

Steering Committee Meeting #5

MEETING DATE: Thursday, June 20, 2019

MEETING TIME: 1:00 p.m. – 4:00 p.m.

LOCATION: City Council Chambers, Bend City Hall, 710 NW Wall Street

Objectives

- Briefing on Transportation Outreach Strategy project
- Approve project prioritization criteria
- Approve 2040 Transportation System Plan (TSP) project list
- Check-in on working TSP policies

Agenda

1. Welcome and Introductory Agenda Items (20 min)

- a. Welcome and convene meeting (Mayor Russell)
- b. Approval of previous minutes (Mayor Russell)
- c. Public comment – (Mayor Russell)

Note: time for public comment is also provided later in the agenda

- d. Overview and framing - Overview of agenda and actions requested, and how today's decisions fit into the Bend Transportation Plan update. (Joe Dills, facilitator)

2. Transportation Outreach Strategy (informational item – 20 min)

The City Council has authorized consulting services for polling, outreach and strategy advice regarding potential transportation funding measures that would require a public vote. This item will be a brief status report on work to date.

- a. Introductory remarks by Councilor Gena Goodman-Campbell
- b. Briefing (Transportation Outreach Strategy Project Team)
- c. Discussion

3. Project Prioritization Criteria (action item – 40 min)

CTAC recommends and requests approval of Project Prioritization Criteria. Please see packet materials for recommendations.

- a. Recommendation and comments by the Co-Chairs
- b. Staff briefing (Project Team)
- c. Steering Committee discussion, refinements as criteria needed
- d. Steering Committee action

4. Break (10 min)

5. 2040 TSP Project List (action item – 50 min)

CTAC recommends and requests approval of the 2040 TSP Project List. This is an extensive list of projects and programs discussed by CTAC – it is not prioritized. The Steering Committee’s approval will authorize it for use in transportation modelling, project prioritization, and funding analysis. Please see packet materials for recommendations.

- a. Recommendation and comments by the CTAC Co-Chairs
- b. Staff briefing (Project Team)
- c. Steering Committee discussion, refinements to project list as needed
- d. Steering Committee action

6. Check-In on Working TSP Policies (informational item – 30 min)

CTAC has created, and is sharing with the Steering Committee, working policies for the TSP. This is an opportunity for the Steering Committee to identify policy-related ideas and other policy input for CTAC to consider. This item is an interim check-in – continued work will include a CTAC policy workshop in July, and policy refinement in the fall. Please see packet materials for working policies.

- a. Comments by the Co-Chairs
- b. Staff briefing (Project Team)
- c. Steering Committee discussion and input

7. Public Comment (10 min) – Mayor Russell

8. Close/next meeting – 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 at jeumbarger@bendoregon.gov or 541.323.8509. Providing at least 3 days’ notice prior to the event will help ensure availability.

Agenda Item No. 1:
Steering Committee #5 Packet
Materials Cover Memo



Steering Committee #5 Packet Materials

PREPARED FOR: Bend Transportation Plan Steering Committee

PREPARED BY: Karen Swirsky, City of Bend Growth Management Department

Joe Dills, APG

Matt Kittelson, Kittelson and Associates, Inc.

DATE: June 12, 2019

Contents of Packet & Requested Actions

Material	Requested Action from Steering Committee
Minutes from Steering Committee #4, January 30, 2019	Review and vote
Project & Program Prioritization Criteria	Review, consider, and vote (basis of next steps)
Bend Transportation Plan 2040 Project List	Review, consider, and vote (basis of next steps)
Preliminary Draft Policies	Informational item
Transportation Outreach Strategy Summary	Informational item

Agenda Item No. 2:
Minutes from Steering
Committee #4, January 30, 2019

Minutes

Steering Committee Meeting #4

Bend's Transportation Plan

January 30, 2019

City Hall, Council Chambers

710 NW Wall Street, Bend, Oregon



CITY OF BEND

Steering Committee Members

Sally Russell, Chair	Mayor
Bruce Abernethy	Mayor Pro Tem
Barb Campbell	City Councilor
Gena Goodman-Campbell	City Councilor
Justin Livingston	City Councilor
Bill Moseley	City Councilor
Chris Piper	City Councilor
Tony DeBone	County Commissioner
Gary Farnsworth	Oregon Department of Transportation (ODOT)
Lindsey Hopper	Bend Planning Commission

City Staff & Consultants

Joe Dills, *Angelo Planning Group*
 Emily Eros, *Transportation Planner*
 Russell Grayson, *Community Services Director*
 Kristin Hull, *Jacobs*
 Lorelei Juntunen, *ECONorthwest*
 Eric King, *City Manager*
 Matt Kittleson, *Kittleson & Associates*
 Chris Maciejewski, *DKS Associates*
 Karen Swirsky, *Senior Planner*
 Sharon Wojda, *Finance Director*

CTAC Co-Chairs

Karna Gustafson
 Steve Hultberg
 Mike Riley

1. Welcome and Introductory Agenda Items

Mayor Russell called the meeting to order at 9:06am.

Mr. Dills called for approval of the September 11, 2018 meeting minutes. Minutes were adopted by consensus.

There was no public comment at this point in the meeting.

2. Overview and Framing

Mr. Dills provided an overview of the project work plan phases as outlined in the presentation. The next Steering Committee (SC) meeting will be held June 2019.

3. Initial Funding Assessment (IFA)

Mr. Riley and Ms. Gustafson reviewed the work of the Citywide Transportation Advisory Committee (CTAC) and the Funding Work Group (FWG). While funding sources have been identified, amounts presented at this meeting are intended as placeholders to indicate orders of magnitude. A project prioritization process will begin this Spring.

Ms. Eros reviewed transportation funding processes, sources and challenges, as outlined in the presentation. Member Moseley inquired if funding sources are for operations and maintenance (O&M) and capital; Ms. Eros indicated they are. He also inquired how the order of magnitude was determined; Ms. Eros indicated the amounts presented should be considered a floor. Member DeBone inquired to the timing of the System Development Charges (SDC) debt service; Ms. Wojda indicated 2021. Member Moseley inquired if amounts include deferred maintenance on capital; Ms. Eros indicated they do.

Ms. Juntunen reviewed the IFA, preliminary capital and O&M funding needs, and potential funding tools, as outlined in the presentation. Member Hopper inquired how equity was evaluated; Ms. Juntunen indicated equity is meant to be the distribution of who pays and who benefits, and to create alignment between the two. Ms. Gustafson indicated a demographic analysis was not done. Mr. Riley indicated that policy workgroups have been formed and will be addressing equity over the next couple of months. The SC expressed agreement that further exploration of equity is necessary. Mr. Moseley expressed concern about cost by mode and revenue generated by mode, including charging stations, transit use, etc. Member Piper inquired if electric vehicles and charging stations are included in report; Ms. Juntunen indicated they are not, though will be looked in to. Member Livingston inquired if O&M needs include current and / or future build-out; Ms. Juntunen indicated they include current needs, a projection of past expenditures plus known needs. He also inquired if a policy shift has been considered to encourage private development of residential roads resulting in less liability for the City; Ms. Juntunen indicated that was not addressed by the FWG. Member Moseley inquired if the cost of the impact of existing arterials due to the Urban Growth Boundary (UGB) growth was considered; Mr. Dills indicated modeling includes all trips from the expansion areas, including those beginning outside of Bend. Ms. Swirsky and Mr. Riley indicated the model assumes more than full buildout due to the Transportation System Plan (TSP) looking forward to 2040. Mayor Russell inquired as to what is done through modeling to address small behavioral shifts due to infill, and how incremental funding is considered; Ms. Juntunen indicated there are short-listed funding tools, including urban renewal, Local Improvement Districts (LID), bonds and levies. Ms. Gustafson recommended the question be addressed in the Spring as projects are prioritized. Member Moseley inquired if a volatile revenue source could be used for projects that might be considered on a conditional basis, relative to the economy; Mr. King indicated it is possible.

Ms. Juntunen reviewed the IFA recommendations, including principles, core tools and supplemental tools, as outlined in the presentation. Member Abernethy inquired if the principals are ranked, and if any have veto power; Ms. Gustafson indicated there is no ranking and they are considered equally. Member Moseley recommended adding to the principles socio-economic diversity / fairness; discussion resulted in agreement by all members to break out fairness and equity. Member Goodman-Campbell recommended adding to that, under-represented groups / communities. Member Farnsworth recommended the 'community buy-in' principle reflect how the

package leverages other partners' money and resources, i.e. state, parks; Mr. King suggested community and partners be defined separately. Member DeBone recommended including explanatory text / historical context as to why discussion is necessary on community buy-in. Member Moseley noted Deschutes County's population is twice that of Bend's, and believes distribution of costs should be part of fairness. Member Goodman-Campbell commented the TSP is a community-owned plan and the 'community buy-in' principle should reflect that. Member Piper recommended replacing the term 'buy-in' with 'ownership'. He also inquired as to what the communication plan will look like and how it will be structured. Mr. King indicated a Request for Proposal has been submitted for a full communication plan; details will be shared at the next SC meeting.

Ms. Eros summarized revisions to the principles as follows:

1. Add an additional principle around equity, using specific language about socio-economic and under-represented groups in the community.
2. Add language to the community buy-in principle regarding other partners, such as Deschutes County, businesses, etc.
3. Add a paragraph upfront in the IFA explaining challenges with state and federal funding, and why we are where we are.
4. Change the term 'buy-in' to 'ownership', and add language to reflect the community-driven approach, two-way communication and planning around that.

Mr. Dills called for consensus on the above summary of revisions; consensus received.

Core tools discussion:

Regarding a food and beverage tax, Member Abernethy expressed concern that it may be difficult to connect to transportation, and Member Campbell expressed concern about how it may impact homeless people. Member Farnsworth recommended with regard to flexibility and adapting to the future, thinking broadly about a utility fee and how it may apply to equity and fairness. Mayor Russell inquired what brought the food and beverage tax to the short list; Mr. Riley indicated fuel and food taxes primarily ensure visitors contribute to paying for the system and O&M, and other communities are using one or both. Ms. Gustafson clarified the food and beverage tax is considered voluntary, as it would be prepared food only, i.e. restaurants, and the fuel tax is more about seasonal variation. Member Livingston shared he is not in favor of transportation utility fees (TUF) as they do not require a vote of the population, and unless there was a mechanism for locals not to pay the tax, he could not support it. He also expressed concern that the failure of prior fuel tax requests could poison this plan. Mr. King indicated fuel tax revenue must be used within the right-of-way. Member Moseley believes a fuel tax is regressive, affects lower-income groups disproportionately and cannot support it, now or in the future. He would modestly support a TUF if it were not a blanket fee and could correlate to economics. Member Goodman-Campbell recommended being mindful of ruling out what will help pay for O&M. Mr. Dills called for a straw poll to approve the core tools, understanding the future application with cautions raised. Nine of 10 present approved of the core tools. Mr. Hultberg reinforced the goal of the IFA is to provide set of tools to evaluate later; policy decisions are upcoming. Member DeBone indicated future conversations around vehicle registration fees are likely.

Supplemental tools discussion:

Member Farnsworth recommended considering parking fees as they could be used in conjunction with other technology-related benefits. Member Goodman-Campbell inquired if a sidewalk maintenance fee was considered, or if property owner vs city responsibility was considered? Mr. Dills indicated responsibility was not, the need for sidewalk maintenance funding strategy was, and Ms. Juntunen indicated could be included in the TUF bucket. Member Moseley suggested exploring incentivizing private sector development with public sector credit. Member Farnsworth encouraged coordination with state and federal investments.

Public comment:

Gavin Leslie, CTAC member, spoke to changing behavior in Bend, funding and technology.

Alex Anderson, resident, spoke about how a good transportation plan provides alternatives to driving.

Carol Fulkerson, resident, spoke against privatizing streets.

Mayor Russell suggested clarifying prepared food and beverage language. Member Goodman-Campbell inquired where a vehicle miles traveled (VMT) usage fee would fit in to tools. Mr. Riley indicated CTAC agrees on the importance of technology, though is unclear when. Mayor Russell suggested the intent to update the TSP every five years be included in the operating document.

Mr. Dills called for approval of the principles, including revisions summarized by Ms. Eros, the cautions identified for the core tools, and recognition that the SC will be coming back to review them in detail and how they're applied.

Ms. Eros reviewed two additional notes:

- Acknowledgement of an equity dimension to be considered for LIDs and how those would be applied.
- Specific comments around SDCs and credits.

Ms. Eros reviewed two additional revisions:

5. Change the way the food & beverage tax is described, as prepared food and non-alcoholic beverage.
6. Acknowledge a five-year update with emphasis on how innovation is included.

Member Abernethy moved for approval of the Initial Funding Assessment recommended by CTAC with the refinements identified by the Steering Committee; Member Goodman-Campbell seconded. Members Abernethy, Campbell, DeBone, Farnsworth, Goodman-Campbell, Hopper, Livingston, Piper and Russell in favor; Member Moseley opposed (9 yes, 1 no).

4. Break/snacks

5. Citywide Transportation Framework (CTF)

Mr. Hultberg reviewed the development steps of the CTF, as outlined in the presentation.

Mr. Maciejewski reviewed the CTF, as outlined in the presentation. Member Moseley inquired if users with limited mobility were considered; Mr. Maciejewski indicated it was not considered at this level of detail.

Member Russell inquired how the UGB and opportunity areas were integrated into the CTF; Mr. Maciejewski indicated land use was integrated with transportation strategies at the time of the UGB and brought forward together, and recommendations are adding to that, i.e. transit investment. Mr. Dills added that the recommendations implement the land use plan, and they update the TSP according to the new population estimate for 2040. For digging into projects in greater detail, Mr. Dills recommended using the online mapping tool linked in the email Ms. Swirsky sent prior to this meeting. Member Livingston inquired if the low-stress network (LSN) considers the Bend Parks and Recreation District (BPRD) trail system; Ms. Swirsky indicated it does include some of their existing facilities, and the project team is working with BPRD to ensure their proposed plan interfaces with the LSN. Mr. Farnsworth indicated Oregon Department of Transportation (ODOT) and Burlington Northern Santa Fe Railway (BNSF) are in conversation.

Member Campbell expressed concern about safety on the existing Wilson Avenue facility and inquired how to identify where people are trying to walk; Mr. Maciejewski indicated existing projects in the CTF address those concerns. Member Abernethy inquired where the Wilson project is prioritized; Mr. Grayson indicated the Wildflower master plan would address needs at Wilson Avenue, including a roundabout at 15th Street, though would not include a throughway to Pettigrew Road or 27th Street. Member Russell inquired as to the status on the airstrip; Mr. King indicated it is privately owned, and Mr. Dills indicated it would be a possibility as part of Option B. Member Moseley and Member Piper expressed their support for immediacy on decisions. Member Piper expressed concerns about 9th Street and Wilson Avenue. Member Livingston inquired as to the timeline, and when communication with the southeast area neighborhood will begin; Ms. Swirsky indicated she will be informing attendees of this evening's SE Area Neighborhood Workshop of the decision made by the SC at this meeting. Mr. Maciejewski will have additional information on the Wilson Avenue project to bring to the June SC meeting. Member Livingston expressed his support for Option B at this time. Member Goodman-Campbell recommended targeted public outreach be included in Option B. Member Hopper inquired if funding for studies is within the current scope of work in the current TSP; Mr. Dills indicated the goal is to keep it within the scope of the work. Mr. Dills identified consensus for Option B.

Mr. Moseley expressed concern about general funding for accessibility requirements, and would like to see it packaged in the overall system. Mr. King indicated it could be discussed in the budget process. Mr. Moseley also believes mobility standards are not acceptable for the greater downtown area.

Member Farnsworth expressed concern about surfacing conditions not being addressed in baseline projects, and would like O&M linked and prioritized; Mr. Maciejewski indicated trade-offs with maintenance costs were considered, and O&M would be in addition to the baseline projects. Ms. Gustafson indicated baseline projects are already included in construction in process (CIP), CTAC addressed framework only. Mr. Maciejewski indicated CTAC has discussed incorporating other in-process transportation plans. Member Moseley indicated funding does not exist for baseline projects; Ms. Swirsky noted funding sources have been identified, and projects and policies will evolve as studies are completed. Member Livingston noted a BLSD road was omitted from the map and inquired how those types of changes impact funding. Ms. Gustafson reinforced the CTF is not about funding or prioritizing, it is a list of projects; funding and prioritization is coming in the Spring. Member Piper expressed concerns about the impact on 9th Street and Wilson Avenue if traffic is redirected from Reed Market Road; Mr. Maciejewski indicated it will be part of the study.

Member Moseley expressed support for additional vehicle projects in the downtown / core area; Mr. Maciejewski indicated the Parkway Study will address some of the concerns. Ms. Gustafson inquired if Member Moseley's concern is at the CTF or neighborhood level; Mr. Maciejewski indicated both due to the level of capital investment required. Member Moseley inquired if projects

are being considered to mitigate the need to go south on surface streets in order to go north on the parkway, siting the need to use Knott Road to access US 97 north; Mr. Maciejewski indicated solutions are part of the Murphy Corridor project.

Member Goodman-Campbell inquired if the LSN includes crossings of major roads; Mr. Maciejewski indicated it does.

Member Moseley expressed he would like accessibility requirements included in the connected pedestrian system.

Member Goodman-Campbell expressed concerns about the south river crossing study project but believes it is worth studying. Member Russell is concerned about community pushback, and recommended being mindful of investment in the study, having process check-ins. Mr. Dills indicated the study would be subsequent to the TSP, and Mr. Maciejewski indicated the timing of the project is closer to 2030. Member Debone would support defining the land use around the affected area, and why the need for a river crossing exists.

Member Russell supports continuing to look at moving the switchyard because of existing conversation with area municipalities. Member Farnsworth indicated BNSF is open to the idea.

Member Livingston inquired if the ROW for widening existing facilities would be purchased or acquired through development; Mr. King indicated both. Ms. Swirsky indicated we currently have much of the ROW needed, and Mr. Hultberg noted the ROW may be preserved by including related projects in the TSP.

Member Goodman-Campbell inquired if current mobility targets are being met; Mr. Maciejewski indicated not all are, though there are projects included in the framework to address them. Member Campbell inquired if there is a way to communicate to drivers the difference between time and distance with regard to moving through roundabouts and intersections. Member Farnsworth expressed encouragement to consider time-value differences. Member DeBone suggested terminology be included with regard to alternate mobility standards; Mr. Dills recommended including in policy discussions. Member Moseley recommended studying how to acquire ROW east of Bend before it is developed; Mayor Russell indicated it will be discussed this Spring.

Public comment:

- Kristen Phillips spoke to concerns about the A-4 south river crossing study project.
- Moey Newbold with Central Oregon Land Watch spoke in support of policies that improve livability.
- Beth Hoover, chair of Mt View Neighborhood Association, expressed a lack of support for 27th Street becoming a five-lane bypass and would favor Hamby Road as an alternative.

Ms. Hull summarized refinements to the CTF as follows:

1. Advance Option B for Wilson Avenue, with a recommendation for targeted public outreach, and a specific look at the 9th Street and 15th Street intersection.
2. Add a framework program to address capital needs to maintain a state of good repair.
3. Add to the project list a way to call out implementing the intelligent transportation system (ITS) plan outcome, similar to how the parkway was addressed.

4. Modify the pedestrian system recommendation to explicitly consider Americans with Disabilities Act (ADA) needs.
5. Look at additional vehicular projects at the downtown core to address alternate mobility targets.
6. Terminology changes:
 - a. Clarify meaning of obtaining ROW for future corridors.
 - b. Revise language around alternate mobility targets to be clearer.
 - c. Revise language around implementing technology per the ITS plan.

Member Livingston moved for approval of the Citywide Transportation Framework recommended by CTAC, with the refinements identified by the Steering Committee; Member Abernethy seconded. Motion received unanimous approval. Members Abernethy, Campbell, DeBone, Farnsworth, Goodman-Campbell, Hopper, Livingston, Moseley, Piper and Russell in favor (10 yes).

In summary, attached are the changes requested by the Steering Committee that are reflected in the final versions of the Initial Funding Assessment and the Citywide Transportation Framework.

6. Closing items

Member Russell's indicated Council goal setting begins next week.

Mr. Dills acknowledged the departure of Ms. Hull from the project team.

Meeting adjourned at 1:06pm.

Respectfully submitted,

Jenny Umbarger
Growth Management Department

Accessible Meeting/Alternate Format Notification



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Agenda Item No. 3:
Project & Program Prioritization
Criteria



DRAFT Project & Program Prioritization Criteria

June 18, 2019

Overview

The project prioritization criteria establish a method to help identify transportation investment priorities for the City of Bend. These criteria build on the work completed in Phase 1 and Phase 2 of the Bend TSP process that identified the 2040 Project List. As used here, investment priorities refers to what transportation facilities and programs are important to fund and implement, and, when those investments should occur over the near-, mid-, and long-term through 2040. The criteria presented herein are based upon the established project goals and are consistent with other City of Bend infrastructure planning efforts.

Figure 1 shows the general process that will guide project prioritization as part of the Bend Transportation System Plan (TSP). The evaluation will proceed along the following steps:

1. Identify the 2040 Project List (Current list developed as part of Phase 1 & Phase 2)
2. Establish the funding assumptions to be used¹
3. Model and evaluate the 2040 Project List using performance measures established during Phase 1
4. Evaluate the 2040 Project List based on the prioritization criteria established in this document
5. Conduct a Citywide Transportation Advisory Committee (CTAC) work session to review the evaluation
6. Categorize the elements of the 2040 Project List as:
 - Near-term Project/Program
 - Mid-term Project/Program
 - Long-term Project/Program
 - Development Driven Project
7. Create the Funding Plan (near-term projects/programs) and Funding Strategy (mid- and long-term projects/programs)
8. Finalize the 2040 Prioritized Project List, Funding Plan and Funding Strategy

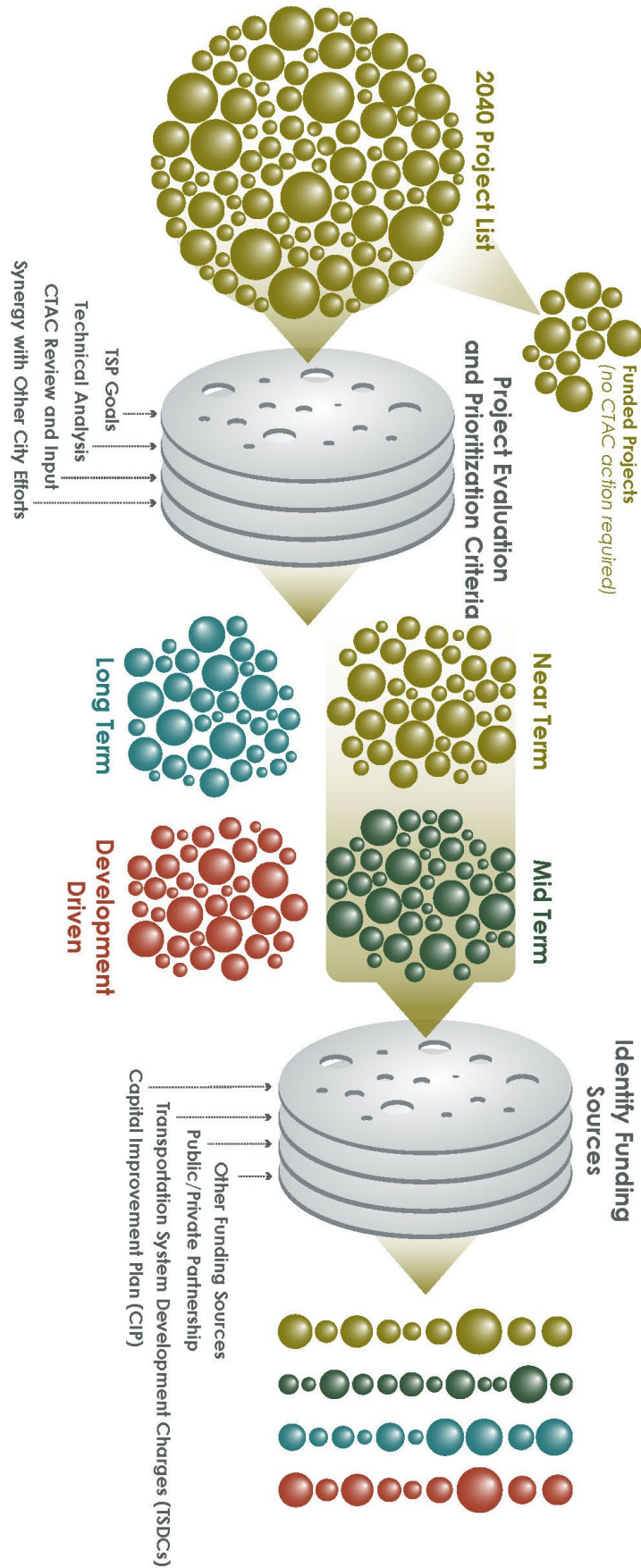
Steps 6-8 above will be iterative as CTAC and the Funding Work Group discuss choices and direction for their recommendations to the Steering Committee.

¹ Funding assumptions will be based on the Initial Funding Assessment, as further discussed by the Funding Work Group. An example of a funding assumption is the rate to be used for a Transportation Utility Fee.

Request to CTAC

CTAC is requested to review this memorandum, identify refinements, and approve the final memorandum as a recommendation to the Steering Committee. The remainder of this memorandum outlines the proposed prioritization criteria and identifies how they will be used to evaluate the 2040 Project List.

Figure 1 – Prioritization Process Chart



Project and Program Screening Conducted To-Date

In 2018 as part of Phase 1, CTAC, the Steering Committee, and the project team conducted the initial screening of projects as part of the scenario evaluation effort. These Phase 1 efforts led to the development of the Citywide Transportation Framework (CTF). The CTF was refined via the Neighborhood Outreach effort, completed in early 2019. These first two phases of the TSP considered a number of projects and programs, some of which were either advanced for further evaluation or set aside for consideration in the future or through a different planning effort. The culmination of Phases 1 and 2 led to the development of the 2040 Project List that is comprised of viable projects and programs which will be evaluated during Phase 3 using the prioritization criteria.

Draft Prioritization Criteria

The prioritization criteria will be used to differentiate, compare and identify trade-offs associated with the projects/programs in the 2040 Project List. This evaluation will be informed by data from the Bend-Redmond Regional Travel Demand Model and other technical and qualitative evaluations. Using this information, each of the projects or programs will be qualitatively rated to assess its ability to meet the TSP Goals & Objectives as guided by the prioritization criteria. The evaluation will then inform discussion to determine recommended timelines for implementation.

It is important to note that the proposed evaluation process is a blend of art and science; it is guided decision making as opposed to a rigid point system. For effectiveness, the prioritization criteria need to be easily understood and allow for differentiation between projects. This ensures a common understanding of each criterion’s meaning and allows for a clear comparison among different ideas.

The criteria listed in Table 1 are based directly on the Goals & Objectives identified by CTAC and approved by the Steering Committee.

The prioritization criteria will be rated based on the scale shown in Table 2, using a “consumer reports” method of project rating.

Table 1. Draft Prioritization Criteria

Goal	Application to Prioritization Criteria
<p>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)</p>	<p>Does the project or program:</p> <p><i>Streets, transit, bicycle, & pedestrian to be evaluated independently</i></p> <ul style="list-style-type: none"> • Add to or enhance the street network or address known areas of existing or future congestion? • <i>Add to or enhance the</i> transit network? • <i>Add to or enhance the</i> bicycle network? • <i>Add to or enhance the and/or</i> pedestrian network, or facilitate the ability to implement or add to these networks in the future? • Increase the reliability of transit, on-time freight operations and vehicular travel? • <i>Address a near-term or long-term need?</i>

Goal	Application to Prioritization Criteria
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 prioritized Opportunity Areas or Expansion Areas, including those prioritized by City Council? • Allow the development of other priority areas identified areas for employment or affordable-housing?
Protect Livability and Ensure Equity and Access	Does the project or program: <p><i>Protect Livability:</i></p> <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)? <p><i>Ensure Equity and Access:</i></p> <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, comfortable, affordable and reliable transportation choices to meet daily transportation needs of disadvantaged transportation access for 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? • Help prepare Bend for future technology? • Help to implement other planned infrastructure projects within the City of Bend or by a partner agency?

Goal	Application to Prioritization Criteria
<p>Implement a Comprehensive Funding and Implementation Plan</p> <p>(Note: Evaluation of this Goal will be done within the Funding Plan and Funding Strategy)</p>	<p>Is the project or program:</p> <p>Cost-effective when considering the benefits and trade-offs?</p> <p>A good match to existing or future funding sources?</p> <p>Align with the community's vision?</p>

Table 2. Draft 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

Additional Considerations

In addition to the criteria described above, the prioritization process will also be informed by the forthcoming work by the Transportation Outreach Strategy Team and project synergy possible with other planned infrastructure projects (e.g., planned sewer project along an identified roadway project, planned ODOT project, etc.). These considerations will be handled on a case-by-case basis.

Agenda Item No. 4:
Bend Transportation Plan 2040
Project List



Bend Transportation Plan 2040 Project List

PREPARED FOR: Citywide Transportation Advisory Committee
 PREPARED BY: TSP Project Team
 DATE: June 18, 2019

Requested CTAC Action & 2040 Project List Purpose

This memorandum presents the 2040 TSP Project list for consideration by the CTAC at meeting #11 on June 18, 2019. CTAC will review the 2040 project list at CTAC 11 and confirm this list reflects work and recommendations completed to-date. Recommendations from CTAC will be forwarded to the Steering Committee for their consideration on June 20, 2019.

The performance of the recommended 2040 project list will be analyzed using the Bend-Redmond Travel Demand Model. The list will then be evaluated using the Prioritization Criteria (see the June 2019 Draft Prioritization Criteria Memorandum for more details). The outcomes of that analysis will be considered by CTAC during a workshop at CTAC 12.

Introduction

The 2040 TSP Project List is a combination of improvements identified in the four venues discussed below.

1. Citywide Transportation Framework (Previously Approved by Steering Committee)

- **Baseline Projects** – includes previously identified project needs from the City's 5-year Capital Improvement Program, the Bend MPO Transportation Plan's financially-constrained project list, the Bend Urban Area 2016 Transportation System Plan amendments to support the UGB expansion,¹ and those projects identified for funding as part of the 2019 Council Goals process. The Baseline Projects are shown in Figure 1 and listed in Table 1.
- **Additional Vehicular & Multimodal Projects** – projects and programs identified by CTAC and approved by the Steering Committee within Phase 1 of this TSP update. These additional projects are shown in Figures 2 and listed in Table 2.
- **Complete Bicycle Low-Stress Network** – additional bike facilities needed to provide a comprehensive Low-Stress Network for cycling throughout the city. Specific projects to construct near-term elements of the Bicycle Low-Stress Network have been identified in "Key Route Infill Projects" described below.
- **Connected Pedestrian System** – improvements needed to (a) fill gaps in the sidewalk system and provide additional crossing opportunities along arterials and collectors, (b) implement a local sidewalk infill and crossing improvement program, and (c) improve facilities to meet current Americans with Disabilities Act (ADA) standards. Specific projects to construct near-term elements of the connected pedestrian system have been identified in "Key Route Infill Projects" described below.

¹ Bend Urban Area Transportation System Plan as updated to incorporate 2016 UGB expansion.

- **State of Good Repair** – this is a general category of funding for capital improvements necessary to maintain the City’s transportation system in a state of good repair. Many roadways in the City have deferred maintenance needs that will require significant reconstruction to remedy. This program is included in Table 2.
 - **Studies & Policies** – this list includes refinement plans for further study related to an additional river crossing and improvements to the railroad crossing at Reed Market as well as programmatic elements that help achieve the TSP policies, such as implementing transportation demand management (TDM) programs for major employers and institutions, an Intelligent Transportation Systems (ITS) plan, the Downtown Parking Plan, and development of a policy to address alternative mobility standards for use in evaluating the impacts of future land use growth as well as prioritizing citywide improvements. These elements are included in Table 2 and the draft policies.
2. **Neighborhood Workshop Outcomes:** Workshop participants identified specific programs and projects of both citywide and neighborhood significance that address existing needs as shared by workshop participants. From a broader list of neighborhood ideas, CTAC recommended a set of projects for inclusion in the 2040 Project List (Included in Table 2 and noted as “CTAC Recommend Addition”).
 3. **Staff Recommendations:** City staff identified additional multimodal projects to address existing and forecast future deficiencies of the transportation system that were not previously identified. These projects are listed in Table 3 and shown in Figure 3.
 4. **Key Route Infill Projects:** City staff identified key corridors that are critical to implementing the Low Stress Bicycle Network and providing infill to provide continuous walking routes across the City. City staff also identified essential projects along those routes that are needed in order to provide a usable, continuous facility. These routes and key projects have been recommended by CTAC for inclusion in the 2040 Project List. Projects are shown in Figure 4 and listed in Table 4.

Background

The 2040 Project List implements the TSP goals and performance measures approved by the Steering Committee in September 2018. This list provides the framework for a balanced transportation system that will serve Bend residents, workers, visitors, a robust economy, and a livable community during the next twenty years.

The TSP Scenario Evaluation process identified a core list of projects that achieve the findings identified below.

✓ **Addressing Key Vehicular Capacity Needs Will Improve Travel Time Reliability & Help Alleviate Congestion**

Technical work completed for the TSP to-date has clearly demonstrated the need to manage Bend’s existing and future congestion by improving connectivity (new roads), widening specific existing roadway segments, fixing intersection bottlenecks, and/or adopting policies that allow for more vehicular congestion in specific areas or corridors.

The key capacity needs were identified as those that address:

- (1) east-west capacity and connectivity through Central Bend,
- (2) north-south capacity due to the lack of a comprehensive arterial network, and

(3) south/central US 97 corridor capacity and safety.

At prior CTAC meetings, the benefits and trade-offs of a variety of projects that address the key capacity needs were discussed. To address the first two categories of needs, the 2040 Project List includes a combination of new roads and an incremental approach to intersection improvements and roadway widening. This approach will enable the City to monitor the effectiveness of emerging technologies on managing vehicular congestion and to construct new or widen existing roadways only when they are needed. In addition to physical improvements and technological changes, the 2040 Project List includes refinement plans related to a possible new bridge over the Deschutes River, and the potential for moving the Burlington Northern Railroad switching yard outside of the City and/or constructing an overcrossing at Reed Market Road.

The operational and safety management projects needed to address the south/central US 97 corridor are being identified via the ODOT US 97 Parkway Study.

✓ **Complete Bike and Pedestrian Networks Create Connectivity and Access**

Complete bicycle and pedestrian systems in Bend will improve connectivity and access for people on foot, using mobility devices, and on bikes. Without a comprehensive and connected network, implementation of isolated projects will not result in significant gains in access to jobs for those walking, using mobility devices, or biking. Completing these networks is particularly important for connecting employment and residential areas with key transit corridors and the overall viability of transit in Bend. The 2040 Project List includes a goal of a complete bicycle “low-stress network” and a complete pedestrian system to address this need.

✓ **Transit and Demand Management Work Together**

Technical work completed for the TSP to-date has also identified that demand for motor vehicle trips, particularly during peak hours, can be mitigated by a combination of transit investments and implementing policies and programs that encourage use of other modes (e.g., parking pricing and employer commute options). Concepts such as “mobility hubs”² can provide first/last mile travel choices that connect to an improved transit system. Implementing transportation demand management in key regional centers and parking pricing in downtown would support increased transit, walking and biking in Bend, and complement the Bend Comprehensive Plan.

² A mobility hub is a physical place where different modes of travel and services converge, providing an integrated range of mobility services such as public transit, bike share, scooters, shuttles, and ride-share. This convergence of services helps to seamlessly link trips by different modes, including providing first/last mile services for regional transit connections.

Figure 1. 2040 Project List: Baseline Transportation Projects

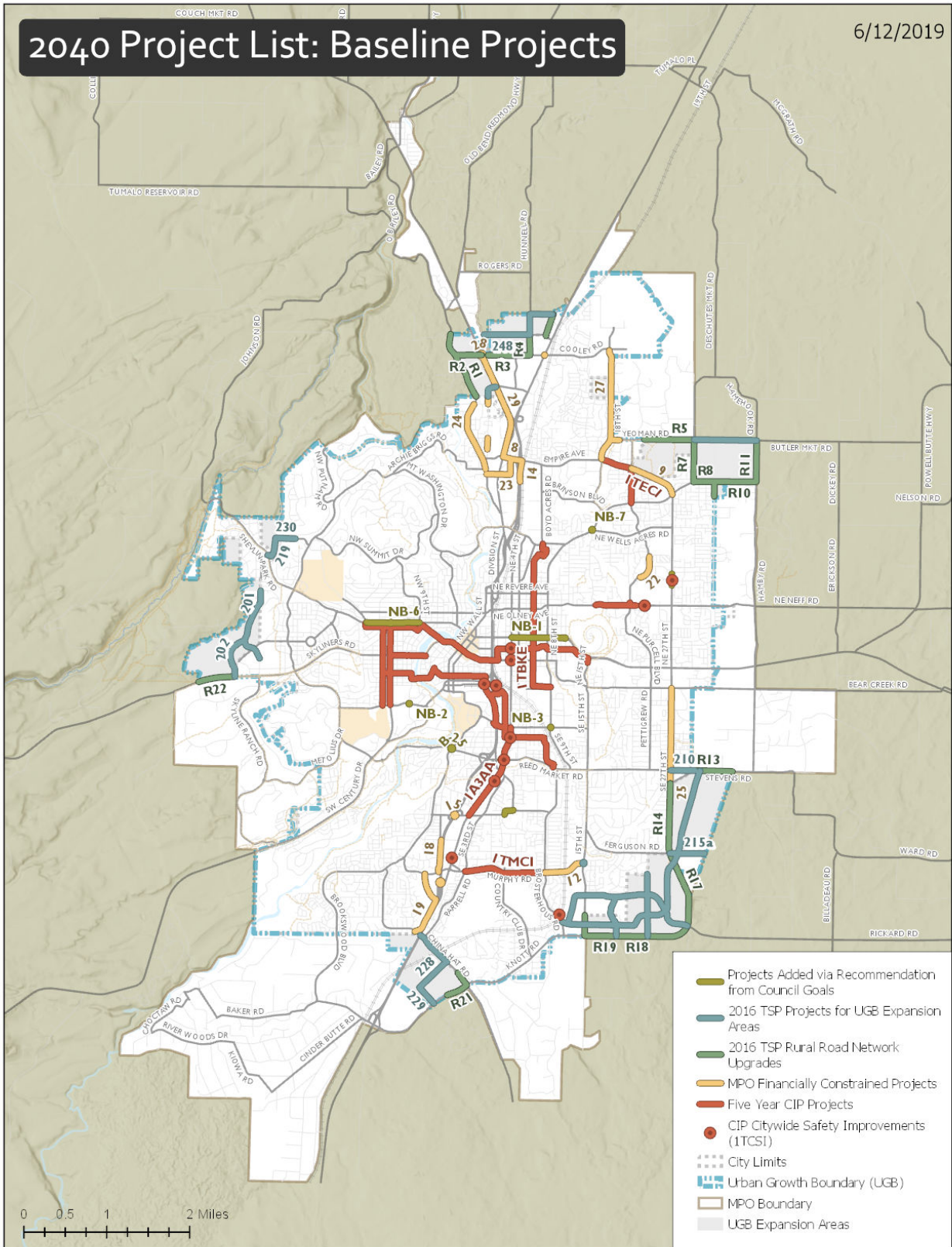


Table 1. Baseline Transportation Projects

Number	Project Name	Location	Project Description	Project Type
NB-1	Greenwood Avenue Sidewalk improvements	From 3rd Street to 12th Street	Improve existing sidewalks along Greenwood Avenue (Added via Council Goals)	Pedestrian
NB-2	Simpson Avenue / Columbia Avenue intersection safety and capacity improvements	Simpson Avenue at Columbia Avenue	Includes a roundabout (Added via Council Goals)	Roadway Safety/Capacity
NB-3	Wilson Avenue / 9th Street intersection safety and capacity improvements	Wilson Avenue at 9th Street	Includes a roundabout (Added via Council Goals)	Roadway Safety/Capacity
NB-4	27th Street / Conners Avenue intersection safety and capacity improvements	27th Street at Conners Avenue	Specific improvement to be determined to address existing and future safety and operational needs (Added via Council Goals)	Roadway Safety/Capacity
NB-5	Chase Road extension	From Brosterhous Road to terminus	Includes extending Chase Road to Brosterhous Road and intersection improvements at Brosterhous Road/Chase Road (Added via Council Goals)	Complete Street (All Modes)
NB-6	Newport Avenue corridor improvements	From College Way to NW 9th Street	Includes closing sidewalk gap on Newport Avenue and connecting Newport Avenue to 15th St neighborhood greenway. Includes additional improvements to be determined (Added via Council Goals)	Complete Street (All Modes)
NB-7	Butler Market Road / Wells Acres Road intersection safety and capacity improvements	Butler Market Road at Wells Acres Road	Includes a roundabout (Added via Council Goals)	Roadway Safety/Capacity

Number	Project Name	Location	Project Description	Project Type
B-25	Reed Market Road/Bond Street intersection capacity improvement	Reed Market Road at Bond Street	Assumes partial two-lane roundabout at Bond/Reed Market Road (Added via Council Goals)	Roadway Safety/Capacity
B-27	Reed Market Road / 3rd Street intersection safety and capacity improvements	Reed Market Road at 3rd Street	Provide dedicated left turn lanes on Reed Market at 3rd Street, possibly through widening or a lane reconfiguration (Added via Council Goals)	Roadway Safety/Capacity
8	Empire Avenue widening to five lanes	From US 20 to US 97 northbound ramp	Widen Empire to 5 lanes (near interchange) and install traffic signal at SB ramps.	Roadway Safety/Capacity
9	Empire Avenue extension	From Purcell Boulevard to 27th Street	Includes three lane extension, maintaining ROW for a five lane section, and multi-lane roundabout at Butler Market Road	Complete Street (All Modes)
10	Stevens Road realignment	Stevens Road at Reed Market Road	Includes connection to Reed Market Road and bridge to cross canal	Roadway Safety/Capacity
11	O.B. Riley Road intersection safety and capacity improvement	From Old Bend-Redmond Hwy to 3rd Street	Improvements at key intersections such as Mervin Sampels, Archie Briggs Road, Halfway Road and Glen Vista/Hardy Road	Roadway Safety/Capacity
12	Murphy Road extension	From Brosterhous Road to 15th Street	Includes a bridge to cross the railroad and a roundabout at Murphy Road/15th Street.	Complete Street (All Modes)
13	US 97 / Cooley Road area improvements	US 97 at Cooley Road	Includes interim Cooley Road improvements	Roadway Safety/Capacity
14	US 97 / Empire Avenue northbound off ramp widening	US 97 at Empire Boulevard	US 97/Empire Avenue northbound off ramp widening to two lanes	Roadway Safety/Capacity

Number	Project Name	Location	Project Description	Project Type
15	Powers Road / US 97 preliminary engineering and ROW acquisition for Interchange	Powers Road at US 97	May include interchange or overcrossing, pending outcome of the Parkway Study	Roadway Safety/Capacity
17	Yeoman Road extension	From 18th Street to western terminus	Includes two lane extension and bridge to cross canal	Complete Street (All Modes)
18	New North Frontage Road	Near Murphy Road	Improvements to be determined	Complete Street (All Modes)
19	New South Frontage Road	Near Murphy Road	Improvements to be determined	Complete Street (All Modes)
20	Britta Street extension (north section)	From Hardy Road to Robal Road	Includes two lane extension	Complete Street (All Modes)
21	Britta Street extension	From Halfway Road to Ellie Lane	Includes two lane extension	Complete Street (All Modes)
22	Purcell Boulevard extension	From Full Moon Drive to Jackson Avenue	Includes two lane extension	Complete Street (All Modes)
23	Mervin Sampels Road / Sherman Road Collector Corridor upgrade	From O.B. Riley Road to Empire Boulevard	Includes upgrade to two lane collector roadway and a traffic signal at US 20	Complete Street (All Modes)
24	O.B. Riley Road Arterial Corridor upgrade	From Hardy Road to US 20	Includes upgrade to three lane arterial with curb, sidewalk and bike lane improvements	Complete Street (All Modes)
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	Complete Street (All Modes)
26	US 97 northbound on ramp and southbound off ramp at Murphy Road	US 97 at Murphy Road	US 97 northbound on ramp and southbound off ramp at Murphy Road	Roadway Safety/Capacity
27	18th Street Arterial Corridor upgrade	From Cooley Road to Butler Market Road	Includes upgrade to three lane arterial	Roadway Safety/Capacity
28	US 20 intersection safety and capacity improvements	From Robal Road to Old Bend-Redmond Hwy	Intersection control improvements to be determined.	Roadway Safety/Capacity

Number	Project Name	Location	Project Description	Project Type
29	US 20 southbound Roadway widening	From Cooley Road to US 97 interchange	US 20 southbound widening to two lanes	Roadway Safety/Capacity
1TMCI	Murphy Road Corridor safety and capacity improvements	Parrell Road to Brosterhous Road	Includes roundabouts at Country Club Drive and Brosterhous Road. Includes upgrade to three lane collector.	Roadway Safety/Capacity
1TECI	Empire Boulevard Corridor safety and capacity improvements	From 18th Street to Purcell Boulevard	Includes upgrade to three lane arterial	Roadway Safety/Capacity
1TBKE	Neighborhood Bicycle greenways	Throughout Central Bend	Add improvements such as signage and pavement markings to designate neighborhood greenways	Pedestrian/Bicyclist
1A3aa	South 3rd Street Pedestrian improvements	From Powers Road to Wilson Road	Improvements to be determined	Pedestrian/Bicyclist
1TNPS	Neff Road / Purcell Boulevard intersection capacity and safety improvements	Neff Road at Purcell Boulevard	Intersection control improvements to be determined, including sidewalks along the north side of Neff Road	Roadway Safety/Capacity
1TGCI	Galveston Corridor improvements	From 14th Street to Riverside Boulevard	Multi-modal transportation facility improvements to help with pedestrian, bicycle, and vehicular connectivity in Galveston Avenue corridor. City is currently completing design effort for this project.	Roadway Safety/Capacity
1T14	14th Street reconstruction	From Newport Avenue to Colorado Avenue	Includes 1T14B and 1T14R	Roadway Safety/Capacity
1TCSI	Citywide safety improvements	Throughout Bend	Includes 3rd/Hawthorne, 3rd/COID Canal, 3rd/Pinebrook, Brosterhous/Railroad bridge, and Colorado Ave/US 97 improvements	Roadway Safety/Capacity

Number	Project Name	Location	Project Description	Project Type
R1	O.B. Riley Road rural Road upgrade	From Hardy Road to Old-Bend Redmond Highway	Includes curb and sidewalk on east side, bike lanes both directions	Pedestrian/Bicyclist
R2	Cooley Road rural Road upgrade	From O.B. Riley Road to US 20	Includes curbs, sidewalks and bike lanes both directions	Pedestrian/Bicyclist
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	Pedestrian/Bicyclist
R4	Hunnell Road rural Road upgrade	From Cooley Road to Loco Road	Includes sidewalk on west side	Pedestrian/Bicyclist
R5	Yeoman Road rural Road upgrade	From western terminus to Deschutes Market Road	Includes curbs, sidewalks and bike lanes both directions	Pedestrian/Bicyclist
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
R7	Deschutes Market Road rural Road upgrade	From canal to Butler Market Road	Includes curb and sidewalk on east side	Pedestrian/Bicyclist
R8	Butler Market Road rural Road upgrade	From Deschutes Market Road to Eagle Road	Includes curb and sidewalk on north side	Pedestrian/Bicyclist
R9	Butler Market Road rural Road upgrade	From Eagle Road to Clyde Lane	Includes curbs, sidewalks and bike lanes both directions	Pedestrian/Bicyclist
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
R11	Butler Market Road rural Road upgrade	From Hamby Road to Hanbrook Road	Includes curbs and sidewalks on both sides	Pedestrian/Bicyclist
R12	Eagle Road rural Road upgrade	From Eagle Road to Marea Drive	Includes curb, sidewalk, and bike lane on east side	Pedestrian/Bicyclist
R13	Stevens Road rural Road upgrade	From Stevens realignment to Bend UGB boundary	Includes curbs, sidewalks and bike lanes both directions	Pedestrian/Bicyclist

Number	Project Name	Location	Project Description	Project Type
R14	SE 27th Street rural Road upgrade	From Stevens Road to Ferguson Road	Includes curb, sidewalk, and bike lane on east side	Pedestrian/Bicyclist
R15	SE 27th Street rural Road upgrade	From Ferguson Road to Diamondback Lane	Includes curb and sidewalk on east side, bike lanes both directions	Pedestrian/Bicyclist
R16	SE 27th Street rural Road upgrade	From Diamondback Lane to access road	Includes curb and sidewalk on east side	Pedestrian/Bicyclist
R17	SE 27th Street rural Road upgrade	From access road to Knott Road	Includes curbs and sidewalks on both sides	Pedestrian/Bicyclist
R18	SE 27th Street rural Road upgrade	From Knott Road to 15th Street	Includes curbs, sidewalks and bike lanes both directions	Pedestrian/Bicyclist
R19	Knott Road rural Road upgrade	From 27th Street to 15th Street	Includes curbs, sidewalks and bike lanes both directions	Pedestrian/Bicyclist
R20	15th Street rural Road upgrade	From Knott Road to access road	Includes curb and sidewalk on east side, bike lanes both directions	Pedestrian/Bicyclist
R21	Knott Road rural Road upgrade	South of China Hat Road	Includes curb and sidewalk on north side	Pedestrian/Bicyclist
R22	Skyliners Road rural Road upgrade	Within the UGB expansion area	Includes curb and sidewalk on north side	Pedestrian/Bicyclist
R23	Clausen Drive rural Road upgrade	From Loco Road to northern terminus	Includes sidewalk on west side	Pedestrian/Bicyclist
R24	China Hat Road rural Road upgrade	North of Knott Road	Includes sidewalks on both sides	Pedestrian/Bicyclist
R25	China Hat Road canal bridge widening	North of Knott Road	Widen bridge to include sidewalk on both sides	Pedestrian/Bicyclist
R26	Deschutes Market Road canal bridge widening	North of Monticello Drive	Widen bridge to include sidewalk on west sides	Pedestrian/Bicyclist
201	Skyline Ranch Road extension	West UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
202	Crossing Drive extension	West UGB expansion area	Two lane collector roadway	Complete Street (All Modes)

Number	Project Name	Location	Project Description	Project Type
204	New Road	From O.B. Riley to Robal Road	Two lane collector roadway	Complete Street (All Modes)
205	Hunnell Road extension	Triangle UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
206a	New Road	Triangle UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
207a	Yeoman Road extension	From Deschutes Market Road to Hamhook Road	Two lane collector roadway	Complete Street (All Modes)
210	New Road to Stevens	DSL UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
211	New Road	DSL UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
212	New Road	DSL UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
213	New Road	Elbow UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
214	New Road	Elbow UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
214b	New Road	Southeast Bend UGB	Two lane collector roadway	Complete Street (All Modes)
214c	New Road	Southeast Bend UGB	Two lane collector roadway	Complete Street (All Modes)
215a	New Road	DSL UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
216	New Road	Elbow UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
219	Skyline Ranch Road	Shevlin UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
224	New Road	Elbow UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
224a	New Road	Southeast Bend UGB	Two lane collector roadway	Complete Street (All Modes)

Number	Project Name	Location	Project Description	Project Type
225	New Road	Elbow UGB expansion area	Two lane collector roadway	Complete Street (All Modes)
226	New Road	Elbow UGB expansion area	Two lane collector roadway	Complete Street (All Modes)

Figure 2. 2040 Project List: Citywide Transportation Framework Projects

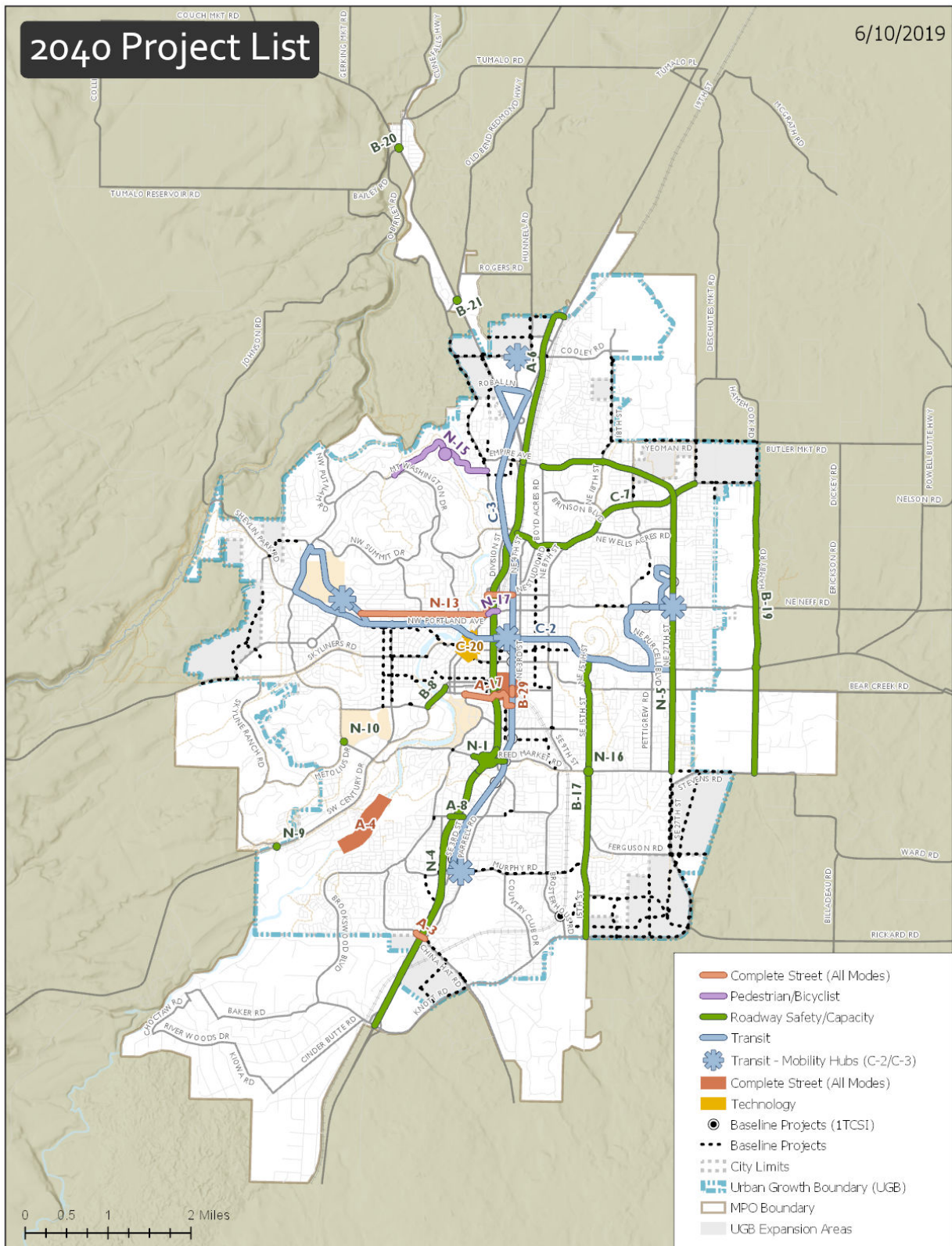


Table 2. 2040 Project List (including CTAC recommended additions)

Project Number	Project Name	Location	Project Description	Project Type
A-3	Ponderosa Street / China Hat Road overcrossing	Ponderosa Street/China Hat at US 97	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)
A-4*	Study for southern river crossing	Between Powers Road and Murphy Road	Study to identify new river crossing location between Powers Road and Murphy Road, connecting Century Drive to US 97 or 3rd Street	Complete Street (All Modes)
A-6	US 97 North parkway extension	From Grandview Drive to Butler Market Road	Includes all improvements in the US 97 Bend North Corridor Project FEIS	Roadway Safety/Capacity
A-8	Powers Road interchange	Powers Road at US 97	Grade separated interchange or overcrossing of US 97 (pending Parkway Study)	Roadway Safety/Capacity
A-17	Aune Road extension	From Bond Street to 3rd 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.	Complete Street (All Modes)
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.	Roadway Safety/Capacity

Project Number	Project Name	Location	Project Description	Project Type
B-17	15th Street Corridor safety and capacity improvements	From US 20 to Knott Road	Includes roundabouts at key intersections, including Wilson Avenue, Ferguson Road, and Knott Road.	Roadway Safety/Capacity
B-19	Hamby Road Corridor safety improvements	From Ward Road/Stevens Road to Hamby Road/Butler Market Road	Includes shoulder widening for safety and bicycle facilities. Includes a roundabout at US 20 and safety improvements at key intersections, including Neff Road and Butler Market Road	Roadway Safety/Capacity
B-20	US 20 / Cook Avenue intersection safety and capacity improvements	US 20 at Cook Avenue	Includes intersection safety and capacity improvements (may include roundabout or signal).	Roadway Safety/Capacity
B-21	US 20 / Old Bend-Redmond highway intersection safety and capacity improvements	US 20 at Old-Bend Redmond Highway	Includes intersection safety and capacity improvements (may include roundabout or signal).	Roadway Safety/Capacity
B-29	3rd Street railroad undercrossing widening	From Emerson Avenue to Miller Avenue	Widen 3rd Street to 4-lanes under the railroad, including complete street design.	Complete Street (All Modes)
C-2	Newport Avenue / Greenwood Avenue corridor high-capacity transit and mobility hubs	Mt Washington Drive to 27th Street	Includes HCT transit service connecting COCC to downtown to St. Charles Area. Includes improved transit connections from neighborhoods to HCT stops. Includes mobility hubs at west end, east end, and in central Bend.	Transit
C-3	3rd Street corridor high-capacity transit and mobility hubs	Murphy Road to near Robal Road	Includes HCT transit service connecting northern Bend (the Triangle) to southern Bend. Includes improved transit connections from neighborhoods to HCT stops. Includes mobility hubs at north end, south end, and in central Bend.	Transit
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	Roadway Safety/Capacity

Project Number	Project Name	Location	Project Description	Project Type
C-9	Colorado Avenue / US 97 Northbound ramp intersection safety and capacity improvements	Colorado Avenue at US 97 Northbound ramp	Includes traffic signal or roundabout.	Roadway Safety/Capacity
C-16 (Not Mapped)	TDM Program for major employers and institutions	Throughout Bend	TDM program for major employers and institutions	Technology
C-19 (Not Mapped)	Traffic Signal Coordination improvements along signalized corridors, including freight and transit Signal Priority	Throughout Bend	Includes US 97 (mainline and ramp terminals), 3rd Street, 27th Street, Colorado/Arizona couplet, and US 20 (3rd Street and Greenwood) corridors	Technology
C-20	Parking pricing and management in downtown Bend	Downtown Bend	Implement the 2017 Downtown Parking Plan	Technology
C-24*	Study of at-grade railroad crossing solutions near Reed Market Road	Near Reed Market Road and railroad crossing	Study the cost and feasibility of relocating the BNSF switchyards compared to a Reed Market Road overcrossing of the railroad	Complete Street (All Modes)
N-1	Reed Market Road Interchange improvements	Reed Market Road at US 97	Reed Market Road interchange improvements as defined by the Parkway Study	Roadway Safety/Capacity
N-4	US 97 operational and safety management improvements and associated City street improvements	US 97 within Bend MPO boundary	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-5	Empire Boulevard / 27th Street Corridor capacity improvements	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.	Roadway Safety/Capacity

Project Number	Project Name	Location	Project Description	Project Type
LSN (Mapped separately)	Low Stress Bicycle Network (LSN) Program	Throughout Bend	City program to implement a LSN (see LSN map and list of key LSN projects)	Pedestrian/Bicyclist
P-1 (Not Mapped)	Connected Pedestrian System Program, including Sidewalks and Enhanced Crossings on Arterial and Collector Roadways	Throughout Bend	City program to complete the arterial and collector pedestrian system (sidewalks and crossings)	Pedestrian/Bicyclist
P-2 (Not Mapped)	Local Street Sidewalk Infill, Repair, and Crossing improvement Program	Throughout Bend	City program to implement local street and sidewalk infill, repairs, and crossing improvements	Pedestrian/Bicyclist
T-1 (Not Mapped)	Address Capital Needs backlog to maintain a state of Good Repair	Throughout Bend	City program to address capital needs backlog to maintain a state of good repair, including reconstruction of streets, signals, bridges, and other transportation infrastructure	Program
T-2 (Not Mapped)	Neighborhood traffic calming Program	Throughout Bend	City program to manage vehicle speeds in neighborhoods through various traffic calming techniques	Pedestrian/Bicyclist
T-3 Not Mapped)	School zone enforcement and Safe Routes to School Program	Throughout Bend	City program to improve safety near schools and in school zones. Includes enhanced speed zone enforcement and improvements for walking and biking.	Pedestrian/Bicyclist
T-4 (Not Mapped)	Street lighting Program	Throughout Bend	City program to improve street lighting, especially at crossing locations. Consider dark skies.	Pedestrian/Bicyclist
T-5 (Not Mapped)	Bicycle and Pedestrian facility maintenance Program	Throughout Bend	City program to improve snow and debris clearing along key pedestrian and bicycle facilities.	Pedestrian/Bicyclist
N-6 (Not Mapped)	Intelligent Transportation System (ITS) plan implementation	Throughout Bend	Intelligent Transportation System (ITS) projects and programs as defined by the County ITS Plan	Technology

Project Number	Project Name	Location	Project Description	Project Type
N-7 (Not Mapped)	Transportation safety Action Plan (TSAP) implementation	Throughout Bend	Safety projects and programs as defined by the Transportation Safety Action Plan	Complete Street (All Modes)
N-8 (Not Mapped)	Cascades East transit (CET) Plan implementation	Throughout Bend	Transit projects and programs as defined by the Cascades East Transit Plan.	Transit
N-9	Century Drive/Skyline Ranch Road roundabout CTAC Recommended Addition	Century Drive at Skyline Ranch Road	Address existing and future safety and operational needs at intersection; specific improvements to be evaluated in next phase of work.	Roadway Safety/Capacity
N-10	Mt. Washington Drive/Metolius Drive roundabout CTAC Recommended Addition	Mt. Washington Drive at Metolius Drive	Address existing and future safety and operational needs at intersection; specific improvements to be evaluated in next phase of work.	Roadway Safety/Capacity
N-13	Portland Avenue Corridor Project CTAC Recommended Addition	From College Way to NE 3rd	Multi-modal transportation facility improvements to help with pedestrian, bicycle, and vehicular connectivity in the Portland Avenue corridor. Project includes improvements to the Revere Avenue Interchange area.	Complete Street (All Modes)
N-14 (Not Mapped)	Improve all City-owned pedestrian bridges across the Deschutes River CTAC Recommended Addition	Various	Evaluate and repair/replace bridges to accommodate pedestrian and bicycle traffic.	Pedestrian/Bicyclist
N-15	Archie Briggs Road Improvement Project CTAC Recommended Addition	Deschutes River Trail Crossing	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

Project Number	Project Name	Location	Project Description	Project Type
N-16	Reed Market Road/15th Street intersection safety and capacity improvements CTAC Recommended Addition	Reed Market Road at 15th Street	Includes expanding the partial multi-lane roundabout to a full multi-lane roundabout	Roadway Safety/Capacity
N-17	Olney Protected Bicycle Lanes CTAC Recommended Addition	Parkway undercrossing	Provide protected bicycle lanes on Olney Avenue at Parkway undercrossing	Pedestrian/Bicyclist
N-18 (Not Mapped)	Projects of Regional Significance from Subarea Planning Efforts CTAC Recommended Addition	Various	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

*Indicates project for a feasibility study

Project Type: Multimodal Roadway Capacity/Safety Transit Technology Pedestrian/Bicyclist

Figure 4 Recommended Additions to 2040 Project List

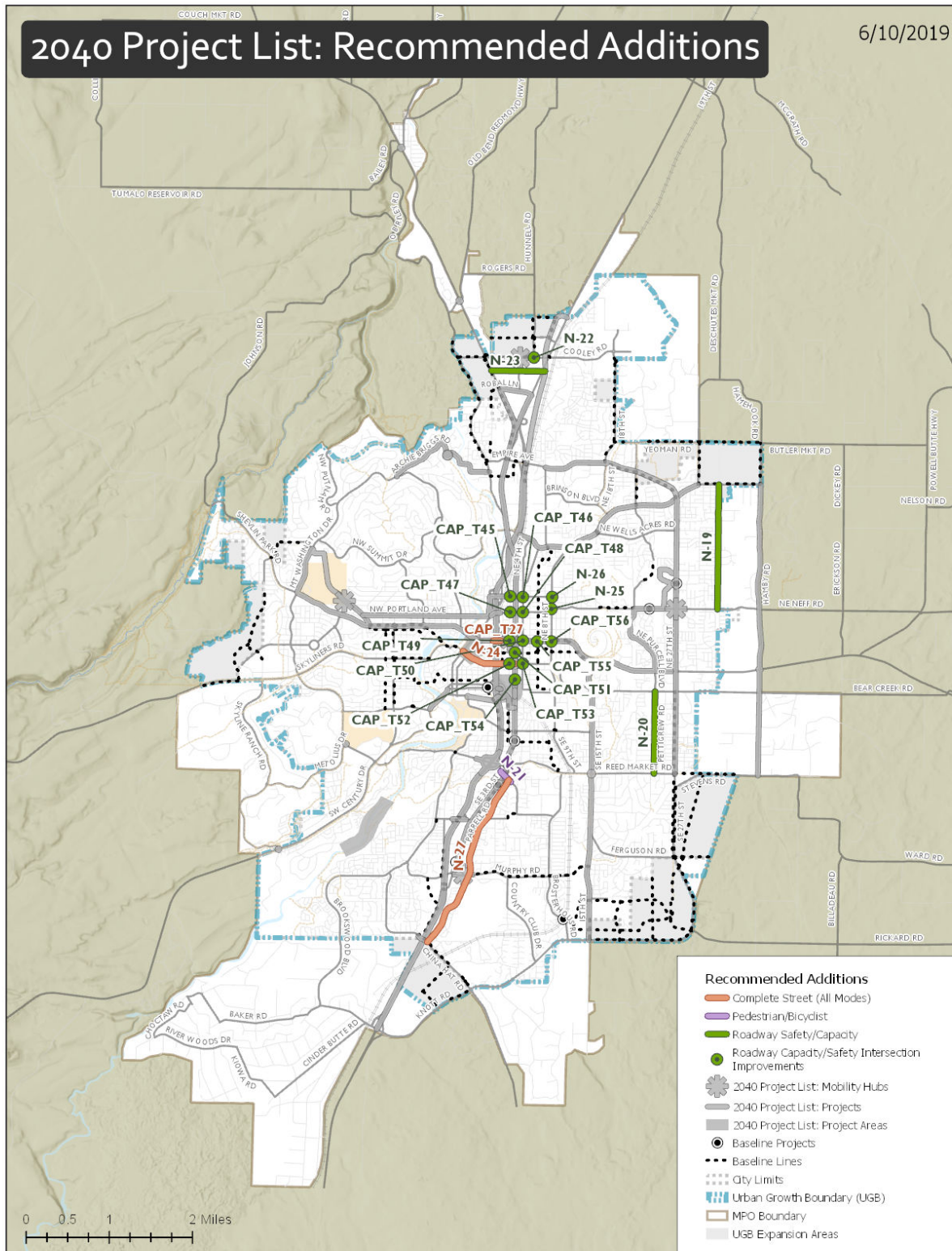


Table 3. Recommended Additions to 2040 Project List (Post CTF)

Project Number	Project Name	Location	Project Description	Project Type	Reason for Addition
N-19	Eagle Road Functional Classification Upgrade	Neff Road to Butler Market Road	Classify roadway as Minor Collector and construct complete street upgrades	Roadway Capacity/Safety	Staff recommendation
N-20	Pettigrew Road Urban Upgrade	Reed Market Road to Bear Creek Road	Construct complete street upgrades. Includes intersection improvements at Reed Market Road and Bear Creek Road.	Roadway Capacity/Safety	Staff recommendation
N-21	3rd Street Canal Crossing	Canal crossing just south of 3rd Street/Brosterhous Road	Construct pedestrian facilities on 3rd Street across the canal bridge.	Pedestrian/Bicyclist	Staff recommendation
N-22	Cooley Road/Hunnell Road Intersection Improvement	Cooley Road/Hunnell Road	Add intersection improvement at Cooley/Hunnell to Cooley Road rural Road upgrade project (R3) already in baseline	Roadway Capacity/Safety	Staff recommendation
N-23	Collector between Cooley Road & Robal Road	US 20 to Hunnell Road	Construct new collector between US 20 and Hunnell Road. Road would be south of Cooley road and north of Robal Road	Roadway Capacity/Safety	Staff recommendation
N-24	Franklin Avenue Corridor Study	Downtown to 3rd Street	Conduct a corridor study to determine roadway and intersection improvement needs to serve all users	Complete Street (All Modes)	Staff recommendation
N-25	Olney Avenue/8th Street Intersection improvement	Olney Avenue/8th Street	Improve intersection capacity	Roadway Capacity/Safety	Staff recommendation
CAP_T46	Revere Avenue/4th Street Intersection improvement	Revere Avenue/4th Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
N-26	Revere Avenue/8th Street Intersection improvement	Revere Avenue/8th Street	Improve intersection capacity	Roadway Capacity/Safety	Staff recommendation
CAP_T45	Revere Avenue/2 nd Street Intersection improvement	Revere Avenue/2 nd Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation

Project Number	Project Name	Location	Project Description	Project Type	Reason for Addition
CAP_T47	Onley Avenue/2nd Street Intersection improvement	Onley Avenue/2nd Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T48	Onley Avenue/4th Street Intersection improvement	Onley Avenue/4th Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T50	Greenwood/4th Street Intersection improvement	Greenwood/4th Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T49	Greenwood/2nd Street Intersection improvement	Greenwood/2nd Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T52	Franklin Avenue/2nd Street Intersection improvement	Franklin Avenue/2nd Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T53	Franklin Avenue/4th Street Intersection improvement	Franklin Avenue/4th Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T51	Hawthorne Avenue/3rd Street Intersection improvement	Hawthorne Avenue/3rd Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T54	Clay Avenue/3rd Street Intersection improvement	Clay Avenue/3rd Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T55	Greenwood/6th Street Intersection improvement	Greenwood/6th Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T56	Greenwood/8th Street Intersection improvement	Greenwood/8th Street	Improve intersection capacity	Roadway Capacity/Safety	Core Area Project Recommendation
CAP_T27	Greenwood Undercrossing Improvements	Underpass of the Parkways	Widen undercrossing to include improved multimodal facilities	Complete Street (All Modes)	Core Area Project Recommendation
N-27	Parrell Road Urban Upgrade	China Hat Road to Brosterhous Road	Construct complete street upgrades and reconstruct roadway	Complete Street (All Modes)	Staff recommendation

Project Type: Multimodal Roadway Capacity/Safety Transit Technology Pedestrian/Bicyclist

Figure 4. Key Walking and Biking Routes

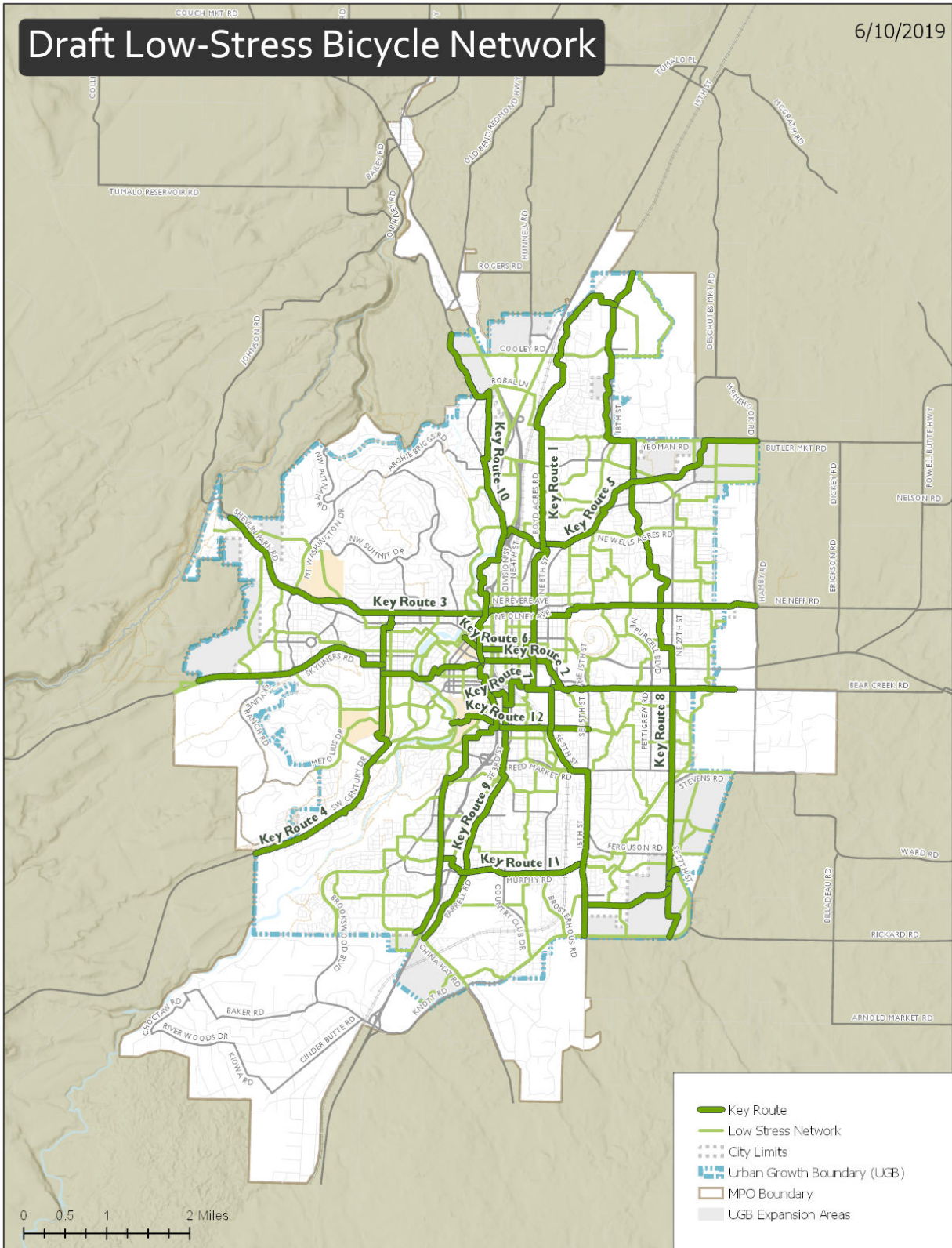


Table 5. Recommended Low-Stress Bicycle Network Projects on Key Routes

Key Routes & Projects	Project Extents	Facility Type & Description	Cost Projection
<i>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</i>			
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.	\$\$
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.	\$
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.	\$\$\$
<i>ROUTE 2: NW Crossing to new Affordable Housing: Route runs east-west connecting Skyliners Rd, Franklin Ave and Bear Creek Rd</i>			
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.	\$
R2-B	Franklin Ave Underpass: Hill St to 1 st St	Shared use path adjacent to roadway: Widen sidewalk paths under RR and Hwy 97 to modernize design for roadside safety.	\$\$\$\$
R2-C	Franklin Ave: 1 st St to 5 th St	Buffered bike lane: Re-stripe roadway to include buffered bike lane westbound; includes crosswalks at 2 nd St & 4 th St and signal timing enhancements at 3 rd St.	\$
R2-D	Bear Creek SRTS: Larkspur Trail to Coyner Trail	Trail: Close sidewalk gap and create a connection between Coyner and Larkspur Trail.	\$
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.	\$\$\$
<i>ROUTE 3: Shevlin Park to Big Sky Park: Route runs east-west connecting Shevlin Park Rd, Portland Ave, Olney Ave, and Neff Rd</i>			

Key Routes & Projects	Project Extents	Facility Type & Description	Cost Projection
R3-A	Norton Ave: NE 6 th St to NE 12 th St	Neighborhood greenway: Create a low-stress bikeway on NE Norton Ave (SRTS ³).	\$
R3-B	Hillside Trail: Connects NE 12 th to Neff Rd	Hillside path: Close sidewalk gap and create a switchback shared use path (SRTS); includes school zone enhancements.	\$\$\$
R3-C	Neff Rd: NE 12 th to Big Sky Park	Shared use path adjacent to roadway: Close sidewalk gaps and create a low-stress bikeway.	\$\$\$
R3-D	Deschutes River Footbridge: Drake Park	Upgrade footbridge: Accessibility upgrades and widen to reduce user conflicts.	\$\$
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.	\$
<i>Route 4: West UGB to Portland Ave: Route runs north-south connecting Haul Rd Trail to 15th St Neighborhood Greenway</i>			
SW-1	Newport Ave: NW College Way to NW 9 th St	Sidewalks: Close sidewalk gap on Newport Ave and connect Newport Ave to 15 th St neighborhood greenway	\$
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 15 th St neighborhood greenway.	\$
R4-B	NW 14th St: Ogden Ave to Portland Ave	Hillside path: Close sidewalk gap and create a hillside switchback shared use path within 14 th St right-of-way to connect route to Portland Ave.	\$
<i>Route 5: Route runs along Butler Market Rd</i>			
R5-A	Butler Market Rd: Brinson Blvd to NE 6 th St	Shared use path adjacent to roadway: Close sidewalk gap along both sides of Butler Market Rd and create low-stress bikeway.	\$\$\$
<i>Route 6: Hawthorne Overcrossing: Core Area connectivity</i>			

³ STRS: Safe Routes to School

Key Routes & Projects	Project Extents	Facility Type & Description	Cost Projection
R6-A	Hawthorne Overcrossing Bridge: NE 1 st St to NE 5 th St	Grade separated overpass: Close sidewalk gap along Hawthorne and create a grade-separated footbridge over BNSF RR ⁴ and Hwy 97.	\$\$\$\$
<i>Route 7: 3rd St at RR to Connect KorPine to 3rd St</i>			
R7-A	3rd St	Crosswalk: Create a safe crossing of 3 rd St between BNSF RR and Wilson Ave using RRFB ⁵ and safety islands.	\$
R7-B	3rd St	Crosswalk: Create a safe crossing of 3 rd St between BNSF RR and Franklin Ave using RRFB and safety islands.	\$
R-7C	3rd Street	3rd Street Underpass: Near Term Enhancements to sidewalk.	\$
<i>Route 8: 27th St: Route runs north-south connecting neighborhoods to services and transit</i>			
R8-A	27th St: Hwy 20 to Reed Mkt Rd	Shared use path adjacent to road: Close sidewalk gap along 27 th Street and create a low-stress bikeway.	\$\$\$
<i>Route 12: Wilson Ave: Route runs east-west connecting neighborhoods to services and transit</i>			
R12-A	Wilson Ave: 2 nd Street to SE 9 th Street	Shared use path adjacent to roadway: Close sidewalk gap along Wilson Avenue and create a low-stress bikeway.	\$\$
R12-B	Wilson Avenue: 9 th to 15 th Street	Shared use path adjacent to roadway: Create a low-stress bikeway to connect near SE neighborhoods to Old Mill and Deschutes River Trail.	\$\$

Notes:

\$ - Less than \$500,000

\$\$ - \$500,000 to \$1 million

\$\$\$ - \$1 million to \$5 million

\$\$\$\$ - \$5 million to \$10 million

\$\$\$\$\$ - \$10 million to \$50 million

⁴ BNSF RR: Burlington Northern Santa Fe Railroad

⁵ RRFB: Rectangular Rapid Flashing Beacon

Agenda Item No. 5:
Preliminary Draft Policies



Draft Transportation Policies

PREPARED FOR: Bend Transportation Plan Steering Committee
PREPARED BY: Karen Swirsky, City of Bend Growth Management Department
DATE: June 5, 2019

Transportation Goals, Policies & Actions

The Bend Transportation Plan includes Goals, Policies and Actions that set the overall direction for how we will implement and manage our transportation system into the future. As a reminder, the Goals, Policies and Action items will be adopted with the Bend Transportation Plan, and therefore will be part of Bend's Comprehensive Plan. In that context, the Goals are aspirational (not regulatory), the Policies are regulatory, and Action items are supporting (not regulatory).

CTAC Policy Subcommittees

CTAC subcommittees met several times each to review policies from Bend's existing Transportation Plan and policy language from other cities. From these examples, CTAC revised or drafted new policies and identified potential action items. The subcommittees were:

- Bicycle/Pedestrian/Complete Streets
- Equity
- Mobility
- Safety
- Technology/Transit/Transportation Demand Management
- Funding (Initial Funding Assessment, via the Funding Work Group)

Timeline for Policy Discussion & Adoption

CTAC as a whole has reviewed all of the draft policies with the exception of Funding, which will go to the Funding Work Group in July. The draft policies are also under review by the City Legal and other appropriate City Departments – which may result in adjustments to policy language. CTAC will hold a workshop on July 26 to review and create updated drafts of the policies. Final draft policies will be brought to the Steering Committee for approval in December 2019, and the policies will be adopted by City Council with the Transportation Plan in spring 2020.

Requested Steering Committee Action

Please review the preliminary draft policies for general completeness and logic in meeting the Goals. Your input will be provided to CTAC for their July 26th workshop.

Preliminary Draft Policies – 6/11/19

DRAFT SAFETY POLICIES

Introduction: The City of Bend aspires to have zero serious injuries or fatal crashes on its transportation system. The City recognizes that we must design and manage our transportation network with this goal in mind.

- 1. The City will balance safety, connectivity, and travel time reliability for all modes of transportation in design and construction of transportation projects, and in transportation program implementation.**

Actions:

- *Adopt and implement the 2019 Transportation Safety Action Plan, including mapping identified crash emphasis areas.*
- *Amend the Bend Development Code to ensure that safety mitigation is included as part of development.*

- 2. The City aspires to have no transportation-related fatalities or serious injuries by reducing the number and severity of crashes through design, operations, maintenance, and enforcement.**

Actions:

- *By 2021, the City will develop and adopt an action plan to move the City towards zero traffic deaths or serious injuries (e.g. Vision Zero). The plan will set a clear goal of eliminating traffic deaths and serious injuries among all road users within an explicit timeframe (i.e. 10 years) and actively engage key City departments.*

- 3. The City will consider the needs and safety for all users in transportation projects, programs, and funding decisions, to improve safety for vulnerable users. Vulnerable users are transportation system users most at risk in traffic, such as pedestrians, cyclists, and public transportation users- children, older people, and disabled people may be in this category.**

Actions:

- *The City will plan for, design, construct, and/or reconstruct streets to achieve consistency between motorists' speeds and target speed limits, and prioritize speeding and reckless driving enforcement programs on problematic routes.*
- *Identify, prioritize, and/or allocate funding for projects and programs to improve safety for vulnerable users.*

- 4. The City's policy is to achieve consistency between motorists' speeds and target speed limits.**

Actions:

- *Create a citywide speed management program to address safety issues related to speed.*
- *Review street design in coordination with emergency services; amend Standards and Specifications accordingly.*

5. The City will provide transparent, easy to understand, and effective communication programs to encourage safe travel on the transportation system.

Action:

- *Develop a comprehensive public dashboard of data to capture the user experience of the City's Transportation System in a system that integrates data from existing sources, not limited to crash data, with data from new and emerging street monitoring technology and public input.*

Draft Mobility Policies

Introduction: The City will design, construct, maintain, and operate its transportation system to provide a comprehensive and integrated network to safely serve all modes and people of all ages and abilities, promote commerce, and support the Comprehensive Plan's vision for growth and development in a responsible and efficient manner.

- 1. The City will plan for efficient access for employees, customers, emergency services, and freight to and from employment, commercial, and industrial lands, for all modes of travel.**
- 2. The City will improve connectivity and address deficiencies in the street network with the understanding that connectivity needs and conditions may vary based on an area's existing and planned land uses and street network (e.g., large lot industrial areas may have different needs than residential areas).**
- 3. The City will limit the location and number of driveways and vehicular access points on higher order streets (arterials and collectors) to maintain public safety and future traffic carrying capacity, while preserving appropriate access to existing and future development.**
- 4. The City's preferred intersection treatment is the roundabout, for reasons of capacity, traffic flow, and safety. The City may select a different intersection treatment, considering land acquisition needs, operational considerations, topography, and other engineering factors.**

Action:

- *Update the Bend Roundabout Design Guide, incorporate in Standards and Specifications.*
- 5. The City's standard for collectors and arterials is a three-lane configuration, but will also consider a two-lane configuration with medians where appropriate for pedestrian crossing safety and traffic flow.**

6. Placeholder for Mobility Standard Policy

- 7. The City will manage the roadway network with the intent to achieve travel time reliability for all users.**
- 8. The City's policy is to manage congestion/corridor demand before adding motor vehicle lanes. Adding travel lanes for motor vehicles will be considered only after the City has:**
 - a. Evaluated the safety effects for all users and modes of travel;**
 - b. Evaluated the potential to add capacity through intersection improvements;**
 - c. Evaluated the potential to add capacity through increasing system connectivity with parallel routes;**
 - d. Provided appropriate transit, bicycle and pedestrian facilities, including safe crossings; and**
 - e. Implemented Transportation Demand Management or other tools; and**
 - f. Assessed the full cost of property acquisition in monetary and social terms.**

9. The City may permanently or temporarily waive the mobility standard for a particular intersection or corridor when it is determined that peak hour vehicle traffic congestion is acceptable in order to meet other community goals and desired outcomes, including but not limited to affordable housing and safety. (Note-placeholder, more internal discussion needed)

10. The City desires to preserve connections between local connections and ODOT facilities.

Action:

- *Continue to coordinate with ODOT to determine when to implement modifications to City streets and closures or modifications to approaches on City streets that will be impacted by improvements to US20 or US97.*

DRAFT EQUITY POLICIES

Introduction: The City of Bend believes that communities thrive when all individuals, from all parts of our City, have affordable and equitable access to a full range of transportation choices to meet their daily needs- including, but not limited to employment, housing, healthcare, education, recreation, and shopping. The City also recognizes that a significant portion of Bend's residents are low-income and that their needs require particular attention in prioritizing and funding transportation investments, programs, and services.

- 1. The City defines Transportation Equity as being achieved when everyone has access to safe, comfortable, affordable, and reliable transportation choices to meet their daily transportation needs. Transportation equity helps ensure that disparities are reduced and access to daily needs and key destinations are fairly provided.**

Actions:

- *Fund data collection to identify historically underfunded populations, to better identify and understand their transportation needs and target projects and programs to improve transportation-related conditions for these residents.*
 - *Adapt policies and actions to address evolving needs.*
 - *Analyze crash and fatality data to determine if rates are higher in neighborhoods that are more diverse than the City as a whole. Ensure that the annual CIP process includes projects that will improve safety outcomes and processes that build trust within these areas.*
- 2. The City will equitably distribute the benefits and costs of transportation system plans and improvements. The City will prioritize (change to balance?) and support programs and projects, both capital and maintenance, that eliminate transportation-related disparities faced by vulnerable populations. Vulnerable populations include, but are not limited to:**
 - a. People who cannot drive, including many older adults, children, and persons with disabilities.**
 - b. People experiencing challenges to self-sufficiency, including those who do not have access to a car, are struggling with the high costs of car ownership, maintenance, and operation, or are struggling with the cost of transportation.**
 - c. Communities experiencing racism and discrimination.**
 - d. People with limited mobility. People in this category include many older adults and people with disabilities.**
 - e. Isolated community members living far from community centers and lacking reasonable access to goods and services.**

Actions:

- *Create an equity lens for analyzing transportation benefits and shortcomings.*
- *Analyze the impacts of transportation projects and programs on areas with greater proportions of low-income, health-challenged, minority, youth and/or elderly population than the City as a whole. Use national best practices for a guide.*

- 3. The City will actively engage and support all populations with respect to age, race, disability, gender, income, or location in the City, in transportation planning issues, outcomes and decisions, and will actively engage and support those who have experienced transportation barriers.**

Actions:

- *Develop, fund, and implement a set of citywide community outreach and engagement protocols that build trust and promote community empowerment in transportation issues and planning.*
 - *Ensure that transportation planning staff have the training resources they need to address equity and diversity issues in infrastructure planning.*
- 4. The City will strive to avoid, minimize and/or mitigate disproportionately high and adverse human health or environmental effects of transportation projects, including safety-related, social, and economic effects on minority and/or low-income populations.**

DRAFT TECHNOLOGY, TRANSIT, AND TRANSPORTATION DEMAND MANAGEMENT (TDM) POLICIES

Introduction: Technology, transit, and transportation demand management tools (including parking management) are critical tools for maximizing the regional and local environmental, economic and social benefits of the Bend transportation system.

- 1. The City will look for opportunities to partner with public and private sectors to test and implement new mobility technologies, including through pilot and/or demonstration projects to create efficient opportunities to test emerging mobility techniques and technologies to better understand their impacts, costs, and opportunities.**
- 2. The City will develop a centralized system for managing, integrating and analyzing transportation data to provide a foundation for data-driven decision making for the City. All mobility providers, connected vehicle infrastructure, and any private data communications devices installed in the City right of way must to use open data standards to report anonymized, accurate, complete and timely information on use, compliance and other aspects of operations.**

Action:

- The City will establish a centralized transportation data system and provide transportation-related data to the public to increase transparency and accountability in meeting identified transportation performance measures.*

- 3. The City recognizes that micro-mobility- small-wheeled vehicles (bikes, e-bikes, scooters, etc.) provided for rent in short time increments which provide increased mobility options are an important concept in transportation planning and demand for such services will likely increase in the future.**

Action:

- The City will evaluate and develop clear guidelines to maximize benefits, and address concerns to govern the location and management of Shared Active Transportation (or “micromobility”) vehicles in the right of way, as approved by the City.*

- 4. The City will encourage the use of electric vehicles by supporting public charging infrastructure and developing a Community Electric Vehicle Infrastructure Plan. The City will act as a role model by replacing City fleet vehicles with electric as replacement opportunities occur.**
- 5. The City recognizes that autonomous vehicles (which do not require the performance of a human operator for part or all of their functions) will be a part of the City’s transportation system in the near future. The City will develop and implement autonomous vehicle strategies to ensure travel time reliability and system efficiency, reduce vehicle miles traveled, and have a positive effect on carbon emissions.**
- 6. The City will manage the curb zone area of the right of way to ensure flexibility and adaptability as parking and mobility technologies change. The City will use adjacent land use characteristics, building type, and other physical attributes to determine the appropriate curb use (e.g., on-street parking, pick-up/drop off of passengers or**

freight, Shared Active Transportation facilities, bikeways, transit stops, and enhanced transit stops).

Action:

- *Create guidelines for curb management, and amend the Standards and Specifications and Bend Development Code to implement.*

7. **The City will implement the Intelligent Transportation System Plan and work with ODOT and the MPO to regularly update the Plan.**
8. **The City will develop a program to require larger institutions and businesses to implement and track a Transportation Demand Management plan that outlines targets, strategies, and evaluation measures to reduce vehicle miles traveled and reduce single-occupancy vehicle trips, particularly at peak hours.**
9. **The City will establish Mobility Hubs, in cooperation with Cascades East Transit, in all four quadrants of the City, in the core, and in regional centers to improve the accessibility of all forms of transportation and transportation technologies. Mobility Hubs are a concentration of transportation services near transit stations that may include Wi-Fi technologies, pocket maps/ brochures, secure bicycle parking, car- and bike-share services, shuttle service, and other assistance for the traveling public.**

Action:

- *Create a Mobility Hub program, identify and fund staff to develop and manage the program.*
10. **The City will continue to develop, document and promote its own internal Transportation Demand Management plan to serve as a role model for others.**
 11. **In order to increase transportation options and support existing and planned land uses, the City will work with Cascades East Transit to improve the efficiency and effectiveness of existing services in Bend, expansion of services to underserved areas and support for regional systems that encourage residents of nearby communities to travel to Bend by public transit. (Note: Postponed until CET completes its Plan update)**
 12. **The City will plan, prioritize, and implement needed improvements on corridors identified for high-capacity transit, including complete street elements and signal prioritization.**
 13. **The City will work with Cascades East Transit to develop Mobility on Demand and Mobility as a Service trip planning and payment tools across multiple mobility platforms. (Note: Postponed until CET completes its Plan update)**
 14. **The City will work with Cascades East Transit to replace the fleet of transit vehicles with energy-efficient vehicles, where applicable, that minimize the transit system's impact on the environment as replacement opportunities occur. (Note: Postponed until CET completes its Plan update)**
 15. **The City will fully implement the Downtown Parking Plan (2017).**

- 16. The City will adopt the use of parking management and enforcement technologies to optimize use of existing public and private parking supply, to reduce conflicts, and to reduce the share of land occupied by parking.**
- 17. The City will enable the creation of parking districts in areas where residents or stakeholders have identified an issue that could be resolved by parking management, and/or in locations where data supports the development of a parking district.**

Action:

- *Amend the Bend Code Title 6 to implement parking districts, and identify and fund staff to manage parking districts.*

- 18. The City will regularly monitor and update parking requirements to allow for adjustments based on changes in behavior and parking demand over time.**

DRAFT FUNDING POLICIES (Funding Work Group will be evaluating these on July 24).

1. The City's transportation funding plan will use a variety of tools to achieve balance and resilience, intended to generate revenues that are stable and flexible over the planning period and through economic market cycles, and that provide sufficient funding for the full range of project types and programs.
2. The City's transportation funding plan will ensure that all users of the transportation system, including but not limited to visitors, commuters, residents, new development, institutions, and businesses (including property tax exempt organizations and entities) pay a fair and equitable share for transportation system development and maintenance.
3. The City's transportation funding plan will generate sufficient capital and operations/maintenance revenue to cover the full life-cycle costs (from initial construction to on-going maintenance) of priority projects (including depreciation), programs, and staffing required to successfully manage and accomplish projects with an explicit focus on near-term and priority projects.
4. The City will implement a transportation funding plan that is broadly supported by the community.

Actions:

- *Discern community priorities and build community support for new funding tools, especially those that require a public vote, through outreach, polling, education, and other efforts to gather and share information.*
 - *Where possible and appropriate, identify alternate tools (a "Plan B") for those funding sources that have a lesser degree of predictability or stability, such as mechanisms subject to voter approval, a sunset clause, are for a limited duration, or are vulnerable to variability due to the nature of larger economic cycles or other factors.*
5. The transportation funding plan will recognize that technologies will change in ways that affect costs and also change the City's ability to monitor, use, and collect revenues. The transportation funding plan should consider funding for innovation and adaptation/inclusion of new technologies that may become available over time.
 6. The City will regularly evaluate existing funding sources and explore the use of new funding opportunities to increase resources for maintenance operations and capital improvements.
 7. The selection of transportation improvements to be funded within the City's yearly Capital Improvement Program plan will be based on the prioritized list of projects included in this Transportation Plan, subject to public review and comment through a City Council public hearing process.

BIKE, PEDESTRIAN, AND COMPLETE STREETS POLICIES

Introduction: The City of Bend's transportation system should be an interconnected network of complete streets that provides safe, optimized travel for all modes. The system is intended to increase safety and travel time reliability, while encouraging walking, biking, and opportunities for using transit and other shared transportation options. The following policies support this vision for Bend's transportation system.

- 1. The City's policy is that all streets should be "complete streets." A complete street is one that is designed to allow everyone to travel safely and comfortably along and across the street, by all travel modes. Arterials, collectors, and most local streets will have buffered sidewalks. Arterials, collectors and select local streets will have facilities in compliance with the Low Stress Network and the Pedestrian Master Plan (See Policy 2).**

Actions:

- *Adopt the Low Stress Bikeway Map and Bikeway Design Guide.*
- *Create and adopt a Pedestrian Master Plan (see Policy 2).*
- *Update the Standards and Specifications and/or Bend Development Code to identify how complete street elements will be incorporated during development and redevelopment, new construction, reconstruction, and maintenance activities.*

- 2. The City will create and implement a Pedestrian Master Plan to establish a pedestrian network that safely and comfortably serves the community year round. The Pedestrian Master Plan will include identification of key pedestrian routes, including crossings.**

Actions:

- *Create and adopt a Pedestrian Master Plan that identifies key routes including enhanced crossing locations. The Pedestrian Master Plan will include an infill program to systematically fund the construction of missing sidewalks and crosswalks on identified key routes and identify appropriate pedestrian facilities for local streets and how to implement those facilities in existing neighborhoods.*
- *The Pedestrian Master Plan will include a Sidewalk Maintenance Plan, to address issues including but not limited to: sidewalk maintenance, winter operations and snow removal, and ADA Compliance.*
- *Amend the Bend Development Code and Standards and Specifications for sidewalk construction.*
- *Develop and implement a Wayfinding program for the pedestrian network.*

- 3. The City may use traffic calming and minor traffic management tools as appropriate to manage motor vehicle speed, volume, and turning movements to meet the requirements of the bicycle Low Stress Network and Pedestrian Master Plan.**

4. The City recognizes the importance of providing students with safe and comfortable walking and biking routes to school.

Actions:

- *In collaboration with the School District, the City will develop Safe Routes to School plans and implementation programs for **existing schools**. The School District, in collaboration with the City, will develop Safe Routes to School plans and implementation programs for **new schools**.*
- *Safe Routes to School plans will identify routes of travel and infrastructure needs including bikeways, sidewalks and crosswalks to accomplish the following:*
 - *Elementary Schools: Level of Traffic Stress 1 routes within 1 mile of the school.*
 - *Middle and High Schools: Level of Traffic Stress 1 or 2 routes within 1.5 miles of the school.*
- *Where the Level of Traffic Stress service criteria would be exceeded for a segment, but correcting it is infeasible due to existing constraints such as topography, right-of-way restriction, road speeds, or other barriers, then mitigation actions will be identified, including but not limited to inclusionary school busing and using crossing guards.*
- *Amend the Bend Development Code to clarify School District requirements to provide bike and pedestrian routes to new schools.*

5. The City recognizes the Bend Park and Recreation District Trail Plan as an element of the transportation system, and will collaborate with the District for City bikeway and pedestrian facility planning and construction.

6. The City will collaborate with Bend Park and Recreation District to provide safe and convenient access for people walking and biking to parks and trails, including roadway crossings.

7. The City requires enhanced crosswalks at key intervals across arterial and collector roadways to complete the walking and bicycling networks (established by the respective Master Plans), including school and trail crossings. All intersections are legal crosswalks; “enhanced” means that there are additional treatments including, but not limited to, striping, safety islands, enhanced lighting, and flashing beacons where warranted, and other tools to enhance pedestrian safety.

Actions:

- *Develop requirements and clear and objective criteria for the installation of enhanced crosswalks and amend the Bend Development Code and the City’s Standards and Specifications to incorporate these.*
- *Update the Standards and Specifications to provide adequate illumination at crosswalks and intersections*

8. Bicycle and pedestrian facilities should be maintained for year-round use.

Action:

- *Update the City’s Winter Maintenance and Operations plan to incorporate walking and biking facilities.*

- *Create an Intergovernmental Agreement with Parks and Recreation District and other local agencies who own or operate walking and biking that clarifies maintenance responsibilities for trails, walking, and biking facilities that are part of or connect the City's Low Stress Bikeway network and/ or Pedestrian Master Plan.*

Agenda Item No. 6:
Transportation Outreach
Strategy Summary

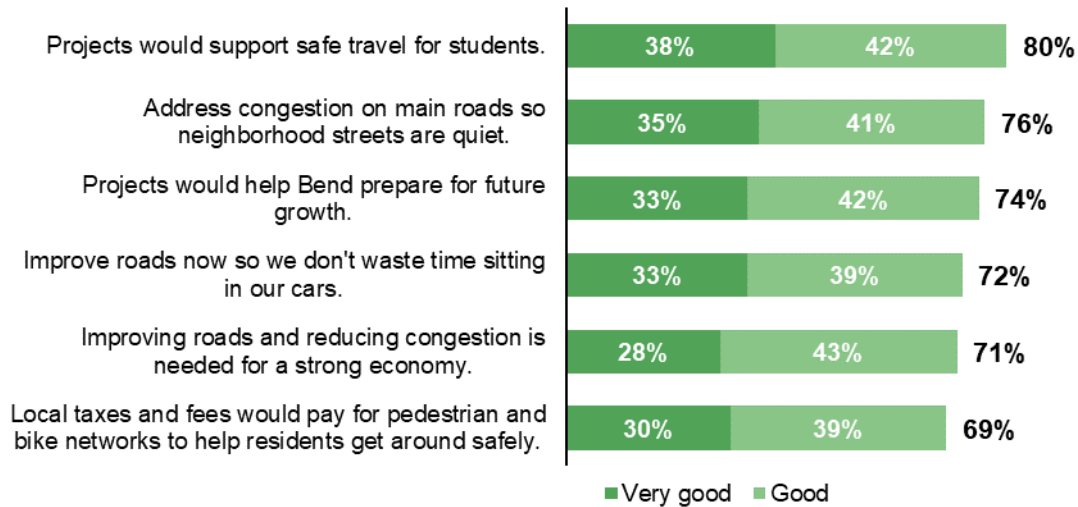
Bend Transportation—Capital Improvement Funding Telephone Survey – May 2019

This is a summary of the Telephone Survey Results- the full report is found on the CTAC website by following this link:

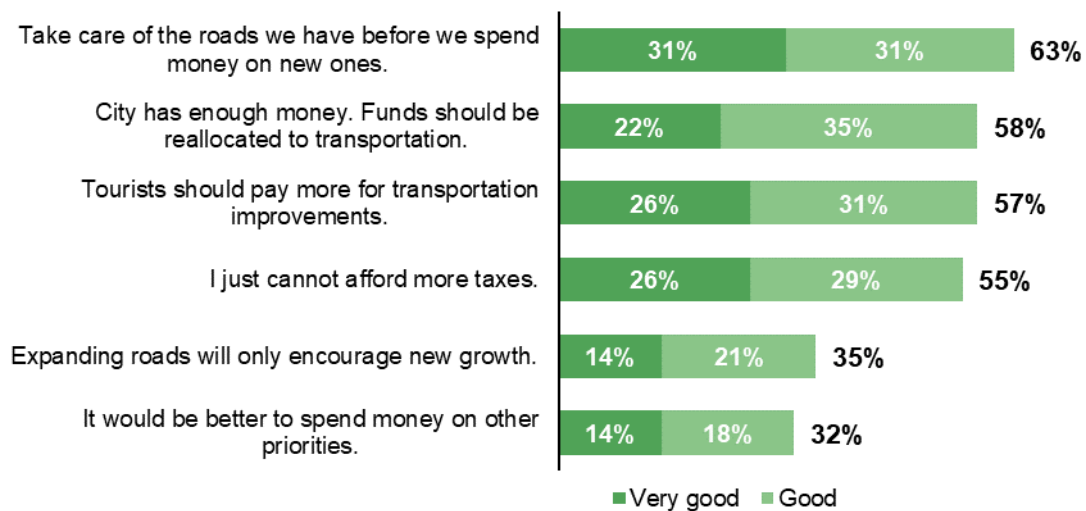
<https://www.bendoregon.gov/Home/ShowDocument?id=41929>

Highlights

- Residents were just as supportive of the City Council going to voters for a neighborhood street safety tax or fee as they were for a traffic congestion tax or fee.
 - Measure to fund projects to reduce congestion (**69%**)
 - Measure to improve the safety of neighborhood streets (**72%**)
- Residents are open to pay more to fund both traffic congestion projects and neighborhood street safety projects.
 - 61%** *Yes*
 - 33%** *No*
 - 7%** *Don't know*
- Transportation is still the leading issue in the community (**43%**), and the greatest concern is the perception of traffic congestion. To compare, other issues raised (unprompted) are: housing/affordability (**17%**), growth (**9%**), homelessness/hunger (**6%**).
- Traffic congestion is considered to be a problem **by 88%** of voters; half of those say it's a "very big problem". Safety of neighborhood streets is thought to be a problem by **58%** of voters (**15%** say it's a "very big problem").
- Residents found all the reasons to support a funding measure quite compelling. Top reasons support are projects would support safe travel for students, addressing congestion on main roads so neighborhood streets are quiet and preparing for the future.



- Residents found several reasons to oppose a funding measure compelling, but not as compelling as any reasons to support.



- Asked which project would be most effective to reduce traffic congestion, residents selected widening roads and adding more lanes (**29%**), followed by fixing intersection bottlenecks (**24%**), realigning or extending existing roads (**18%**), and installing or improving roundabouts (**16%**), and adding bike lanes and pedestrian pathways (**6%**) .
- Asked which project would be most effective to improve safety of neighborhood streets residents selected creating safe routes to schools (**31%**), reducing congestion on major streets so people don't cut through neighborhoods (**31%**), installing sidewalk and crosswalk improvements to meet with ADA standards (**13%**), completing off-street biking and walking trails citywide (**10%**), and adding more bike lanes or separated bike routes on existing streets (**9%**). When considered together, bike related improvements are selected by **19%** of residents.
- Demographics for survey respondents is representative of registered voters. All geographic quadrants of the city are well represented: 59% eastside (31% northeast; 28% southeast), 41% westside (14% northwest; 27% southwest).