd St & 4th St and signal timing enhancements at 3rd St.	\$1,000
R2-D	Bear Creek SRTS: Larkspur Trail to Coyner Trail	Trail: Close sidewalk gap and create a connection between Coyner and Larkspur Trail.	\$560,000
R2-E	Bear Creek Rd: Cessna Ave to east UGB	Shared use path adjacent to roadway: Close sidewalk gap and create low-stress bikeway extending to 170 new affordable housing units.	\$1,710,000
ROUTE 3: Shevlin Park to Big Sky Park: Route runs east-west connecting Shevlin Park Rd, Portland Ave, Olney Ave, and Neff Rd			
R3-A	Norton Ave: NE 6th St to NE 12th St	Neighborhood greenway: Create a low-stress bikeway on NE Norton Ave (SRTS3).	\$1,000
R3-B	Hillside Trail: Connects NE 12th to Neff Rd	Hillside path: Close sidewalk gap and create a switchback shared use path (SRTS); includes school zone enhancements.	\$190,000

Key Routes & Projects	Project Extents	Facility Type & Description	Cost Projection
R3-C	Neff Rd: NE 12th to Big Sky Park	Shared use path adjacent to roadway: Close sidewalk gaps and create a low-stress bikeway.	\$3,740,000
R3-D	Deschutes River Footbridge: Drake Park	Upgrade footbridge: Accessibility upgrades and widen to reduce user conflicts.	\$2,550,000
R3-E	Olney Avenue: Wall Street to railroad	Shared use path adjacent to roadway: close sidewalk gap over railroad and remove existing barrier to east-west bicycle connectivity and create right-turn hook crash countermeasure.	\$310,000
Route 6: Hawthorne Overcrossing: Core Area connectivity			
R6-A	Hawthorne Overcrossing Bridge: NE 1st St to NE 5th St	Grade separated overpass: Close sidewalk gap along Hawthorne and create a grade-separated footbridge over BNSF RR and Hwy 97.	Cost Captured in R-6
Route 12: Wilson Ave: Route runs east-west connecting neighborhoods to services and transit			
R12-A	Wilson Ave: 2nd Street to SE 9th Street	Shared use path adjacent to roadway: Close sidewalk gap along Wilson Avenue and create a low-stress bikeway.	\$930,000
R12-B	Wilson Avenue: 9th to 15th Street	Shared use path adjacent to roadway: Create a low-stress bikeway to connect near SE neighborhoods to Old Mill and Deschutes River Trail.	\$750,000

*Key Routes are shown in Figure 6.

Figure 3. Recommended Mid-term Priorities

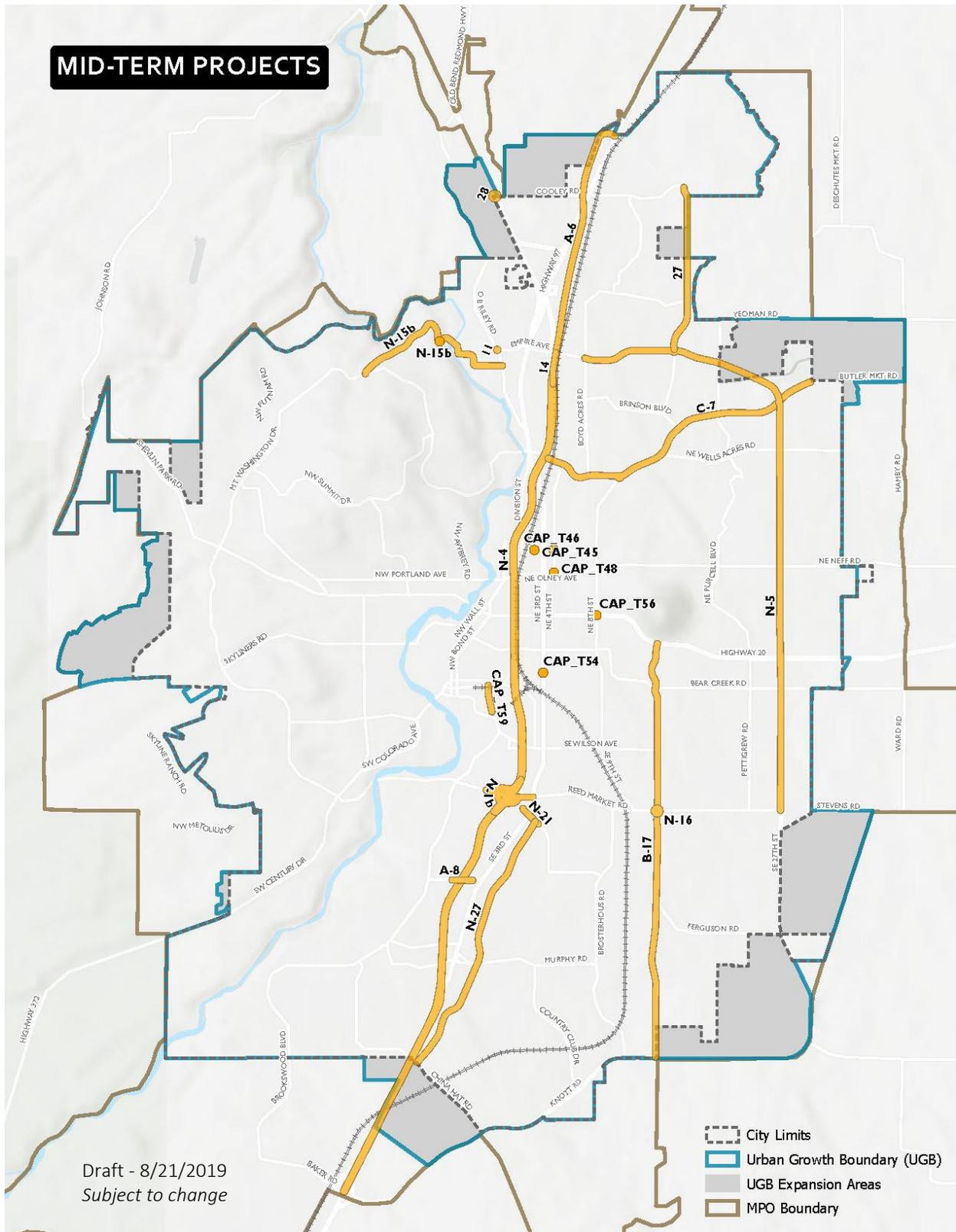


Table 5a: Recommended Mid-term Priorities

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
11	O.B. Riley Road intersection safety and capacity improvement	Improvements at key intersections such as Mervin Sampels, Archie Briggs Road, Halfway Road and Glen Vista/Hardy Road.	\$1,900,000	\$1,900,000	Long	Over capacity in 2040, on LSN, improves safety along corridor, supports expansion area, improves functionality of OB Riley, regional connection to county. Includes crossing for Key Route 10 across OB Riley.
14	US 97 / Empire Avenue northbound off ramp widening	US 97/Empire Avenue northbound off ramp widening to two lanes.	\$1,800,000	\$180,000	Long	Reduces potential for spill-back to US 97, supports regional connectivity.
27	18th Street Arterial Corridor upgrade from Cooley Road to Butler Market Road	Includes upgrade to three lane arterial.	\$7,800,000	\$7,800,000	Near	On LSN and key route, safety/capacity improvement, supports opportunity areas, improves functionality, parallel route to US 97. Includes a segment of Key Route 8 (18 th Egypt to Cooley) and runs parallel to Key Route 8 (Egypt to Yeoman) (include).
28	US 20 intersection safety and capacity improvements	From Robal Road to Old Bend-Redmond Hwy. Intersection control improvements to be determined	\$20,000,000	\$2,000,000	Long	Over capacity in 2040, intersection control will improve ped/bike crossing opportunities, supports expansion areas, key regional connection
A-6	US 97 North parkway extension (Phase 2; next phase of Project 13)	Includes remaining improvements in the US 97 Bend North Corridor Project FEIS after construction of initial phase.	\$200,000,000	\$20,000,000	Near	Provides congestion relief for a significant part of the Parkway. Includes ped/bike improvements to North 3rd Street. Improves access safety, supports expansion areas.
A-8	Powers Road interchange	Grade separated interchange or overcrossing of US 97 (pending Parkway Study).	\$20,000,000	\$2,000,000	Near	Over capacity on Powers in 2028, reduces bottleneck along Parkway, improves ped/bike crossing opportunities of the Parkway, improves safety, supports opportunity area, improved functionality, key regional connection
B-17	15th Street Corridor safety and capacity improvements	From US 20 to Reed Market Road. Includes roundabouts at key intersections, including Wilson Avenue, Ferguson Road, and Knott Road.	\$20,500,000	\$20,500,000	Long	On LSN and Key Route 1, improves safety, serves opportunity area, improves functionality and encourages alternative modes. Includes a segment of Key Route 1 (from SE 15 th Knott to Reed Market).
C-7	Butler Market Road intersection safety and capacity improvements	From US 97 to 27th Street. Includes roundabouts or traffic signals at 4th Street, Brinson Boulevard, and Purcell Boulevard. Wells Acres Road roundabout as a separate baseline project.	\$7,000,000	\$7,000,000	Near	Over capacity in 2028, on LSN and Key Route 5, improves safety, improves functionality. Includes a segment of Key Route 5 (Butler Market Parkway to Brinson).
CAP_T45	Revere Avenue/2 nd Street Intersection improvement	Improve intersection capacity.	\$210,000	\$210,000	Long	On LSN, improves safety, serves opportunity area, improves functionality
CAP_T46	Revere Avenue/4th Street Intersection improvement	Improve intersection capacity.	\$3,700,000	\$3,700,000	Long	On LSN, improves safety, serves opportunity area, improves functionality
CAP_T48	Olney Avenue/4th Street Intersection improvement	Improve intersection capacity.	\$3,700,000	\$3,700,000	Long	On LSN, improves safety, serves opportunity area, improves functionality
CAP_T54	Clay Avenue/3rd Street Intersection improvement	Improve intersection capacity.	\$210,000	\$210,000	Long	Improves safety, serves opportunity area, improves functionality
CAP_T56	Greenwood/8th Street Intersection improvement	Improve intersection capacity.	\$2,100,000	\$2,100,000	Long	Improves safety, serves opportunity area, improves functionality

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
CAP_T59	Sisemore Street Extension	Construct street extension from Arizona avenue to Bond Street.	\$2,400,000	\$2,400,000	Near	Improved connectivity for all users, reduces VMT, serves opportunity area, improves access
N-1b	Construct Reed Market Road/US 97 Interchange improvement	Construct improvement.	\$50,000,000	\$25,000,000	Near	Over capacity in 2028, improves safety on key arterial, improves east-west connectivity, improves functionality.
N-4	US 97 operational and safety management improvements (as identified in the Parkway Study) and associated City street improvements.	Includes elements of the Parkway Study not currently defined in the project list, such as improvements to implement ramp metering or other interchange improvements.	\$100,000,000	\$10,000,000	Near/Long	Improves safety, improves access to regional connection. This project would fund additional elements of the Parkway Plan not currently identified as a specific project.
N-5	Incremental mobility, reliability, and safety improvements to Empire Boulevard / 27th Street Corridor from Boyd Acres Road to Reed Market Road	Includes incremental approach for Empire Boulevard/27th Street widening, including right-of-way acquisition and monitoring for if/when widening is appropriate. Implement alternate mobility targets and identify smaller projects to incrementally improve mobility, reliability and safety. Includes complete streets upgrade.	\$41,800,000	\$41,800,000	Near	Over capacity in 2028, on LSN and Key Route 8, improves safety, supports expansion areas, improves functionality. Includes a segment of Key Route 8 (27 th Street/Reed Market Road to Forum).
N-15b	Archie Briggs Road Bridge Replacement and Trail Crossing Improvement Construction (Phase 2)	Construct pedestrian crossing improvement at the Deschutes River Trail Crossing of Archie Briggs Road and replace Archie Briggs Road bridge. Phase 2 would construct bridge replacement.	\$6,000,000	\$6,000,000	Near	Key motor vehicle connection in danger of failing structurally, river crossing, encourages active modes
N-16	Reed Market Road/15th Street intersection safety and capacity improvements	Includes expanding the partial multi-lane roundabout to a full multi-lane roundabout.	\$1,100,000	\$1,100,000	Near	Over capacity in 2040, on LSN (LSN crosses this intersection to connect to Key Route 1), key east-west connectivity
N-21	3rd Street Canal Crossing just south of 3rd Street/Brosterhous Road	Construct pedestrian facilities on 3rd Street across the canal bridge.	\$980,000	\$980,000	Long	On LSN, improves bike/ped safety, improves access for all modes, encourages alternate modes
N-27	Parrell Road Urban Upgrade from China Hat Road to Brosterhous Road	Construct complete street upgrades and reconstruct roadway from China Hat Road to Brosterhous Road including a roundabout at Chase Road and Powers Road (upon completion of Chase Road extension).	\$29,100,000	\$29,100,000	Near	On LSN and Key Route 9, improves bike/ped safety, improves access for all modes, encourages alternate modes. Includes much of Key Route 9 (Parrell China Hat to Brosterhous which coincides with complete limits of N-27)
		Mid-Term Total	\$520,300,000	\$187,680,000		
		Key Route Projects (Listed in Table 5b):		\$2,640,000		
		Total		\$190,320,000		

- TSDC – Project is on current Transportation System Development Charge Project List (TSDC) and eligible for existing TSDC revenue
- Core Area Urban Renewal Area – Project is within possible Core Area Urban Renewal Area and may be eligible for future funding from that area.
- Murphy Crossing or Juniper Ridge Urban Renewal Area – Project is within existing urban renewal area and may be eligible for funding from that area.
- TSDC and Urban Renewal Area – Project is on the current Transportation System Development Charge Project List and in one existing or proposed Urban Renewal Area.

Table 5b: Recommended Mid-term Key Routes*

Key Routes & Projects	Project Extents	Facility Type & Description	Cost Projection
Route 7: 3rd St at RR to Connect KorPine to 3rd St			
R7-A	3rd St	Crosswalk: Create a safe crossing of 3rd St between BNSF RR and Wilson Ave using RRFB5 and safety islands.	\$215,000
R7-B	3rd St	Crosswalk: Create a safe crossing of 3rd St between BNSF RR and Franklin Ave using RRFB and safety islands.	\$215,000
R-7C	3rd St	3rd Street Underpass: Near Term Enhancements to sidewalk.	\$190,000
Route 8: 27th St: Route runs north-south connecting neighborhoods to services and transit			
R8-A	27th St: Hwy 20 to Reed Mkt Rd	Shared use path adjacent to road: Close sidewalk gap along 27th Street and create a low-stress bikeway.	\$2,020,000
Route 9: Route runs north-south parallel to 3rd Street			
R9-A	Parrell Rd: Murphy Rd to Brosterhous Rd	Shared use path adjacent to road: Close sidewalk gap along Parrell Rd and create a low-stress bikeway on both sides of the street.	Costs captured in N-27

*Key Routes are shown in Figure 6.

Table 6a: Recommended Long-term Priorities

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
18	New North Frontage Road near Murphy Road	Improvements to be determined.	\$5,400,000	\$5,400,000	Long	On LSN and Key Route 10, increased connectivity for ped/bike/motor vehicle, improves livability for nearby residents. Includes segment of Key Route 10 (Frontage Murphy to Badger).
19	New South Frontage Road near Murphy Road	Improvements to be determined.	\$13,800,000	\$13,800,000	Near	On LSN and Key Route 10, increased connectivity for ped/bike/motor vehicle, improves livability for nearby residents. Includes segment of Key Route 10 (frontage Ponderosa to north of Romaine Village Way)
20	Britta Street extension (north section)	Includes two lane extension from Hardy Rad to Robal Road.	\$2,700,000	\$2,700,000	Long	On LSN and Key Route 10, increased connectivity for ped/bike/motor vehicle, supports expansion area, supports connectivity to school, reduces VMT, connects to regional network. Includes segment of Key Route 10 (Britta Robal to Hardy).
21	Britta Street extension (south section)	Includes two lane extension from Halfway Road to Ellie Lane.	\$1,000,000	\$1,000,000	Long	On LSN and Key Route 10, increased connectivity for ped/bike/motor vehicle, supports expansion area, supports connectivity to school, reduces VMT, connects to regional network. Includes a segment of Key Route 10 (Britta Halfway to Ellie).
23	Mervin Sampels Road / Sherman Road Collector Corridor upgrade	Includes upgrade to two lane collector roadway and a traffic signal at US 20 from O.B. Riley Road to Empire Boulevard.	\$6,100,000	\$6,100,000	Long	Under capacity in 2040, improves bike/ped conditions, not on LSN or key route, improved multimodal facilities, reduces business cut through supports nearby developments.
25	27th Street Arterial Corridor upgrade from Bear Creek Road to Ferguson Road	Includes upgrade to three lane arterial and intersection improvements at Ferguson Road	\$8,600,000	\$8,600,000	Long	On LSN and Key Route 8, improves intersection and multimodal safety, supports expansion areas, improved functionality, improved access to transit, improves key region route on eastside. Includes a segment of Key Route 8 (27 th Bear Creek to Ferguson).
A-3	Ponderosa Street / China Hat Road overcrossing	Vehicle, pedestrian and bicycle access over US 97 at Ponderosa Street/China Hat Road. Includes intersection improvement at Parrell Road/China Hat Road.	\$15,000,000	\$15,000,000	Long	Reduces congestion at China Hat/US 97, adds connectivity for ped/bikes and vehicles, key east-west connection, improves pedestrian safety, supports livability and equity for multimodal users (on LSN), encourages multimodal use.
B-29	3rd Street railroad undercrossing widening	Widen 3rd Street to 4-lanes under the railroad, including complete street design from Emerson Avenue to Miller Avenue.	\$13,700,000	\$13,700,000	Long	Over capacity in 2040, on LSN and Key Route 7, significantly improves existing bike/ped conditions, improves multimodal safety. Includes a segment of Key Route 7 (RR Underpass).
CAP_T47	Olney Avenue/2nd Street Intersection improvement	Improve intersection capacity.	\$210,000	\$210,000	Long	On LSN and Key Route 3, improves safety, serves opportunity area, improves functionality.
CAP_T49	Greenwood/2nd Street Intersection improvement	Improve intersection capacity.	\$210,000	\$210,000	Long	On LSN, improves safety, serves opportunity area, improves functionality.
CAP_T51	Hawthorne Avenue/3rd Street Intersection improvement	Improve intersection capacity.	\$210,000	\$210,000	Long	On LSN and Key Route 6, improves safety, serves opportunity area, improves functionality.
CAP_T52	Franklin Avenue/2nd Street Intersection improvement	Improve intersection capacity.	\$210,000	\$210,000	Long	On LSN and Key Route 2, improves safety, serves opportunity area, improves functionality.
CAP_T53	Franklin Avenue/4th Street Intersection improvement	Improve intersection capacity.	\$210,000	\$210,000	Long	On LSN and Key Route 2, improves safety, serves opportunity area, improves functionality.

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
N-9	Century Drive/Skyline Ranch Road roundabout	Address existing and future safety and operational needs at intersection; specific improvements to be evaluated in next phase of work.	\$3,700,000	\$3,700,000	Long	Under capacity in 2040, improves safety, improves roadway functionality. Provides critical crossing of high-speed Century Drive to access Key Route 4.
N-10	Mt. Washington Drive/Metolius Drive roundabout	Address existing and future safety and operational needs at intersection; specific improvements to be evaluated in next phase of work.	\$3,700,000	\$3,700,000	Long	Under capacity in 2040, improves safety, improves roadway functionality.
N-19	Eagle Road Functional Urban Upgrade	Classify roadway as Minor Collector from Neff Road to Butler Market Road and construct complete street upgrades.	\$14,500,000	\$14,500,000	Long	Significant ped/bike improvements, serves NE expansion area, improves functionality, reduces VMT.
N-29	US 97 Frontage Road	Construct frontage road from Ponderosa Street to Baker Road.	\$6,550,000	\$3,275,000	Long	On LSN, improves connectivity, supports regional connectivity.
N-30	US 20/27 th Street Intersection Improvement	Improve intersection capacity.	\$2,100,000	\$210,000	Long	Over capacity in 2040, on LSN and Key Route 8, improves functionality, supports regional connectivity.
TSAP-3b	3rd Street & Miller Avenue intersection improvements and 3rd Street modifications implementation (Phase 2)	Construct intersection improvements and 3rd Street modifications	\$3,100,000	\$3,100,000	Near	Improves safety, improves access, improves functionality. Specific preferred intersection improvement is not yet identified.
		Long-Term Total	\$101,000,000	\$95,835,000		
		Key Route Projects (Listed in Table 6b):		\$1,950,000		
		Total		\$97,785,000		

- TSDC – Project is on current Transportation System Development Charge Project List (TSDC) and eligible for existing TSDC revenue
- Core Area Urban Renewal Area – Project is within possible Core Area Urban Renewal Area and may be eligible for future funding from that area.
- Murphy Crossing or Juniper Ridge Urban Renewal Area – Project is within existing urban renewal area and may be eligible for funding from that area.
- TSDC and Urban Renewal Area – Project is on the current Transportation System Development Charge Project List and in one existing or proposed Urban Renewal Area.

Table 6b: Recommended Long-term Key Routes*

Key Routes & Projects	Project Extents	Facility Type & Description	Cost Projection
Route 4: West UGB to Portland Ave: Route runs north-south connecting Haul Rd Trail to 15th St Neighborhood Greenway			
SW-1	Newport Ave: NW College Way to NW 9th St	Sidewalks: Close sidewalk gap on Newport Ave and connect Newport Ave to 15th St neighborhood greenway	\$390,000
R4-A	NW 15th St: Lexington Ave to Milwaukie Ave	Hillside path: Close sidewalk gap and create a hillside switchback shared use path within the 15th St neighborhood greenway.	\$125,000
R4-B	NW 14th St: Ogden Ave to Portland Ave	Hillside path: Close sidewalk gap and create a hillside switchback shared use path within 14th St right-of-way to connect route to Portland Ave.	\$125,000
Route 5: Route runs along Butler Market Rd			
R5-A	Butler Market Rd: Brinson Blvd to NE 6th St	Shared use path adjacent to roadway: Close sidewalk gap along both sides of Butler Market Rd and create low-stress bikeway.	\$1,310,000

*Key Routes are shown in Figure 6.

Figure 5. Recommended Expansion Area Driven Projects

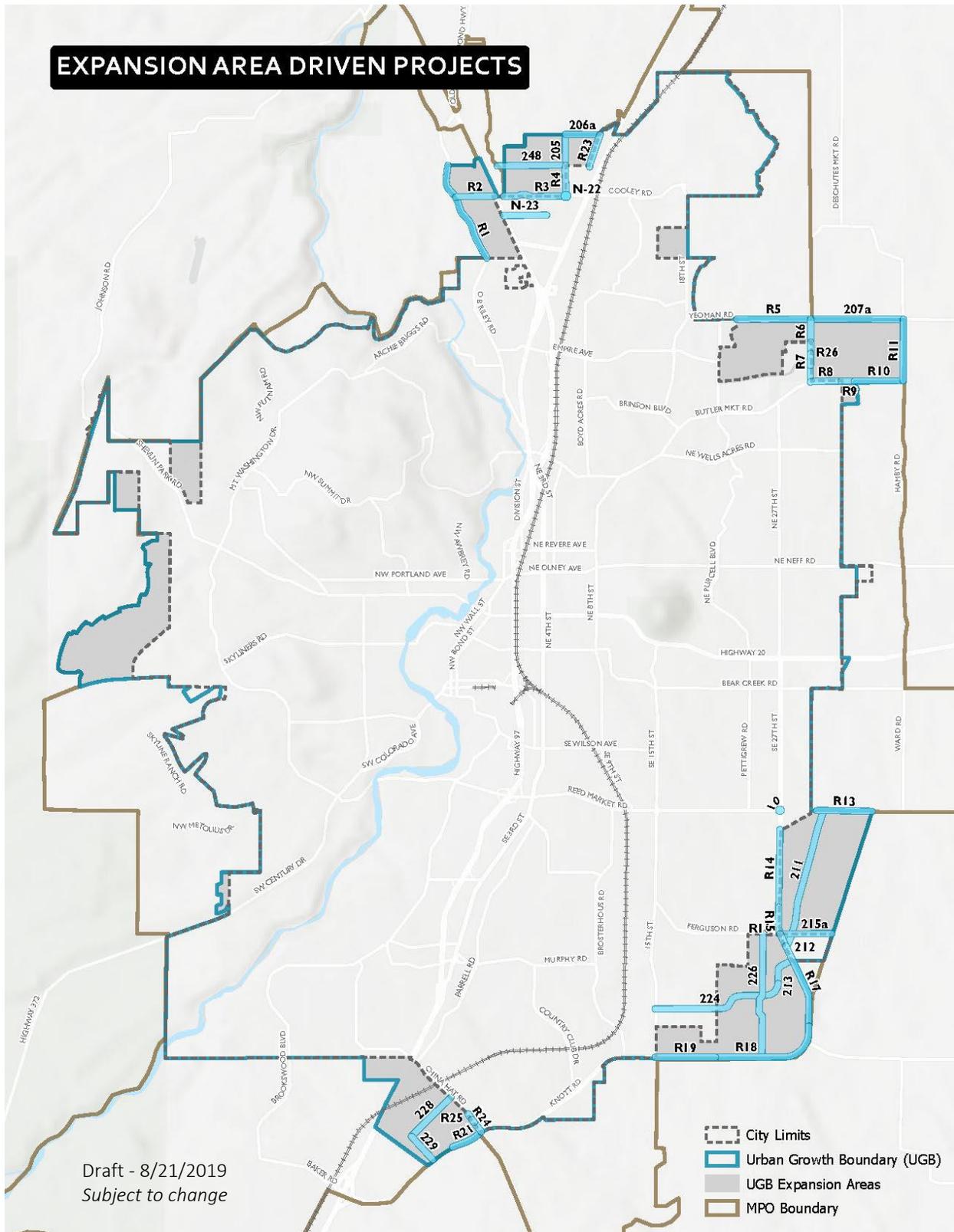


Table 7: Recommended Expansion Area Driven Projects

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
10	Stevens Road realignment	Includes connection to Reed Market Road and bridge to cross canal	\$4,700,000	\$4,700,000	Near	27 th Street over capacity in 2028, improves ped/bike connectivity; existing Stevens configuration on LSN, roadway alignment improves safety, supports DSL expansion area, reduces cut through, supports regional connectivity to county.
205	Hunnell Road extension	Construct a two lane collector roadway in the Triangle UGB expansion area.	\$2,400,000	\$2,400,000	Long	Improves connectivity for all users, supports expansion area, improves access, reduces VMT, connection to regional facility.
211	New Road in DSL UGB expansion area	Construct a two lane collector.	\$9,500,000	\$9,500,000	Long	On LSN, improves connectivity for all users, supports expansion area, improves access.
212	New Road in DSL UGB expansion area	Construct a two lane collector.	\$1,100,000	\$1,100,000	Long	On LSN, improves connectivity for all users, supports expansion area, improves access.
213	New Road in the Elbow UGB expansion area	Construct a two lane collector.	\$4,000,000	\$4,000,000	Near	On LSN and Key Route 8, supports expansion area, improves connectivity and access.
224	New Road in the Elbow UGB expansion area	Construct a two lane collector.	\$10,200,000	\$10,200,000	Long	Supports expansion area, improves connectivity and access.
226	New Road in the Elbow UGB expansion area	Construct a two lane collector.	\$7,100,000	\$7,100,000	Near	Supports expansion area, improves connectivity and access.
228	New Road in the Thumb UGB expansion area	Construct a two lane collector.	\$4,300,000	\$4,300,000	Near	Supports expansion area, improves connectivity and access.
229	New Road in the Thumb UGB expansion area	Construct a two lane collector.	\$2,500,000	\$2,500,000	Near	Supports expansion area, improves connectivity and access.
248	Loco Road extension	Construct a two lane collector.	\$5,300,000	\$5,300,000	Long	Supports expansion area, improves connectivity and access.
206a	New Road in Triangle UGB expansion area	Construct a two lane collector.	\$2,500,000	\$2,500,000	Long	Supports expansion area, improves connectivity and access.
207a	Yeoman Road extension from Deschutes Market Road to Hamehook Road	Construct a two lane collector.	\$10,900,000	\$10,900,000	Near	On LSN and Key Route 5, supports expansion area, improves connectivity and access, reduces VMT. Includes a segment of Key Route 5 (Yeoman (east of Deschutes to Hamehook)).
214b	New Road in the southeast UGB	Construct a two lane collector.	\$4,500,000	\$4,500,000	Near	Supports expansion area, improves connectivity and access.
215a	New Road in DSL UGB expansion area	Construct a two lane collector.	\$3,900,000	\$3,900,000	Long	On LSN and supports expansion area, improves connectivity and access.

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
N-18	Projects of Regional Significance from Subarea Planning Efforts	Subarea planning efforts will identify infrastructure needs to serve Opportunity and Expansion Areas, which are key development areas for the City. Projects that result should be added to the 2040 project list as necessary.	TBD	TBD	Long	Improves local and regional connectivity.
N-22	Cooley Road/Hunnell Road Intersection Improvement	Add intersection improvement at Cooley/Hunnell to Cooley Road.	\$3,700,000	\$3,700,000	Long	Under capacity 2040, improves ped/bike crossing conditions, on LSN, improves functionality.
N-23	Collector between US20 and Hunell Rd	Construct new collector between US 20 and Hunnell Road. Road would be south of Cooley road and north of Robal Road.	\$4,000,000	\$4,000,000	Long	Reduces congestion at US 20/Cooley Road, serves opportunity area, improves network connectivity, connects two regional facilities (US97 & OR20).
R1	O.B. Riley Road rural Road upgrade from Hardy Rd to Cooley Rd	Includes curb and sidewalk on east side, bike lanes both directions.	\$2,400,000	\$2,400,000	Near	On LSN and Key Route 10, improves pedestrian safety, supports expansion area, improves functionality, regional connection to county. Includes a segment of Key Route 10 (OB Riley North UGB Limit to Robal extension).
R2	Cooley Road rural Road upgrade from O.B. Riley Road to US 20	Includes curbs, sidewalks and bike lanes both directions.	\$1,300,000	\$1,300,000	Near	On LSN, improves pedestrian safety, supports expansion area, improves functionality, supports regional connectivity
R3	Cooley Road rural Road upgrade from US 20 to Hunnell Road	Includes curb and sidewalk on north side, bike lanes both directions, and an intersection improvement at Cooley Road/Hunnell Road.	\$1,100,000	\$1,100,000	Long	Under capacity in 2040, on LSN, improves pedestrian safety, supports expansion area, improves functionality, supports regional connectivity
R4	Hunnell Road rural Road upgrade from Cooley Road to Loco Road	Includes sidewalk on west side of Hunnell Road.	\$200,000	\$200,000	Long	Improves pedestrian safety, supports expansion area, improves functionality.
R5	Yeoman Road rural Road upgrade from western terminus to Deschutes Market Road	Includes curbs, sidewalks and bike lanes both directions.	\$2,500,000	\$2,500,000	Near	On LSN and key route, improves pedestrian safety, supports expansion area, improves functionality.
R6	Deschutes Market Road rural Road upgrade from Yeoman Road to canal	Includes curb and sidewalk on east side, bike lanes both directions.	\$500,000	\$500,000	Long	Improves pedestrian safety, supports expansion area, improves functionality.
R7	Deschutes Market Road rural Road upgrade from canal to Butler Market Road	Includes curb and sidewalk on east side of Deschutes Market Road.	\$400,000	\$400,000	Long	Improves pedestrian safety, supports expansion area, improves functionality.
R8	Butler Market Road rural Road upgrade from Deschutes Market Road to Eagle Road	Includes curb and sidewalk on north side of Butler Market Road.	\$300,000	\$300,000	Near	Improves pedestrian safety, supports expansion area, improves functionality.
R9	Butler Market Road rural Road upgrade from Eagle Road to Clyde Lane	Includes curbs, sidewalks and bike lanes for both directions on Butler Market Road.	\$400,000	\$400,000	Near	On LSN, improves pedestrian safety, supports expansion area, improves functionality.
R10	Butler Market Road rural Road upgrade from Clyde Lane to Hamby Road	Includes curb and sidewalk on north side, bike lanes for both directions on Butler Market Road.	\$1,100,000	\$1,100,000	Near	On LSN, improves pedestrian safety, supports expansion area, improves functionality.

Project ID	Project	Description/ Location	Total Cost	City Proportionate Cost	Addresses Near or Long Term Capacity Need	Notes
R11	Butler Market Road rural Road upgrade from Hamby Road to Hamhook Road	Includes curbs and sidewalks on both sides of Butler Market Road.	\$1,100,000	\$1,100,000	Long	On LSN, Improves pedestrian safety, supports expansion area, improves functionality.
R13	Stevens Road rural Road upgrade from Stevens realignment to Bend UGB boundary	Includes curbs, sidewalks and bike lanes for both directions of Stevens Road.	\$1,900,000	\$1,900,000	Long	Improves pedestrian safety, supports expansion area, improves functionality.
R14	SE 27th Street rural Road upgrade from Stevens Road to Ferguson Road	Includes curb, sidewalk, and bike lane on east side of 27 th Street.	\$1,300,000	\$1,300,000	Near	On LSN, improves pedestrian safety, supports expansion area, improves functionality.
R15	SE 27th Street rural Road upgrade from Ferguson Road to Diamondback Lane	Includes curb and sidewalk on east side, bike lanes for both directions on 27 th Street.	\$600,000	\$600,000	Near	On LSN, improves pedestrian safety, supports expansion area, improves functionality.
R16	SE 27th Street rural Road upgrade from Diamondback Lane to access road	Includes curb and sidewalk on east side of 27 th Street.	\$100,000	\$100,000	Long	On LSN, improves pedestrian safety, supports expansion area, improves functionality.
R17	SE 27th Street rural Road upgrade from access road to Knott Road	Includes curbs and sidewalks on both sides of 27 th Street.	\$1,300,000	\$1,300,000	Long	On LSN, improves pedestrian safety, supports expansion area, improves functionality.
R18	Knott Road rural Road upgrade from 15 th Street to Raintree Court	Includes curbs, sidewalks and bike lanes for both directions on Knott Road.	\$500,000	\$500,000	Near	On LSN, improves pedestrian safety, supports expansion area, improves functionality.
R19	Knott Road rural Road upgrade from Raintree Court to SE 27 th Street	Includes curbs, sidewalks and bike lanes for both directions on Knott Road.	\$5,500,000	\$5,500,000	Near	On LSN, improves pedestrian safety, supports expansion area, improves functionality.
R21	Knott Road rural Road upgrade south of China Hat Road	Includes curb and sidewalk on north side of Knott Road.	\$300,000	\$300,000	Long	Improves pedestrian safety, supports expansion area, improves functionality.
R23	Clausen Drive rural Road upgrade from Loco Road to northern terminus	Includes sidewalk on west side of Clausen Drive.	\$200,000	\$200,000	Long	Improves pedestrian safety, supports expansion area, improves functionality.
R24	China Hat Road rural Road upgrade north of Knott Road	Includes sidewalks on both sides of China Hat Road.	\$200,000	\$200,000	Long	On LSN, improves pedestrian safety, supports expansion area, improves functionality, supports regional connectivity.
R25	China Hat Road canal bridge widening	Widen bridge to include sidewalk on both sides of China Hat Road.	\$400,000	\$400,000	Long	Improves pedestrian safety, supports expansion area, improves functionality, supports regional connectivity.
R26	Deschutes Market Road canal bridge widening	Widen bridge to include sidewalk on west side of Deschutes Market Road.	\$400,000	\$400,000	Long	Improves multimodal facilities.
Expansion Area Driven Total		\$104,600,000	\$104,600,000			

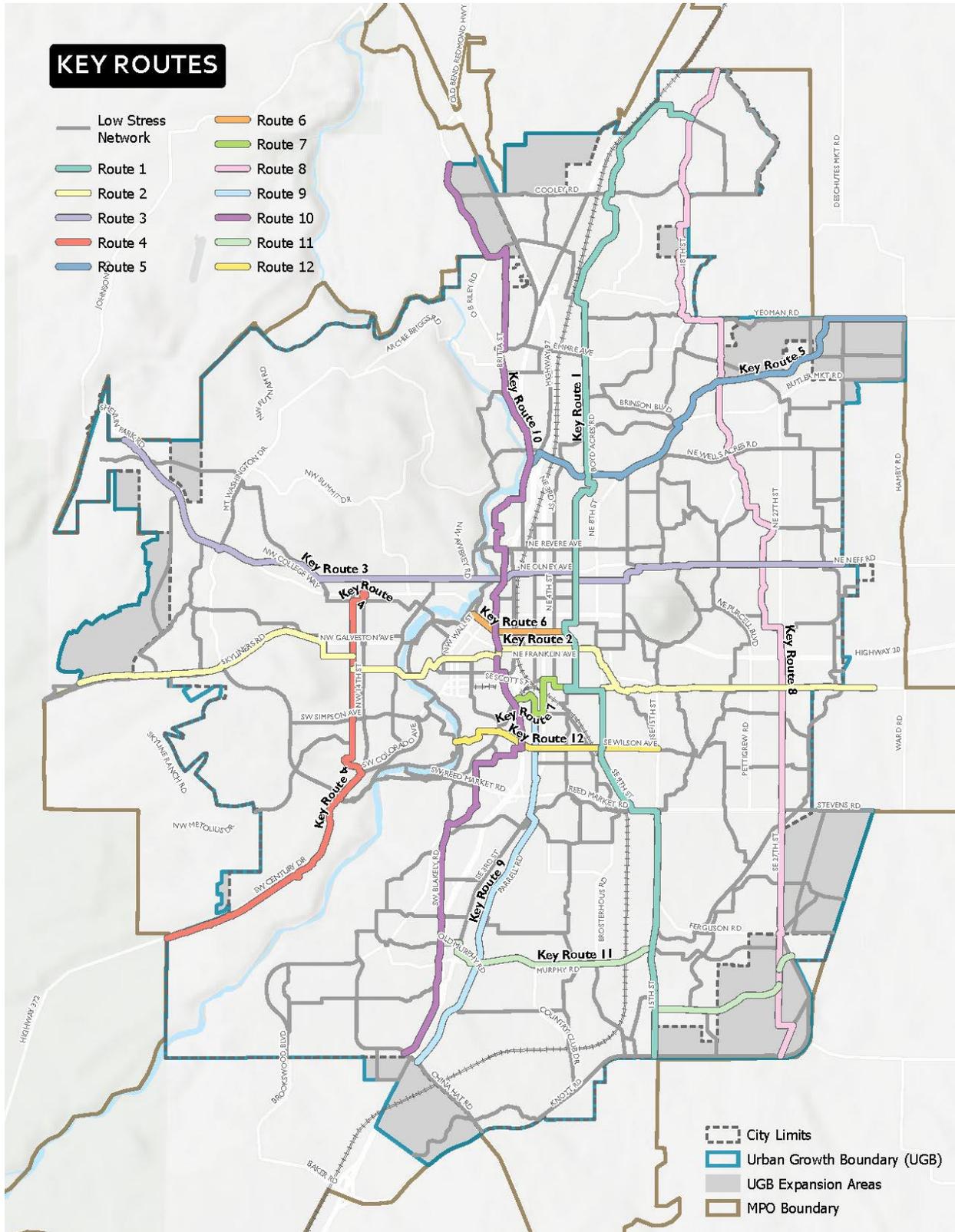
TSDC – Project is on current Transportation System Development Charge Project List (TSDC) and eligible for existing TSDC revenue

Core Area Urban Renewal Area – Project is within possible Core Area Urban Renewal Area and may be eligible for future funding from that area.

Murphy Crossing or Juniper Ridge Urban Renewal Area – Project is within existing urban renewal area and may be eligible for funding from that area.

TSDC and Urban Renewal Area – Project is on the current Transportation System Development Charge Project List and in one existing or proposed Urban Renewal Area.

Figure 6. Key Routes



Appendix A: Bend TSP Goals & Objectives



Bend's Transportation Plan Goals

Approved by the Steering Committee on September 11, 2018

Goal Definition

Bend's Transportation Plan Goals define the community's desired outcomes for the transportation system. The Goals will shape the policies and actions in the Plan, and guide the projects and programs that carry out the Plan.

Preamble

The Goals articulated in this document were developed by the Citywide Transportation Advisory Committee (CTAC) after consideration and review of the City Council's articulated goals for CTAC, and through an extensive CTAC-led process of identifying issues and potential solutions from stakeholders in our regional and city transportation systems. CTAC recognizes that the Goals as drafted are not necessarily comprehensive. CTAC acknowledges that there may be additional issues and solutions that should be considered as the project moves forward and CTAC membership learns more about our transportation system, funding options, community interests, and solutions implemented by other jurisdictions. It is the express intent of CTAC through the adoption of the draft Goals that no issue, policy, solution or project should be excluded from CTAC deliberations and recommendations, regardless of whether the issue, policy, solution or project is specifically identified in the current CTAC-adopted draft Goal.

Goals

Increase System Capacity, Quality, and Connectivity for All Users (e.g. drivers, walkers, bicyclists, transit riders, mobility device users, commercial vehicles, and other forms of transportation)

- Increase route choices and connections for all users
 - Roads: increase capacity and efficiency
 - Sidewalks: increase access and connectivity
 - Bicycle facilities: increase total miles of bike routes/facilities
 - Transit: increase transit participation
- Use technology to enhance system performance, including accessible technology (i.e. audible signals)
- Increase the number of people who walk, ride a bike and/or take transit
- Provide reliable travel times for commuters, emergency vehicles, and commercial users
- Minimize congestion
- Reduce vehicle operating and maintenance costs due to poor pavement conditions
- Emphasize asset management

Ensure Safety for All Users

- Reduce serious injuries and fatalities
- Maximize safe routes within and between neighborhoods and throughout the community for all users
- Design and build facilities and routes that maximize safety for pedestrians and bicyclists
- Ensure safe speeds

Approved by Steering Committee – September 11, 2018

Facilitate Housing Supply, Job Creation, and Economic Development to Meet Demand/Growth

- Build new roads and upgrade existing roads to serve areas targeted for growth (prioritized opportunity and expansion areas) and job creation
- Provide access and connectivity to expanded housing supply
- Improve connectivity and route choices for commercial users

Protect Livability and Ensure Equity and Access

- Incorporate a complete streets approach for all new road projects and road reconstruction
- Increase Safe Routes to Schools
- Ensure that all income levels and abilities have access to the transportation option that best meets their needs
- Encourage the use of roads for their stated classification
- Keep through freight traffic on ODOT facilities

Steward the Environment

- Minimize the impacts of transportation system on natural features
- Minimize the impacts of system on air and water quality and noise
- Reduce carbon emissions from transportation

Have a Regional Outlook and Future Focus

- Coordinate and partner with other public and private capital improvement projects and local/regional planning initiatives
- Create a system that is designed to implement innovative and emerging transportation technologies

Implement a Comprehensive Funding and Implementation Plan

- Identify stable, equitable, adequate and achievable funding for transportation programs and projects
- Ensure that the financial plan and investment priorities are transparent, understandable, and broadly supported by the community
- Produce a funding plan that includes contributions from residents, visitors, and businesses and that delivers benefits to all users and geographies equitably and in a timely manner
- Include performance measures/benchmarks and a formal process to periodically assess progress to-date and adjust or update the plan as needed
- Achieve financial stability

Appendix B: Criteria Evaluation Results

Program	Description	Type	Reduces Congestion/Bottlenecks	Street	Transit	Bicycle	Pedestrian	Reliability	Near/ Long Term Capacity Need	Capacity Notes	Sub Total	Ensure Safety for All Users	Facilitate Housing, Job Creation, Econ Dev	Livability	Equity	Steward the Environment	Regional Outlook	Ave	Notes	TSDC List?	Urban Renew Area?	Prioritization Recommendation	Cost Estimate	City Proportion	City Proportion Cost Estimate	
C-16	TDM Program for major employers and institutions	Program		N/A	N/A	N/A	N/A	N/A	Long	Fewer vehicle trips to TDM areas		N/A							supports economic growth, supports livability and equity, reduces VMT, future technology opportunity	No	No	Near-term	TBD	100%	TBD	
C-19	Traffic Signal Coordination improvements along signalized corridors, including freight and transit Signal Priority	Program		N/A		N/A	N/A		Near	N/A		N/A	N/A						supports transit, reduces VMT, future technology opportunity	No	No	Near-term	TBD	100%	TBD	
C-20	Parking pricing and management in downtown Bend	Program		N/A	N/A	N/A	N/A	N/A	Long	Fewer vehicle trips downtown		N/A	N/A				N/A		improves livability, encourages alternate modes	No	Yes	Near-term	TBD	100%	TBD	
N-7	Transportation safety Action Plan (TSAP) implementation	Program		N/A	N/A	N/A	N/A	N/A	Near	Need to address near term safety needs	N/A		N/A			N/A	N/A		improves safety for pedestrians, encourages alternate modes	No	No	Near-term	TBD	100%	TBD	
T-1	Address Capital Needs backlog to maintain a state of Good Repair	Program			N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A			N/A	N/A		improves safety for pedestrians, encourages alternate modes	No	No	Near-term	TBD	100%	TBD	
T-10	Pedestrian Program	Program		N/A	N/A		N/A	N/A	N/A	N/A							N/A		improves safety for pedestrians, encourages alternate modes	No	No	Near-term	TBD	100%	TBD	
T-11	Bicycle Program	Program		N/A	N/A	N/A		N/A	N/A	N/A							N/A		improves safety for pedestrians, encourages alternate modes	No	No	Near-term	TBD	100%	TBD	
T-5	Bicycle and Pedestrian facility maintenance Program	Program		N/A	N/A	N/A		N/A	N/A	N/A			N/A				N/A		improves safety for pedestrians, encourages alternate modes	No	No	Near-term	TBD	100%	TBD	
Near Term																										
8	Empire Avenue widening to five lanes	Roadway Safety/Capacity		N/A	N/A				Near	Empire over capacity in 2040. Signal improves pedestrian/bike crossing opportunities. On LSN; Approaching capacity in interim scenario.									improves safety, supports NE expansion area and surrounding economic area, provides additional capacity for key arterial, partner with ODOT	Yes	No	Near-term	\$ 2,900,000	50%	\$ 1,450,000	
13	US 97 North parkway extension (phase 1)	Roadway Safety/Capacity		N/A	N/A	N/A	N/A		Near	Over capacity in 2040; On unreliable corridor; improves congestion in interim scenario									improves safety, supports north triangle expansion area, improves functionality, reduces emissions, supports region	No	No	Near-term	\$ 110,000,000	10%	\$ 11,000,000	
15	Powers Road / US 97 preliminary engineering and ROW acquisition for Interchange	Roadway Safety/Capacity		N/A	N/A				Near	Same score as Project A-8									improved safety, supports COID opportunity area, improved functionality, reduces emissions, key regional connection on ODOT facility	No	No	Near-term	\$ 6,500,000	10%	\$ 650,000	
17	Yeoman Road extension	Complete Street (All Modes)			N/A				Near	Increased connectivity for pedestrian/bike/motor vehicle. Extension part of key walking and biking network. Significant traffic demand in 2040 and interim scenario.							N/A	N/A	serves NE expansion area, improves functionality of network, reduces VMT	No	No	Near-term	\$ 5,000,000	100%	\$ 5,000,000	
22	Purcell Boulevard extension	Complete Street (All Modes)			N/A				Near	Reduces demand on 27th Street. Increased connectivity for pedestrian/bike/motor vehicle. Extension part of key walking and biking network. Significant demand in 2040 and interim scenario.								N/A	access to new housing developments, improves regional connectivity, reduces VMT	No	No	Near-term	\$ 2,288,000	100%	\$ 2,288,000	
24	O.B. Riley Road Arterial Corridor upgrade	Complete Street (All Modes)		N/A	N/A				Near	Improve pedestrian/bike conditions, on key walking and biking route.									multimodal improvements, supports OB Riley expansion area, improves functionality, connection to county	No	No	Near-term	\$ 6,700,000	100%	\$ 6,700,000	
26	US 97 northbound on ramp and southbound off ramp at Murphy Road	Roadway Safety/Capacity			N/A	N/A	N/A		Near	Improves the congestion bottleneck at Powers/US 97									improves connectivity of south Bend, reduces VMT, key connection to ODOT facility	No	Yes, Murphy	Near-term	\$ 10,000,000	100%	\$ 10,000,000	
29	US 20 southbound Roadway widening	Roadway Safety/Capacity		N/A	N/A	N/A	N/A		Near	Over capacity in 2040 as single lane on US 20; Improves capacity on unreliable corridor; Over capacity in interim scenario as single lane									improves safety, supports OB Riley and North Triangle expansion area, key regional connection on ODOT facility	No	Yes, JR	Near-term	\$ 4,800,000	100%	\$ 4,800,000	
1TCSI	Citywide safety improvements	Roadway Safety/Capacity		N/A	N/A	N/A	N/A	N/A	Near	N/A	N/A		N/A						safety improvements, improves livability and access for all users, may encourage alternative modes, ODOT facility intersections	No	Yes, Core	Near-term	\$ 1,000,000	100%	\$ 1,000,000	
1TGI	Galveston Corridor improvements	Roadway Safety/Capacity		N/A	N/A	N/A			Near	Not on key walking and biking routes or LSN. Near term due to stormwater deficiencies									multimodal safety improvements, improved functionality for all, improved access to transit, may encourage alternative modes	No	No	Near-term	\$ 3,900,000	100%	\$ 3,900,000	
A-17	Aune Road extension	Complete Street (All Modes)			N/A				Long	Under capacity in 2040; Adds connectivity in KorPine area, including to the bike and pedestrian network. Significant traffic demand in 2040.		N/A							serves korpine opportunity area, improves local connectivity, improves access, reduces VMT	No	Yes, Core	Near-term	\$ 13,500,000	100%	\$ 13,500,000	
A-4	Study for southern river crossing	Complete Street (All Modes)			N/A				Near	Near term because bridges are all over capacity by the interim scenario.		N/A							improves connectivity of south Bend, supports COID and River Rim opportunity area, supports disparity of river crossing for southern residents, reduces VMT, key connection	No	No	Near-term	\$ 500,000	100%	\$ 500,000	
B-8	Colorado Avenue corridor capacity improvements	Roadway Safety/Capacity		N/A	N/A	N/A	N/A		Near	Improves capacity at both ends of the bridge. Still over capacity along Colorado south of the bridge; Not on key walking and biking route; on LSN; Over capacity in interim scenario; on unreliable corridor									improves safety, serves Central Westside opportunity area, improves functionality	Yes	No	Near-term	\$ 21,000,000	100%	\$ 21,000,000	
C-13	Mobility Hubs	CTAC Recomm.		N/A	N/A				Long	N/A		N/A							improves connectivity for all users, reduces disparities, improves transit amenities, reduces VMT, supports future infrastructure	No	No	Near-term	\$ 5,000,000	100%	\$ 5,000,000	
C-2	Newport Avenue / Greenwood Avenue corridor high-capacity transit and mobility hubs	Transit		N/A					Long	N/A		N/A							improves access to transit, reduces VMT, provides service for underserved	No	Yes, Core	Near-term	\$ 1,000,000	100%	\$ 1,000,000	
C-24	Study of at-grade railroad crossing solutions near Reed Market Road	Complete Street (All Modes)		N/A	N/A	N/A	N/A		Near	N/A			N/A	N/A	N/A				improves safety at crossing, improves functionality, reduces negative social/economic impact, regional BNSF facility	No	No	Near-term	\$ 200,000	100%	\$ 200,000	
C-3	3rd Street corridor high-capacity transit and mobility hubs	Transit		N/A					Long	N/A		N/A							improves access to transit, reduces VMT, provides service for underserved	No	Yes, Core	Near-term	\$ 1,000,000	100%	\$ 1,000,000	
C-9	Colorado Avenue / US 97 Northbound ramp intersection safety and capacity improvements	Roadway Safety/Capacity		N/A	N/A				Near	Over capacity in 2040; improves pedestrian/bike crossing opportunities; not on LSN or key walking and biking route; over capacity in interim scenario									improves safety, serves Korpine opportunity area, improves functionality, regional connection to ODOT facility	No	Yes, Core	Near-term	\$ 4,300,000	10%	\$ 430,000	

		Description	Type	Reduces Congestion/Bottlenecks	Street	Transit	Bicycle	Pedestrian	Reliability	Near/ Long Term Capacity Need	Capacity Notes	Sub Total	Ensure Safety for All Users	Facilitate Housing, Job Creation, Econ Dev	Livability	Equity	Steward the Environment	Regional Outlook	Ave	Notes	TSDC List?	Urban Renew Area?	Prioritization Recommendation	Cost Estimate	City Proportion	City Proportion Cost Estimate																				
Mid-Term																																														
11	O.B. Riley Road intersection safety and capacity improvement	Improvements at key intersections such as Mervin Sampels, Archie Briggs Road, Halfway Road and Glen Vista/Hardy Road	Roadway Safety/Capacity	●	N/A	N/A	●	●	N/A	Long	Over capacity in 2040 near Empire/Archi Briggs. Key walking and biking route. Improves pedestrian/bike crossing opportunities of O.B. Riley; under capacity in interim scenario	●	●	●	○	○	N/A	●	●	Improves safety at intersections, supports OB Riley expansion area, improves functionality of OB Riley, regional connection to county	No	No	Mid-term	\$ 1,900,000	100%	\$ 1,900,000																				
14	US 97 / Empire Avenue northbound off ramp widening	US 97/Empire Avenue northbound off ramp widening to two lanes	Roadway Safety/Capacity	●	N/A	N/A	N/A	N/A	N/A	Long	Under capacity in 2040 (w/ ramp meters). Significant traffic demand in 2040 and interim scenario.	●	●	○	●	N/A	○	●	●	reduces potential for spill back to US 97, supports regional connectivity on ODOT facility	Yes	No	Mid-term	\$ 1,800,000	10%	\$ 180,000																				
27	18th Street Arterial Corridor upgrade	Includes upgrade to three lane arterial	Roadway Safety/Capacity	●	N/A	N/A	●	●	N/A	Near	Under capacity in 2040. Bike lanes exist today.	●	●	●	○	○	○	●	●	safety/capacity improvement, supports NE expansion area and juniper ridge opportunity area, improves functionality, parallel route to US 97	Yes	No	Mid-term	\$ 7,800,000	100%	\$ 7,800,000																				
28	US 20 intersection safety and capacity improvements	Intersection control improvements to be determined.	Roadway Safety/Capacity	●	N/A	N/A	●	●	●	Long	Over capacity in 2040; Intersection control will improve pedestrian/bike crossing opportunities; Not on key walking and biking route, on LSN; on unreliable corridor; Under capacity in interim scenario.	●	●	●	○	○	N/A	●	●	improves safety, supports OB Riley and North Triangle expansion area, key regional connection on ODOT facility	No	No	Mid-term	\$ 20,000,000	10%	\$ 2,000,000																				
A-6	US 97 North parkway extension (phase 2)	Includes all improvements in the US 97 Bend North Corridor Project FEIS	Roadway Safety/Capacity	●	●	N/A	●	●	●	Near	Provides congestion relief for a significant part of the Parkway. Adds additional street network with significant traffic demand in 2040 and interim scenario. Includes pedestrian/bike improvements to North 3rd Street.	●	●	●	●	○	N/A	●	●	improves safety and capacity of northend, serves opportunity area, improves livability of northend, improves access safety, regional connection on ODOT facility	No	No	Mid-term	\$ 200,000,000	10%	\$ 20,000,000																				
A-8	Powers Road Interchange	Grade separated interchange or overcrossing of US 97 (pending Parkway Study)	Roadway Safety/Capacity	●	N/A	N/A	●	●	●	Near	Reduces bottleneck along Parkway; Improves pedestrian/cyclist crossing opportunities of the Parkway; on unreliable corridor; Over capacity on Powers in interim scenario	●	●	●	○	○	○	●	●	improved safety at intersection, serves COID & River Rim opportunity areas, improves functionality, reduces emissions, regional connection on ODOT facility	No	No	Mid-term	\$ 20,000,000	10%	\$ 2,000,000																				
B-17	15th Street Corridor safety and capacity improvements	Includes roundabouts at key intersections, including Wilson Avenue, Ferguson Road, and Knott Road.	Roadway Safety/Capacity	●	N/A	N/A	●	●	●	Long	Ferguson nearing capacity in 2040; on key walking and biking route; under capacity in interim scenario	●	●	●	●	○	○	○	N/A	●	Yes	No	Mid-term	\$ 20,500,000	100%	\$ 20,500,000																				
C-7	Butler Market Road intersection safety and capacity improvements	US97 to 27th St. Includes roundabouts or traffic signals at 4th Street, Brinson Boulevard, and Purcell Boulevard. Wells Acres Road roundabout as a separate baseline project.	Roadway Safety/Capacity	●	N/A	N/A	●	●	●	Near	Over capacity in 2040; partially on key walking and biking route; on unreliable corridor; over capacity in interim scenario	●	●	○	○	○	N/A	N/A	○	improves safety, improves functionality	Yes	No	Mid-term	\$ 7,000,000	100%	\$ 7,000,000																				
CAP_T45	Revere Avenue/2nd Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	N/A	N/A	N/A	Long	Under capacity 2040; not on key walking and biking network; on LSN	●	●	●	○	○	N/A	○	○	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Mid-term	\$ 210,000	100%	\$ 210,000																				
CAP_T46	Revere Avenue/4th Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	●	●	N/A	Long	Under capacity 2040; not on key walking and biking network; on LSN; All way stop control to roundabout/signal improves pedestrian/bike crossing opportunities	●	●	●	○	○	N/A	○	○	improves safety, serves Bend Central District opportunity area, improves functionality	Yes	Yes, Core	Mid-term	\$ 3,700,000	100%	\$ 3,700,000																				
CAP_T48	Onley Avenue/4th Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	●	●	N/A	Long	Under capacity 2040; On key walking and biking network	●	●	●	○	○	N/A	○	○	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Mid-term	\$ 3,700,000	100%	\$ 3,700,000																				
CAP_T54	Clay Avenue/3rd Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	N/A	N/A	N/A	Long	Over capacity in 2040 without 3rd Street widening; On key walking and biking network; Under capacity in interim scenario.	●	●	●	○	○	N/A	○	○	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Mid-term	\$ 210,000	100%	\$ 210,000																				
CAP_T56	Greenwood/8th Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	○	○	○	Long	Over capacity 2040, under capacity in interim scenario; on unreliable corridor	●	●	●	○	○	N/A	○	○	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Mid-term	\$ 2,100,000	100%	\$ 2,100,000																				
CAP_T59	Sisemore Street Extension	Arizona Avenue to Bond Street. Construct street extension	Core Area Project Recommendation	●	N/A	●	●	●	N/A	Near	Adds connectivity in KorPine area, for bike/pedestrian/motor vehicle. Significant traffic demand in 2040; not on key walking and biking route	●	○	●	○	○	○	○	○	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Mid-term	\$ 2,400,000	100%	\$ 2,400,000																				
N-4	US 97 operational and safety management improvements and associated City street improvements	Includes potential recommended Parkway Plan projects such as RI/RO Access Modifications/Closures, Ramp Meters, Butler Market Interchange Improvements, Revere Ave Lane Re-allocation, US 97 Auxiliary Lanes, Baker/Knott interchange ramp terminal improvements, etc.	Roadway Safety/Capacity	●	N/A	N/A	N/A	N/A	●	Near/Long	N/A	●	●	○	○	○	N/A	○	○	improves safety, ODOT facility	No	No	Mid-term	\$ 100,000,000	10%	\$ 10,000,000																				
N-5	Empire Boulevard / 27th Street Corridor capacity improvements	Includes incremental approach for Empire Boulevard/27th Street widening, including right-of-way acquisition and monitoring for #/when widening is appropriate. Implement alternate mobility targets and identify smaller projects to incrementally improve mobility, reliability and safety. Includes complete streets upgrade.	Roadway Safety/Capacity	●	N/A	N/A	○	○	●	Near	Over capacity in interim scenario and 2040; On unreliable corridor	●	●	●	○	○	N/A	N/A	N/A	improves safety, supports expansion areas, improves functionality	No	No	Mid-term	\$ 41,800,000	100%	\$ 41,800,000																				
N-15b	Archie Briggs Road Bridge and Pedestrian Improvement	Construct improved pedestrian crossing at the Deschutes River Trail Crossing of Archie Briggs Road. City is currently seeking funding to replace the Archie Briggs Road vehicular bridge due to maintenance issues.	Pedestrian/ Bicyclist	●	N/A	●	●	●	N/A	Near	Key connection in danger of failing structurally	●	○	○	○	○	○	○	○	improves bridge safety, encourages active modes	Yes	No	Mid-term	\$ 6,000,000	100%	\$ 6,000,000																				
N-16	Reed Market Road/15th Street intersection safety and capacity improvements	Includes expanding the partial multi-lane roundabout to a full multi-lane roundabout.	Roadway Safety/Capacity	●	N/A	N/A	○	○	●	Near	Over capacity in 2040; full multilane roundabout more difficult for pedestrians/bicyclists to cross; on unreliable corridor; approaching capacity in interim scenario	●	●	●	○	○	N/A	N/A	N/A	improves safety and capacity for key arterial	No	No	Mid-term	\$ 1,100,000	100%	\$ 1,100,000																				
N-1b	Construct Reed Market Road Interchange improvements	Reed Market Road interchange improvements as defined by the Parkway Study.	Roadway Safety/Capacity	●	N/A	N/A	●	●	●	Near	Reed Market over capacity in 2040 and interim scenario.	●	●	○	○	○	N/A	○	○	improves safety on key arterial, improves functionality, reduces emissions, regional connection on ODOT facility	No	No	Mid-term	\$ 50,000,000	50%	\$ 25,000,000																				
N-21	3rd Street Canal Crossing	Construct pedestrian facilities on 3rd Street across the canal bridge.	Staff recomm.	●	N/A	N/A	N/A	○	N/A	Long	Not on key pedestrian/bike route	●	●	○	○	○	N/A	○	○	improves bike/ped safety, improves access for all modes, encourages alternate modes	No	No	Mid-term	\$ 980,000	100%	\$ 980,000																				
N-27	Parrell Road Urban Upgrade	China Hat Road to Brosterhous Road. Construct complete street upgrades and reconstruct roadway	Staff recomm.	●	N/A	N/A	●	●	N/A	Near	On key walking and biking network	●	●	○	○	○	N/A	○	○	improves bike/ped safety, improves access for all modes, encourages alternate modes	No	Yes, Murphy	Mid-term	\$ 29,100,000	100%	\$ 29,100,000																				
																							Mid-term Total	\$ 520,300,000																						
Long-Term																																														
18	New North Frontage Road near Murphy Road	Improvements to be determined	Complete Street (All Modes)	●	N/A	●	●	●	N/A	Long	Increased connectivity for pedestrian/bike/motor vehicle. Moderate traffic demand in 2040 and interim scenario. Extension part of key walking and biking network.	●	○	○	○	○	N/A	N/A	○	improves livability for nearby residents	No	Yes, Murphy	Long-term	\$ 5,400,000	100%	\$ 5,400,000																				
19	New South Frontage Road	Improvements to be determined	Complete Street (All Modes)	●	N/A	●	●	●	N/A	Near	Increased connectivity for pedestrian/bike/motor vehicle. Significant traffic demand in 2040. Extension part of key walking and biking network.	●	○	○	○	○	N/A	N/A	○	improves livability for nearby residents	No	Yes, Murphy	Long-term	\$ 13,800,000	100%	\$ 13,800,000																				
20	Britta Street extension (north section)	Includes two lane extension	Complete Street (All Modes)	●	N/A	●	●	●	N/A	Long	Increased connectivity for pedestrian/bike/motor vehicle. Moderate demand in 2040 and interim scenario. Extension part of key walking and biking network.	●	○	○	○	○	○	○	○	supports OB Riley expansion area, supports connectivity to school, reduces VMT, connects to ODOT facility	No	No	Long-term	\$ 2,700,000	100%	\$ 2,700,000																				
21	Britta Street extension	Includes two lane extension	Complete Street (All Modes)	●	N/A	●	●	●	N/A	Long	Increased connectivity for pedestrian/bike/motor vehicle. Moderate traffic demand in 2040 and interim scenario. Extension part of key walking and biking network.	●	○	○	○	○	○	○	○	supports OB Riley expansion area, supports connectivity to school, reduces VMT, near key regional network	No	No	Long-term	\$ 1,000,000	100%	\$ 1,000,000																				

		Description	Type	Reduces Congestion/Bottlenecks	Street	Transit	Bicycle	Pedestrian	Reliability	Near/ Long Term Capacity Need	Capacity Notes	Sub Total	Ensure Safety for All Users	Facilitate Housing, Job Creation, Econ Dev	Livability	Equity	Steward the Environment	Regional Outlook	Ave	Notes	TSDC List?	Urban Renew Area?	Prioritization Recommendation	Cost Estimate	City Proportion	City Proportion Cost Estimate																				
23	Mervin Sampels Road / Sherman Road Collector Corridor upgrade	Includes upgrade to two lane collector roadway and a traffic signal at US 20	Complete Street (All Modes)	●	N/A	N/A	●	●	N/A	Long	Under capacity in 2040. Improves bike/pedestrian conditions. Not on LSN or key route.	●	○	●	○	○	N/A	N/A	●	improved multimodal facilities, reduces business cut through supports nearby developments	No	No	Long-term	\$ 6,100,000	100%	\$ 6,100,000																				
25	27th Street Arterial Corridor upgrade	Includes upgrade to three lane arterial and intersection improvements at Ferguson Road	Complete Street (All Modes)	●	N/A	N/A	●	●	N/A	Long	Ferguson/27th under capacity in 2040. Key pedestrian/bike route.	●	●	●	●	○	N/A	●	●	improves intersection and multimodal safety, supports East Hwy 20 and DSL expansion areas, improved functionality, improved access to transit, improves key region route on eastside	Yes	No	Long-term	\$ 8,600,000	100%	\$ 8,600,000																				
A-3	Ponderosa Street / China Hat Road overcrossing	Vehicle, pedestrian and bicycle access over US 97 at Ponderosa Street/China Hat Road. Includes intersection improvement at Parrell Road/China Hat Road.	Complete Street (All Modes)	●	●	N/A	●	●	N/A	Long	Reduces congestion at China Hat/US 97; Adds connectivity for pedestrians, bicyclists and vehicles; Not on key walking and biking route; Significant traffic demand in 2040 and interim scenario; under capacity in interim scenario	●	●	●	●	○	N/A	●	●	improves pedestrian safety, supports livability and equity for multiodal users, encourages multimodal use, crosses ODOT facility	No	No	Long-term	\$ 15,000,000	100%	\$ 15,000,000																				
B-29	3rd Street railroad undercrossing widening	Emerson Ave to Miller Ave. Widen 3rd Street to 4-lanes under the railroad, including complete street design.	Complete Street (All Modes)	●	N/A	N/A	●	●	●	Long	Over capacity in 2040; significantly improves existing bike/pedestrian conditions; on key walking and biking routes; under capacity in interim scenario	●	●	●	○	N/A	N/A	●	●	improves capacity, improves multimodal safety	No	Yes, Core	Long-term	\$ 13,700,000	100%	\$ 13,700,000																				
CAP_T47	Olney Avenue/2nd Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	●	●	N/A	Long	Under capacity 2040; On key walking and biking network	●	○	●	○	N/A	○	N/A	●	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Long-term	\$ 210,000	100%	\$ 210,000																				
CAP_T49	Greenwood/2nd Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	N/A	N/A	N/A	Long	Under capacity 2040; not on key walking and biking routes or LSN; on unreliable corridor	●	●	●	○	N/A	○	N/A	●	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Long-term	\$ 210,000	100%	\$ 210,000																				
CAP_T51	Hawthorne Avenue/3rd Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	●	●	N/A	Long	Under capacity 2040; not on key walking and biking route or LSN; Two-way stop control to signal would improve pedestrian/bike crossing opportunities	●	●	●	○	N/A	○	N/A	●	improves safety, serves Bend Central District opportunity area, improves functionality	Yes	Yes, Core	Long-term	\$ 210,000	100%	\$ 210,000																				
CAP_T52	Franklin Avenue/2nd Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	N/A	N/A	N/A	Long	Under capacity 2040; on key walking and biking route	●	●	●	○	N/A	○	N/A	●	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Long-term	\$ 210,000	100%	\$ 210,000																				
CAP_T53	Franklin Avenue/4th Street Intersection improvement	Improve intersection capacity.	Core Area Project Recommendation	●	N/A	N/A	N/A	N/A	N/A	Long	Under capacity 2040; on key walking and biking route	●	○	●	○	N/A	○	N/A	●	improves safety, serves Bend Central District opportunity area, improves functionality	No	Yes, Core	Long-term	\$ 210,000	100%	\$ 210,000																				
N-9	Century Drive/Skyline Ranch Road roundabout	Address existing and future safety and operational needs at intersection; specific improvements to be evaluated in next phase of work.	Roadway Safety/Capacity	●	N/A	N/A	●	●	N/A	Long	Under capacity in 2040	●	●	●	○	N/A	○	N/A	●	improves safety, improves roadway functionality, reduces emissions, connection to County	No	No	Long-term	\$ 3,700,000	100%	\$ 3,700,000																				
N-10	Mt. Washington Drive/Metolius Drive roundabout	Address existing and future safety and operational needs at intersection; specific improvements to be evaluated in next phase of work.	Roadway Safety/Capacity	●	N/A	N/A	●	●	N/A	Long	Under capacity in 2040	●	●	●	○	N/A	○	N/A	●	improves safety, improves roadway functionality, reduces emissions	No	No	Long-term	\$ 3,700,000	100%	\$ 3,700,000																				
N-19	Eagle Road Functional Urban Upgrade	Neff Road to Butler Market Road. Classify roadway as Minor Collector and construct complete street upgrades.	Staff recomm.	N/A	N/A	N/A	●	●	N/A	Long	Significant improvement over today's pedestrian/bike conditions; not on key walking and biking network or LSN	●	○	●	○	N/A	N/A	●	●	serves NE expansion area, improves functionality of network, reduces VMT	No	No	Long-term	\$ 14,500,000	100%	\$ 14,500,000																				
N-29	US 97 Frontage Road	Ponderosa Street to Baker Road	Parkway Coordination	N/A	●	N/A	●	●	N/A	Long	Moderate traffic demand in 2040 and interim scenario; not on key walking and biking route	●	N/A	●	○	N/A	○	N/A	●	supports the Thumb expansion area, improves connectivity, supports ODOT facility	No	No	Long-term	\$ 6,550,000	50%	\$ 3,275,000																				
N-30	US 20/27 th Street Intersection Improvement	Improve intersection capacity	Steering Committee Addition	●	N/A	N/A	○	○	●	Long	Over capacity in 2040 and makes significant improvement but will not get below v/c 1.0; worsen conditions for bike/pedestrian crossing (on key walking and biking route); under capacity in interim scenario	●	○	●	○	N/A	N/A	●	●	improves functionality and capacity, regional connection to ODOT facility	No	No	Long-term	\$ 2,100,000	10%	\$ 210,000																				
TSAP-3b	3rd Street & Miller Avenue (Phase 2: Implementation)	Construction of intersection improvements and 3rd Street modifications in the vicinity of the intersection (no preferred alternative selected - assumed high cost alternative)	TSAP Project	●	●	N/A	●	●	●	Near	N/A	●	●	○	●	●	●	N/A	●	N/A	No	Yes, Core	Long-term	\$ 3,100,000	100%	\$ 3,100,000																				
																						Long-term Total	\$ 101,000,000																							\$ 95,835,000

		Description	Type	Reduces Congestion/Bottlenecks	Street	Transit	Bicycle	Pedestrian	Reliability	Near/ Long Term Capacity Need	Capacity Notes	Sub Total	Ensure Safety for All Users	Facilitate Housing, Job Creation, Econ Dev	Livability	Equity	Steward the Environment	Regional Outlook	Ave	Notes	TSDC List?	Urban Renew Area?	Prioritization Recommendation	Cost Estimate	City Proportion	City Proportion Cost Estimate
Expansion Area Driven																										
10	Stevens Road realignment	Includes connection to Reed Market Road and bridge to cross canal	Roadway Safety/Capacity	●	●	N/A	●	●	N/A	Near	Intersection improvement at Stevens/27th/Reed Market can help decrease congestion (27th over capacity in 2040); Improves pedestrian and bicyclist connectivity; Existing Stevens configuration on LSN; 27th over capacity in interim scenario.	●	●	●	●	○	○	●	●	roadway alignment improves safety, supports DSL expansion area, reduces cut through, supports regional connectivity to county	No	No	Expansion Area Driven	\$ 4,700,000	100%	\$ 4,700,000
205	Hunnell Road extension	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Long	Adds connectivity for pedestrians, bicyclists and vehicles. Not on key walking and biking route or LSN. Moderate traffic demand in 2040.	●	N/A	●	●	○	○	N/A	●	supports North Triangle expansion area, improves connectivity and access, reduces VMT	No	Yes, JR	Expansion Area Driven	\$ 2,400,000	100%	\$ 2,400,000
211	New Road in DSL UGB expansion area	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Long	Adds connectivity for pedestrians, bicyclists and vehicles; Not on key walking and biking route; On LSN; Minimal traffic demand in interim scenario.	●	N/A	●	●	○	○	N/A	●	supports DSL expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 9,500,000	100%	\$ 9,500,000
212	New Road in DSL UGB expansion area	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Long	Adds connectivity for pedestrians, bicyclists and vehicles; Moderate traffic demand in 2040 and in interim scenario; Not on key walking and biking route; On LSN.	●	N/A	●	●	○	○	N/A	●	supports DSL expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 1,100,000	100%	\$ 1,100,000
213	New Road in the Elbow UGB expansion area (east-west collector from western edge of High Desert MS property to SE 27th Street)	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Near	Adds connectivity for pedestrians, bicyclists and vehicles; Substantial traffic demand in 2040 and interim scenario; On key walking and biking route; (Extension of project Z16)	●	N/A	●	●	○	○	N/A	●	supports the Elbow expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 4,000,000	100%	\$ 4,000,000
224	New Road in the Elbow UGB expansion area (east-west collector from SE 15th Street to western edge of High Desert MS property)	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Long	Adds connectivity for pedestrians, bicyclists and vehicles; Moderate traffic demand in 2040 and interim scenario; On key walking and biking route	●	N/A	●	●	○	○	N/A	●	supports the Elbow expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 10,200,000	100%	\$ 10,200,000
226	New Road in the Elbow UGB expansion area (north-south collector)	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Near	Adds connectivity for pedestrians, bicyclists and vehicles; Substantial traffic demand in 2040 and interim scenario; Not on key walking and biking route	●	N/A	●	●	○	○	N/A	●	supports the Elbow expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 7,100,000	100%	\$ 7,100,000
228	New Road	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Near	Adds connectivity for pedestrians, bicyclists and vehicles; Substantial traffic demand in 2040 and interim scenario; Not on key walking and biking route	●	N/A	●	●	○	○	N/A	●	supports the Elbow expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 4,300,000	100%	\$ 4,300,000
229	New Road	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Near	Adds connectivity for pedestrians, bicyclists and vehicles; Substantial traffic demand in 2040 and interim scenario; Not on key walking and biking route	●	N/A	●	●	○	○	N/A	●	supports the Elbow expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 2,500,000	100%	\$ 2,500,000
248	Loco Road extension	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Long	Adds connectivity for pedestrians, bicyclists and vehicles; Minimal traffic demand in 2040 and interim scenario; Not on key walking and biking route	●	N/A	●	●	○	○	N/A	●	supports the Elbow expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 5,300,000	100%	\$ 5,300,000
206a	New Road in Triangle UGB expansion area	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Long	Adds connectivity for pedestrians, bicyclists and vehicles. Not on key walking and biking network or LSN. Moderate traffic demand in 2040 and minimal demand in interim scenario.	●	N/A	●	●	○	○	N/A	●	supports North Triangle expansion area, improves connectivity and access, reduces VMT	No	No	Expansion Area Driven	\$ 2,500,000	100%	\$ 2,500,000
207a	Yeoman Road extension from Deschutes Market Road to Hamehook Road	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Near	Adds connectivity for pedestrians, bicyclists and vehicles. On key walking and biking route. Substantial traffic demand in 2040 and interim scenario	●	N/A	●	●	○	○	N/A	●	supports NE expansion area, improves connectivity and access, reduces VMT	No	No	Expansion Area Driven	\$ 10,900,000	100%	\$ 10,900,000
214b	New Road in the southeast UGB	Two lane collector roadway	Complete Street (All Modes)	N/A	●	N/A	●	●	N/A	Near	Adds connectivity for pedestrians, bicyclists and vehicles; Substantial traffic demand in 2040 and interim scenario; Not on key walking and biking route	●	N/A	●	●	○	○	N/A	●	supports the Elbow and the Thumb expansion areas, improves connectivity and access	No	No	Expansion Area Driven	\$ 4,500,000	100%	\$ 4,500,000
215a	New Road in DSL UGB expansion area	Two lane collector roadway	Complete Street (All Modes)	N/A	○	N/A	●	●	N/A	Long	Adds connectivity for pedestrians, bicyclists and vehicles; Minimal traffic demand in 2040 and interim scenario; Not on key walking and biking route	●	N/A	●	●	○	○	N/A	●	supports DSL expansion area, improves connectivity and access	No	No	Expansion Area Driven	\$ 3,900,000	100%	\$ 3,900,000
N-18	Projects of Regional Significance from Subarea Planning Efforts	Subarea planning efforts will identify infrastructure needs to serve Opportunity and Expansion Areas, which are key development areas for the City. Projects that result should be added to the 2040 project list as necessary.	Roadway Safety/Capacity	N/A	N/A	N/A	N/A	N/A	N/A	Long	N/A	N/A	N/A	●	○	○	○	○	●	improves local and regional connectivity	No	No	Expansion Area Driven	TBD	100%	TBD
N-22	Cooley Road/Hunnell Road Intersection Improvement	Add intersection improvement at Cooley/Hunnell to Cooley Road rural road upgrade project (R3) already in baseline.	Staff recomm.	●	N/A	N/A	●	●	N/A	Long	Under capacity in 2040; improves pedestrian/bike crossing conditions, on LSN, improvement over today's conditions for pedestrians but not on key walking or biking route	●	●	●	●	○	○	N/A	●	improves intersection safety, serves north triangle opportunity area, improves functionality of north end, reduces emission, provides alternate route	Yes	No	Expansion Area Driven	\$ 3,700,000	100%	\$ 3,700,000
N-23	Collector between Cooley Road & Robal Road	Construct new collector between US 20 and Hunnell Road. Road would be south of Cooley road and north of Robal Road.	Staff recomm.	●	●	N/A	●	●	N/A	Long	Reduces congestion at Cooley/US 20 in 2040; increases connectivity for vehicles/bicyclists/pedestrians; not on LSN or key walking and biking routes; Cooley/US 20 under capacity in interim scenario	●	N/A	●	●	○	○	N/A	●	serves north triangle opportunity area, improves network connectivity, connects two regional facilities (US97 & OR20)	No	No	Expansion Area Driven	\$ 4,000,000	100%	\$ 4,000,000
R1	O.B. Riley Road rural Road upgrade	Includes curb and sidewalk on east side, bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Near	On key walking and biking network	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports OB Riley expansion area, improves functionality of OB Riley, regional connection to county	No	No	Expansion Area Driven	\$ 2,400,000	100%	\$ 2,400,000
R2	Cooley Road rural Road upgrade from O.B. Riley Road to US 20	From O.B. Riley Road to US 20. Includes curbs, sidewalks and bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Near	Not on key walking and biking routes; on LSN	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area and Juniper Ridge opportunity area, improves functionality, regional connection to ODOT	No	No	Expansion Area Driven	\$ 1,300,000	100%	\$ 1,300,000
R3	Cooley Road rural Road upgrade from US 20 to Hunnell Road	From US 20 to Hunnell Road. Includes curb and sidewalk on north side, bike lanes both directions, and an intersection improvement at Cooley Road/Hunnell Road	Pedestrian/ Bicyclist	●	N/A	N/A	●	●	N/A	Long	Under capacity in 2040. On LSN, not on key walking and biking routes.	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area and Juniper Ridge opportunity area, improves functionality, regional connection to ODOT	Yes	Yes, JR	Expansion Area Driven	\$ 1,100,000	100%	\$ 1,100,000
R4	Hunnell Road rural Road upgrade from Cooley Road to Loco Road	Includes sidewalk on west side	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	●	N/A	Long	Not on key walking and biking routes	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports North Triangle expansion area, improves functionality	Yes	Yes, JR	Expansion Area Driven	\$ 200,000	100%	\$ 200,000
R5	Yeoman Road rural Road upgrade from western terminus to Deschutes Market Road	Includes curbs, sidewalks and bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Near	On key walking and biking network	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area, improves functionality	No	No	Expansion Area Driven	\$ 2,500,000	100%	\$ 2,500,000
R6	Deschutes Market Road rural Road upgrade from Yeoman Road to canal	Includes curb and sidewalk on east side, bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Long	Not on key walking and biking routes or LSN	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area, improves functionality	No	No	Expansion Area Driven	\$ 500,000	100%	\$ 500,000
R7	Deschutes Market Road rural Road upgrade from canal to Butler Market Road	Includes curb and sidewalk on east side	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	●	N/A	Long	Not on key walking and biking routes or LSN	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area, improves functionality	No	No	Expansion Area Driven	\$ 400,000	100%	\$ 400,000
R8	Butler Market Road rural Road upgrade from Deschutes Market Road to Eagle Road	Includes curb and sidewalk on east side	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Near	Not on key walking and biking routes; on LSN	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area, improves functionality	No	No	Expansion Area Driven	\$ 300,000	100%	\$ 300,000
R9	Butler Market Road rural Road upgrade from Eagle Road to Clyde Lane	Includes curbs, sidewalks and bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Near	Not on key walking and biking routes; on LSN	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area, improves functionality	No	No	Expansion Area Driven	\$ 400,000	100%	\$ 400,000
R10	Butler Market Road rural Road upgrade from Clyde Lane to Hamby Road	Includes curb and sidewalk on north side, bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Near	Not on key walking and biking routes; on LSN	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area, improves functionality	No	No	Expansion Area Driven	\$ 1,100,000	100%	\$ 1,100,000
R11	Butler Market Road rural Road upgrade from Hamby Road to Hanbrook Road	Includes curbs and sidewalks on both sides	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Long	Not on key walking and biking routes or LSN	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports NE expansion area, improves functionality	No	No	Expansion Area Driven	\$ 1,100,000	100%	\$ 1,100,000
R13	Stevens Road rural Road upgrade from Stevens realignment to Bend UGB boundary	From Stevens realignment to Bend UGB boundary. Includes curbs, sidewalks and bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Long	Not on key walking and biking routes or LSN	●	●	●	●	○	○	N/A	●	improves pedestrian safety, supports East Hwy 20 & DSL expansion areas, improves functionality	No	No	Expansion Area Driven	\$ 1,900,000	100%	\$ 1,900,000

		Description	Type	Reduces Congestion/Bottlenecks	Street	Transit	Bicycle	Pedestrian	Reliability	Near/ Long Term Capacity Need	Capacity Notes	Sub Total	Ensure Safety for All Users	Facilitate Housing, Job Creation, Econ Dev	Livability	Equity	Steward the Environment	Regional Outlook	Ave	Notes	TSDC List?	Urban Renew Area?	Prioritization Recommendation	Cost Estimate	City Proportion	City Proportion Cost Estimate
R14	SE 27th Street rural Road upgrade from Stevens Road to Ferguson Road	From Stevens Road to Ferguson Road. Includes curb, sidewalk, and bike lane on east side	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Near	On key walking and biking network, on LSN	●	●	●	○	○	N/A	N/A	●	improves pedestrian safety, supports the Elbow & DSL expansion areas, improves functionality	No	No	Expansion Area Driven	\$ 1,300,000	100%	\$ 1,300,000
R15	SE 27th Street rural Road upgrade from Ferguson Road to Diamondback Lane	From Ferguson Road to Diamondback Lane. Includes curb and sidewalk on east side, bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	●	N/A	Near	On key walking and biking network, on LSN	●	●	●	○	○	N/A	N/A	●	improves pedestrian safety, supports the Elbow expansion area, improves functionality	No	No	Expansion Area Driven	\$ 600,000	100%	\$ 600,000
R16	SE 27th Street rural Road upgrade from Diamondback Lane to access road	From Diamondback Lane to access road. Includes curb and sidewalk on east side	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	○	N/A	Long	Not on key walking and biking routes	○	●	●	○	○	N/A	N/A	●	improves pedestrian safety, supports the Elbow expansion area, improves functionality	No	No	Expansion Area Driven	\$ 100,000	100%	\$ 100,000
R17	SE 27th Street rural Road upgrade from access road to Knott Road	From access road to Knott Road. Includes curbs and sidewalks on both sides	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	○	N/A	Long	Not on key walking and biking routes	○	●	●	○	○	N/A	N/A	●	improves pedestrian safety, supports the Elbow expansion area, improves functionality	No	No	Expansion Area Driven	\$ 1,300,000	100%	\$ 1,300,000
R18	Knott Road rural Road upgrade from 15 th Street to Raintree Court	From Knott Road to 15th Street. Includes curbs, sidewalks and bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	○	N/A	Near	Not on key walking and biking network, on LSN	●	●	●	○	○	N/A	N/A	●	improves pedestrian safety, supports the Elbow expansion area, improves functionality	No	No	Expansion Area Driven	\$ 500,000	100%	\$ 500,000
R19	Knott Road rural Road upgrade from Raintree Court to SE 27 th Street	From 27th Street to 15th Street. Includes curbs, sidewalks and bike lanes both directions	Pedestrian/ Bicyclist	N/A	N/A	N/A	●	○	N/A	Near	Not on key walking and biking network, on LSN	●	●	●	○	○	N/A	N/A	●	improves pedestrian safety, supports the Elbow & Thumb expansion areas, improves functionality	No	No	Expansion Area Driven	\$ 5,500,000	100%	\$ 5,500,000
R21	Knott Road rural Road upgrade south of China Hat Road	South of China Hat Road. Includes curb and sidewalk on north side	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	○	N/A	Long	Not on key walking and biking network	○	●	●	○	○	N/A	N/A	●	improves pedestrian safety, supports the Thumb expansion area, improves functionality	No	No	Expansion Area Driven	\$ 300,000	100%	\$ 300,000
R23	Clausen Drive rural Road upgrade from Loco Road to northern terminus	From Loco Road to northern terminus. Includes sidewalk on west side	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	○	N/A	Long	Not on key walking and biking network	○	●	●	○	○	N/A	N/A	●	improves pedestrian safety, supports the North Triangle expansion area, improves functionality	Yes	No	Expansion Area Driven	\$ 200,000	100%	\$ 200,000
R24	China Hat Road rural Road upgrade north of Knott Road	North of Knott Road. Includes sidewalks on both sides	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	○	N/A	Long	Not on key walking and biking network	○	●	●	○	○	N/A	○	○	improves pedestrian safety, supports the Thumb expansion area, improves functionality, improves access to US 97	No	No	Expansion Area Driven	\$ 200,000	100%	\$ 200,000
R25	China Hat Road canal bridge widening	North of Knott Road. Widen bridge to include sidewalk on both sides	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	○	N/A	Long	Not on key walking and biking network	○	●	N/A	○	N/A	N/A	N/A	○	improves multimodal safety	Yes	No	Expansion Area Driven	\$ 400,000	100%	\$ 400,000
R26	Deschutes Market Road canal bridge widening	North of Monticello Drive. Widen bridge to include sidewalk on west sides	Pedestrian/ Bicyclist	N/A	N/A	N/A	N/A	○	N/A	Long	Not on key walking and biking network	○	●	○	○	N/A	N/A	○	○	improves multimodal safety, supports NE expansion area	No	No	Expansion Area Driven	\$ 400,000	100%	\$ 400,000
																						Expansion Area Driven Total	\$ 104,600,000		\$ 104,600,000	

Appendix C: Volume-to-Capacity Model Plots

Appendix C: Modeling Data Sources and Scenarios for Prioritization

The Bend-Redmond Regional Travel Demand Model (BRM) is a modeling tool that utilizes inputs of planned land use, demographics, transit service, regional travel growth, and the characteristics of the area transportation network to forecast travel and network performance such as roadway volume and congestion at a regional corridor scale. The model was developed (and is maintained by) ODOT and the Bend MPO and is a required analytical tool for evaluating compliance with Oregon’s Transportation Planning Rule. The model is a helpful tool for quantifying differences between varying scenarios of projected land use or transportation system or service improvements.

The BRM was used to measure demand-to-capacity ratios for three scenarios for the Bend Transportation Plan:

1. The 2040 Baseline Scenario -- previously modeled for the Detailed Scenario Evaluation in Phase I of the work program. The full project list for the Baseline Scenario is included in the Phase I Scenario Evaluation memo¹.
2. Interim Land Use Scenario – This scenario represents the land use and growth consistent with the UGB expansion work, approximately 10 years in the future. The roadway network for this scenario included most of the Baseline Scenario Projects.²
3. 2040 TSP Project List Scenario – This scenario includes all projects and programs that have been identified for prioritization and approved by the Steering Committee.

The model demand-to-capacity ratio plots were used to help prioritize projects and programs. Demand-to-capacity ratio is predicted using a travel demand model. It is expressed as a decimal representation, with 1.0 representing a saturated, or “full” condition. The number describes the proportion of available capacity that is forecasted to be used along a roadway segment. A demand-to-capacity ratio is determined by dividing the forecasted traffic volume along a segment by the capacity of a given roadway segment. A lower ratio indicates smoother operations and minimal delays. As the ratio approaches 1.0, congestion increases, and performance is reduced. A ratio of greater than 1.0 means that the roadway is oversaturated and can result in increased queueing and delays.

The model demand-to-capacity plots for the Interim Land Use Scenario, the 2040 Baseline Scenario and the 2040 TSP Project List Scenario are included in Figures C-1 to C-3.

¹ *Scenario Evaluation Overview for CTAC, Attachment A: Baseline Project List and Map*, November 2019, <https://www.bendoregon.gov/home/showdocument?id=39611>

² Since the BRM was also used to model the Bend MPO transportation plan, which must be fiscally constrained, the following projects from the Baseline Scenario were not included in the Interim Year Scenario: South frontage road connecting to Murphy interchange area (Project 18) and Preliminary engineering and right of way acquisition for an overcrossing or interchange at US 97/Powers Road (Project 14).

The model plots were used to evaluate projects and programs in two ways during the prioritization process:

1. To help identify whether the project or programs addressed a projected area of congestion by comparing the proposed 2040 TSP Scenario with the 2040 Baseline Scenario. For example, a roadway extension project was evaluated by determining how much traffic it would attract, if that attracted traffic was diverted from a nearby congested link, and if that shift would result in a significant difference in that areas' volume-to-capacity ratio. Program improvements such as parking pricing in downtown Bend were evaluated in a similar way by evaluating the level of traffic differences on surrounding roadway links. This methodology, while quantitative with model information, requires judgement as the large number of projects and programs create overlapping benefits and impacts.
2. To help determine when a regional corridor capacity need would be triggered. In this application, existing conditions (from the 2010 base year model Scenario), interim year and future year 2040 plots were compared to assess which projects and programs address near-term, mid-term, or long-term needs. Projects or programs with benefits on corridors that were over capacity in the 2040 Baseline Scenario were given a higher rating for addressing congestion than projects or programs with benefits on corridors that were shown as under capacity in the model.

Figure C-1: Interim Land Use Scenario Demand-to-Capacity Ratios

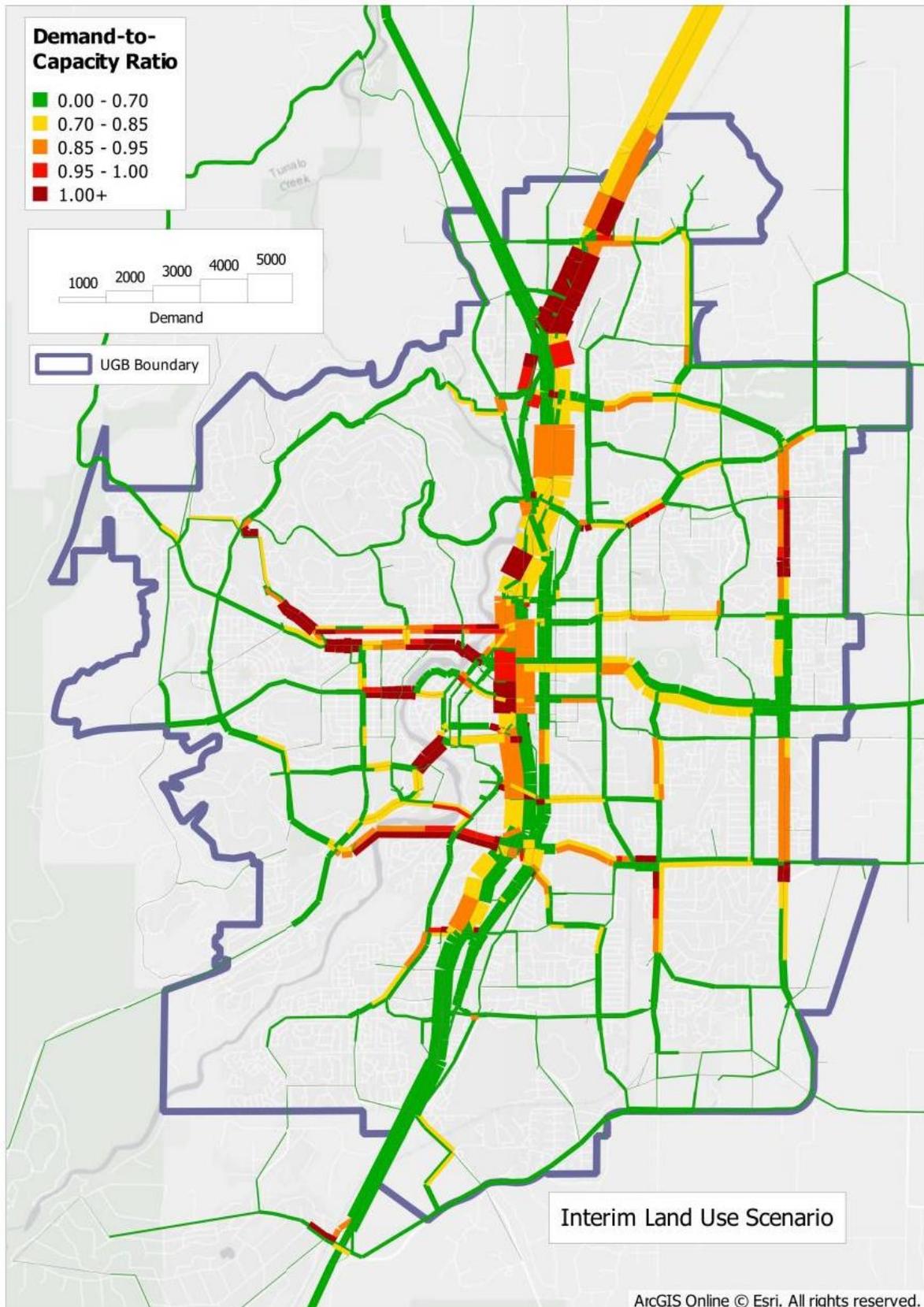


Figure C-2: 2040 Baseline Scenario Demand-to-Capacity Ratios

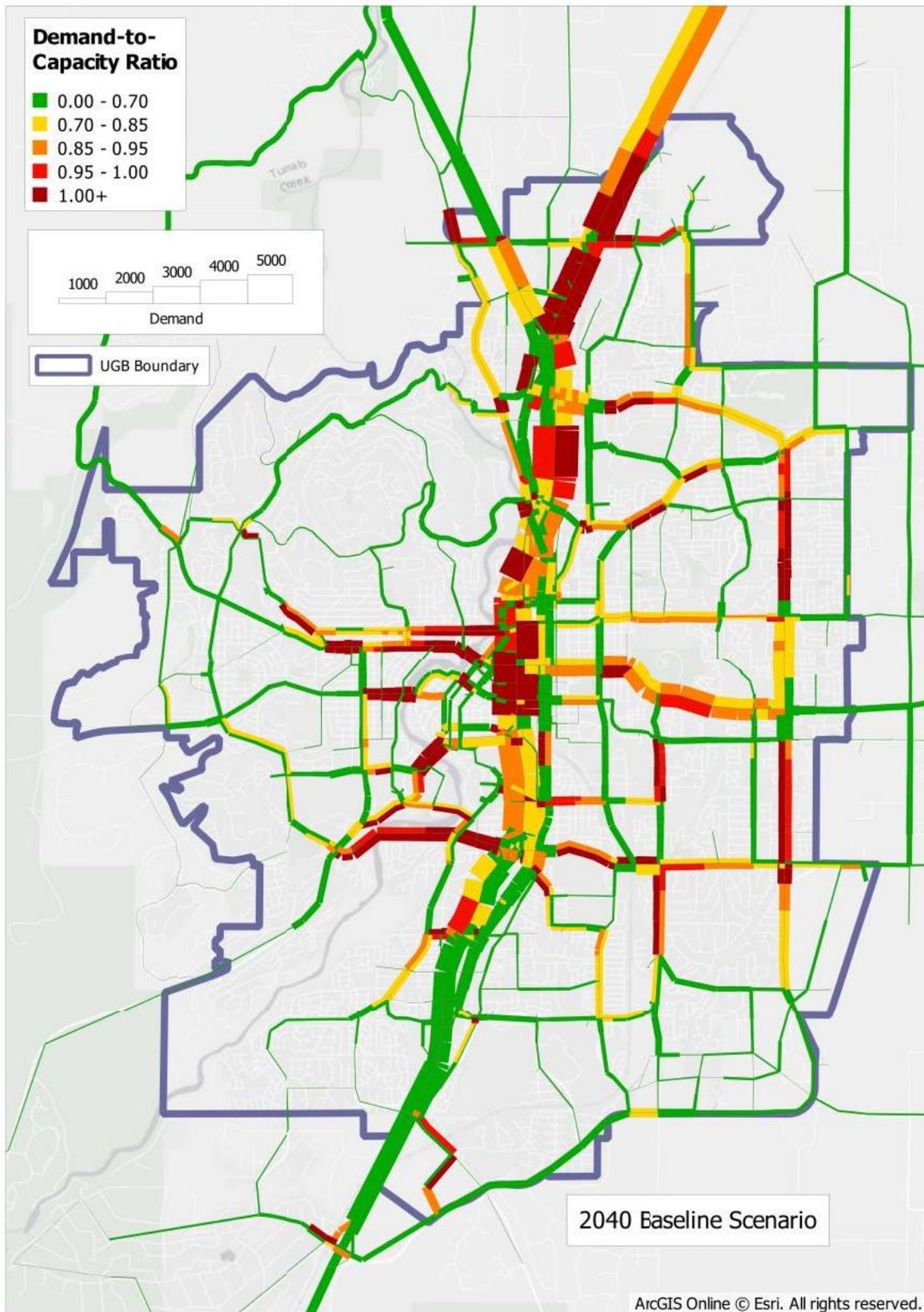
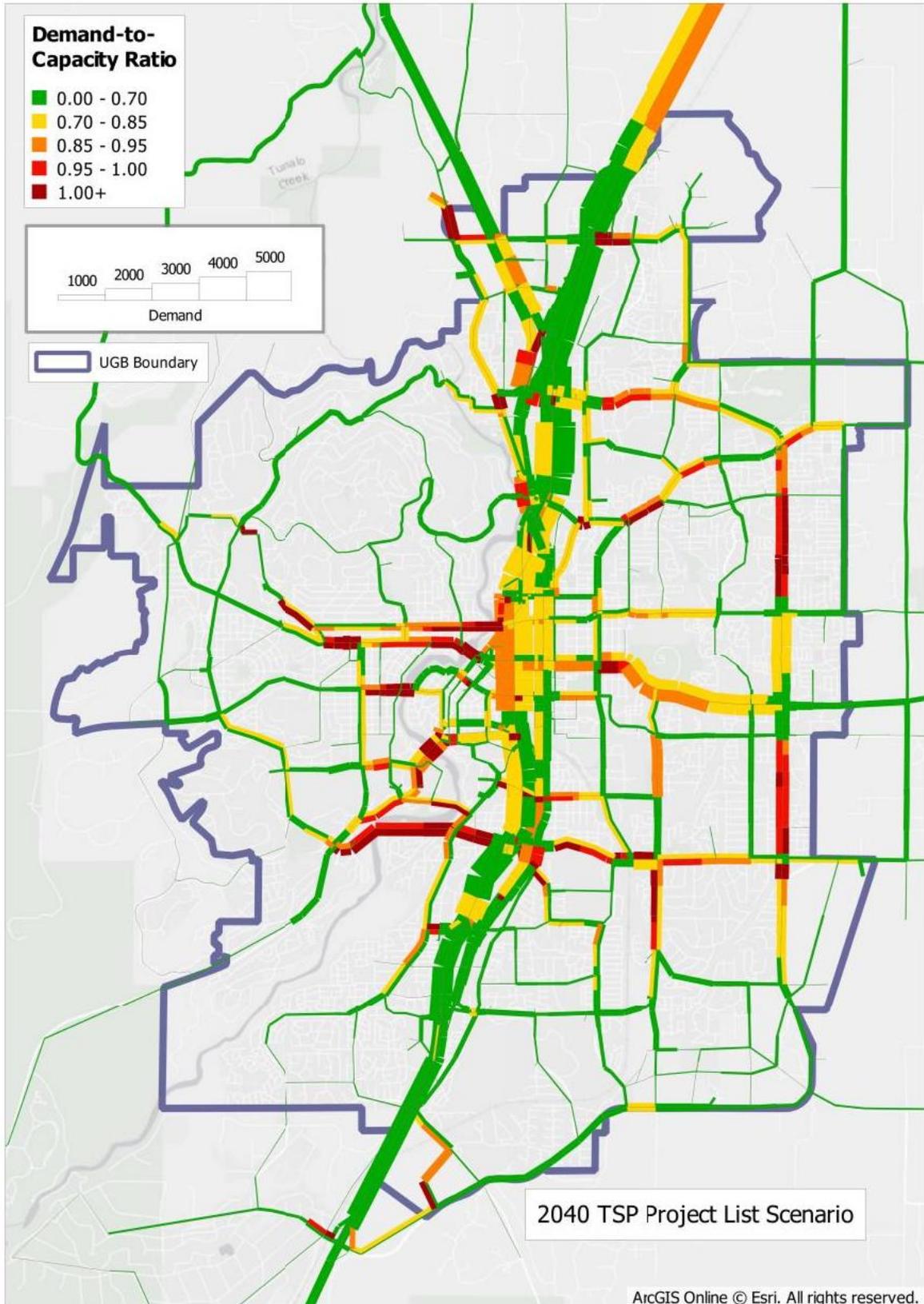


Figure C-3: 2040 TSP Project List Scenario Demand-to-Capacity Ratios



Agenda Item No. 3:
Minutes from FWG #5,
July 24, 2019

Minutes

Funding Work Group Meeting #5

Bend's Transportation Plan

July 24, 2019

City Hall, Council Chambers

710 NW Wall Street, Bend, Oregon

Funding Work Group Members

Karna Gustafson, *Co-Chair*

Steve Hultberg, *Co-Chair*

Mike Riley, *Co-Chair*

Ruth Williamson, *Co-Chair (absent)*

Katy Brooks, *Member (absent)*

Nicole Mardell, *Member*

Suzanne Johannsen, *Member*

Richard Ross, *Member*

Dale Van Valkenburg, *Member*

City Staff

David Abbas, *Transportation Services Director*

Nick Arnis, *Growth Management Director*

Anne Aurand, *Communications Director*

Melissa Bradley, *Principal Budget Analyst*

Carolyn Eagan, *Economic Development Director*

Russell Grayson, *Community Services Director*

Susanna Julber, *Senior Policy Analyst*

Eric King, *City Manager*

Ian Leitheiser, *Assistant City Attorney*

Karin Morris, *Accessibility Manager*

Elizabeth Oshel, *Assistant City Attorney*

Ryan Oster, *City Engineer*

Allison Platt, *Senior Planner*

Brian Rankin, *Long Range Planning Planner*

Jon Skidmore, *Assistant City Manager*

Karen Swirsky, *Senior Planner*

Jenny Umbarger, *Administrative Support Specialist*

Dana Wilson, *EIPD Program Manager*

Mary Winters, *City Attorney*

Sharon Wojda, *Finance Director*

Consultants

Joe Dills, *Angelo Planning Group*

Lorelei Juntunen, *ECONorthwest*

Matt Kittelson, *Kittelson & Associates*

1. Welcome, approval of previous meeting minutes, and opportunity for public comment

Mr. Dills called the meeting to order at 1:04pm.

Member Riley noted the pages extracted from the Initial Funding Assessment (IFA) were omitted from the previous meeting's minutes and recommended they be added.

Member Hultberg moved to approve the minutes with the addition of the extracted pages. Member Johannsen seconded. Minutes were approved unanimously. (7-0-0).

Andrea Breault from Cascades East Transit (CET) informed the committee that the Oregon Department of Transportation (ODOT) is combining the Special Transportation Fund (STF) with the Statewide Transportation Improvement Fund (STIF).

2. Today's Goals and FWG Process Overview

Ms. Julber reviewed the goals for the meeting.

Mr. Skidmore and Mr. King reviewed the INFRA Grant award and the projects planned. Construction may begin in 2020. ODOT will manage property acquisition.

Mr. Dills reviewed the TSP Phase 3-4 Work Plan, as outlined in the presentation.

3. Context Briefing and Discussion

Ms. Juntunen reviewed Prior IFA Recommendations, as outlined in the presentation.

Mr. Arnis reviewed City Council's 2008 Capital Improvement Program (CIP) recommendations and CIP highlights, as outlined in the presentation.

Ms. Ward reviewed planning and implementation of the CIP, as outlined in the presentation.

Mr. Kittelson reviewed Funding and Phasing Framework, as outlined in the presentation. Mr. Dills indicated regional projects will be evaluated in modeling. Member Ross recommended funding sources that could be matched with federal money and used for major regional projects be flagged. Mr. Kittelson indicated there will be no weight applied to the questions that determine how projects and programs are categorized into phasing buckets. Member Riley requested safety be added to the set of questions. The phasing buckets are flexible dependent on circumstances. Member Ross recommended progress reports be required in the TSP.

4. Discuss and Confirm Revenue Assumptions

Ms. Juntunen reviewed Revenue Assumptions, as outlined in the presentation.

The committee discussed funding tools listed in Table 1. Transportation System Development Charge (TSDC) methodology will be updated once the TSP is adopted. Member Riley recommended supplemental System Development Charges (SDCs) be analyzed and identified

as a separate tool. The committee agreed by consensus to move ahead with the TSDC assumption of \$91,979,000.

The committee agreed by consensus to support a \$100M GO Bond, and, if necessary based on project costs, to increase the amount to \$200M.

Member Ross recommended incentivizing Local Improvement Districts (LIDs) with public sector matches to resolve key pedestrian gaps.

The committee discussed funding tools listed in Table 2. Member Gustafson recommended adding a commercial construction excise tax as a supplemental tool.

Ms. Juntunen reviewed the discussion, as follows:

Table 1:

1. GO Bond – not to exceed \$200M
2. TSDC rate increase – go to maximum of \$10,904.00 per peak hour trip
3. No change to Urban Renewal and LIDs
4. Add supplemental SDCs to the supplemental tool list

Table 2:

1. No change to food and beverage sales tax
2. Transportation Utility Fees (TUF) – no change to rates, directed at sidewalks, safety, walking, and maintenance
3. Seasonal fuel tax – remains on the list as a future consideration
4. Vehicle registration fees – to be considered only for projects of regional significance
5. Local option levy – no changes, though it may make more sense to fund the capital deferred maintenance projects with a GO Bond
6. Add a construction excise tax on commercial and industrial permits

Near-term (1-10 years):

1. TSDC #1 increase has happened, per Council direction
2. Franchise fee increase has happened, per Council direction
3. GO Bond for capital – new and deferred maintenance
4. TUF for operations and maintenance (sales tax and / or fuel tax)
5. TSDC increase #2
6. Maybe vehicle registration fee

Mid-term (11-15 years):

1. Additional GO Bond (current expires 2032)
2. TUF
3. TSDC

5. Discussion / Direction on Draft TSP Funding and Expansion Area Policies

Mr. Grayson reviewed Transportation Analysis, as outlined in the presentation.

The committee discussed draft policies, as follows:

Policy #8:

- Member Hultberg recommended including opportunity areas and master-planned opportunity areas. He disclosed his representation of property owners in the areas being discussed.
- Member Riley recommended beginning 8b with “The extent to which”...;
- Member Riley recommended rewording 8c as follows: There is a reasonable likelihood that local, state and / or federal grants will be available to leverage the private investments and provide partnerships;

Policy #7:

- Member Gustafson recommended language be clarified that only CIP is subject to a public hearing process.

Policy #3:

- Member Riley recommended operations be included with on-going maintenance.

Policy #4:

- Member Riley recommended “polling” be replaced with “public opinion research”.

Policy #2:

- Member Ross recommended freight be included.

6. Public Comment

No public comment.

7. Next Steps and Adjourn

Meeting adjourned at 3:44pm.

The [packet](#), [related documents](#), and [presentation](#) from Funding Work Group Meeting #5 can be found on the [CTAC webpage](#).

Respectfully submitted,

Jenny Umbarger
Growth Management Department

Accessible Meeting/Alternate Format Notification

This meeting/event location is accessible. Sign and other language interpreter service, assistive listening devices, materials in alternate format such as Braille, large print, electronic formats, language translations or any other accommodations are available upon advance request at no cost. Please contact Jenny Umbarger no later than 24 hours in advance of the meeting at jeumbarger@bendoregon.gov, 541-323-8509, or fax 541-385-6676. Providing at least 3 days' notice prior to the event will help ensure availability.

DRAFT