

## MEETING AGENDA

# Citywide Transportation Advisory Committee Meeting #11

MEETING DATE: Tuesday, June 18, 2019

MEETING TIME: 1:00-4:30 p.m.

LOCATION: Trinity Episcopal Church, 469 NW Wall Street

## Objectives

- Hear update on the Transportation Outreach Strategy project
- Review updates to the draft prioritization criteria
- Confirm 2040 Project List
- Review and provide feedback on revised Equity & Transit, Technology, & TDM Policies
- Review and provide feedback on Complete Street Policies

## Agenda

Time	Topic	Desired CTAC Action (major actions in <b>bold</b> )	Lead
1:00 p.m.	Welcome and introductory items <ul style="list-style-type: none"> <li>• Introductions/conflict declaration</li> <li>• Approve previous meeting summary</li> <li>• Council liaison comments</li> </ul>	Approve meeting summary	Joe Dills – Meeting Facilitator, APG Gena Goodman-Campbell, Bend City Council
1:10 p.m.	Public comment  <i>15 minutes will be divided equally among those who sign in to give comment prior to the 2 p.m. start time. Maximum time will be 3 minutes per person.</i>	N/A	CTAC Co-Chair Mike Riley
1:25 p.m.	Project Prioritization Criteria Revisions  Staff Briefing <ul style="list-style-type: none"> <li>• Revisions to criteria based on CTAC feedback</li> </ul> CTAC Discussion and Feedback <ul style="list-style-type: none"> <li>• Feedback on revised criteria</li> <li>• CTAC recommendation to forward to Steering Committee</li> </ul>	<b>CTAC Recommendation</b>	Matt Kittelson, Joe Dills

Time	Topic	Desired CTAC Action (major actions in <b>bold</b> )	Lead
1:40 p.m.	2040 Project List  Staff Briefing <ul style="list-style-type: none"> <li>• Overview of 2040 Project List</li> </ul> CTAC Discussion and Feedback <ul style="list-style-type: none"> <li>• Is this list reflective of work completed to-date?</li> <li>• CTAC recommendation to forward to Steering Committee</li> </ul>	<b>CTAC Recommendation</b>	Matt Kittelson, Joe Dills
2:30 p.m.	Break	N/A	All
2:40 p.m.	Equity Policies Transit, Technology, TDM Policies  Staff Briefing: <ul style="list-style-type: none"> <li>• Overview and review refinements to equity and TTT policies</li> </ul> CTAC Feedback and Direction: <ul style="list-style-type: none"> <li>• What policies are “good to go”</li> <li>• What policies need more work?</li> </ul>	CTAC Discussion and Direction	Karen Swirsky, Joe Dills
2:55 p.m.	Complete Streets Policies  Staff Briefing: <ul style="list-style-type: none"> <li>• Overview and review of proposed policies</li> </ul> CTAC Discussion and Feedback <ul style="list-style-type: none"> <li>• Breakout group discussions</li> <li>• Report outs and listing of potential policy changes</li> <li>• Closure on direction to staff</li> </ul> <p><i>For this agenda item, CTAC members will discuss the policies in their breakout groups. In addition to discussing clarifications, the practical questions are: (1) Are there policies that need to be added to address a project goal or other key transportation need? (2) Are there concept-level changes needed to the draft language to address a project goal or other key transportation need?</i></p> <p><i>This item is not intended as group editing. Rather, CTAC members are</i></p>	CTAC Discussion and Direction	Karen Swirsky, Joe Dills

<b>Time</b>	<b>Topic</b>	<b>Desired CTAC Action</b> (major actions in <b>bold</b> )	<b>Lead</b>
	<p><i>encouraged to identify policy <u>concepts</u> needing further drafting by staff.</i></p> <p><i>During the report outs, staff will list the concepts needing further work. Then, CTAC will vote:</i></p> <ul style="list-style-type: none"> <li><i>• Policies needing further work (the list); and,</i></li> <li><i>• Policies that are good to go.</i></li> </ul>		
3:40 p.m.	<p>Transportation Outreach Strategy</p> <p>Staff Briefing</p> <ul style="list-style-type: none"> <li>• Presentation on Transportation Outreach Strategy</li> <li>• Initial project findings</li> </ul> <p>CTAC Discussion and Feedback                      General questions and feedback</p>	CTAC Discussion	Libby Barg Bakke, Barney & Worth, John Horvick, DHM Research
4:00 p.m.	<p>Cascades East Transit Intergovernmental Agreement Overview</p> <p>Staff Briefing:</p> <ul style="list-style-type: none"> <li>• TSP Projects/Policies related to CET</li> </ul>	Informational	Elizabeth Oshel
4:15 p.m.	<p>Public comment</p> <p><i>10 minutes will be divided equally among those who wish to speak with a maximum of 2 minutes per person.</i></p>	N/A	CTAC Co-Chair
4:30 p.m.	<p>Close and next meeting</p> <ul style="list-style-type: none"> <li>• CTAC 12, August 2019</li> </ul>	No action	Co-Chairs

## Accessible Meeting Information

This meeting/event location is accessible. Sign language interpreter service, assistive listening devices, materials in alternate format such as Braille, large print, electronic formats and audio cassette tape, or any other accommodations are available upon advance request. Please contact Jenny Umbarger no later than June 15<sup>th</sup> at [jeumbarger@bendoregon.gov](mailto:jeumbarger@bendoregon.gov) or 541-323-8509. Providing at least 3 days' notice prior to the event will help ensure availability.

## Public Comment

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

# Minutes

## CTAC Meeting #9

Bend's Transportation Plan

**April 24, 2019**

Trinity Episcopal Church

469 NW Wall Street, Bend, Oregon



CITY OF BEND

### CTAC Members

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

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

### Ex-Officio Member

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

### City Staff / Elected Officials

David Abbas, *Transportation Services Director*  
Nick Arnis, *Growth Management Director*  
Tyler Deke, *MPO Manager*  
Gena Goodman-Campbell, *City Councilor*  
Tom Hickmann, *Engineering and Infrastructure Director*  
Susanna Julber, *Senior Policy Analyst*  
Eric King, *City Manager*  
Ian Leitheiser, *Assistant City Attorney*  
Robin Lewis, *Transportation Engineer*  
Brian Rankin, *Principal Planner*  
Joshua Romero, *Community Relations Manager*  
Karen Swirsky, *Senior Planner*  
Jenny Umbarger, *Administrative Support Specialist*

### Consultants

Joe Dills, *Angelo Planning Group*  
Matt Kittelson, *Kittelson & Associates*  
Jacqueline Gulczynski, *Kittelson & Associates*

## **1. Welcome, introductory items, approval of previous meeting minutes**

Mr. Dills called the meeting to order at 2:01pm. Mr. Dills requested committee members declare any conflicts of interest. Member Gustafson disclosed her employment with Central Oregon Builders Association. Member Mardell disclosed her employment with Deschutes County. Member Brooks disclosed her employment with Bend Chamber of Commerce. Member Hultberg, attorney, disclosed his representation of clients within the city of Bend. Member Van Valkenburg disclosed his employment with Brooks Resources, and his position as chair of the Urban Renewal Advisory Board. Member Chrostek, attorney, disclosed his representation of clients within the city of Bend. Councilor Goodman-Campbell, City Council liaison to CTAC, welcomed the committee.

Mr. Dills requested approval of the December 11, 2018 meeting minutes. Member Capozzi moved for approval. Member Snyder seconded the motion. Minutes were approved unanimously (20-0).

## **2. Public Comment**

Melissa Baldwin shared concerns about traffic on NW 3<sup>rd</sup> Street, and future westside development's role in funding infrastructure.

Beth Hoover, Mt View Neighborhood Association, shared concerns about traffic on NE 27<sup>th</sup> Street.

Jim Bruce expressed support for a roundabout at Century Drive and Bachelor View Drive / Skyline Ranch Road.

Kristen Phillips shared concerns about a southern river crossing and the State Scenic Waterway.

Rory Isbell, Central Oregon Land Watch, shared support for key routes in the Low Stress Network, support for the Vision Zero policy, concerns about Mobility policy #9, and expressed confusion about Council goals in relationship to the Transportation System Plan (TSP) work.

Oscar Gonzales, Latino Community Association, spoke about transportation needs in the Latino community, particularly in regards to increasing transit service.

Katharine Hoehne, Hubbell Communications, representing Bend Towne Center, et al. read a letter regarding conditions at Hawthorne Station and the Transit Master Plan.

## **3. Phase 3-4 Schedule Review**

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

#### 4. Neighborhood Workshop Summary

Mr. Kittelson reviewed Neighborhood Workshop Outcomes, as outlined in the presentation. Member McClure noted a narrow demographic representation in the outcomes, and encouraged consultants and staff to reach out to under-recognized groups to gather information on their specific needs.

Regarding programs listed in Table 2 to be considered for inclusion in the Citywide Transportation Framework (CTF):

- Member Snyder requested the winter maintenance program be considered a year-round program versus a winter program;
- Member Ross recommended verbiage in the sidewalk infill program along key routes exclude the term 'infill';
- Member Capozzi shared concerns about the Citywide Transportation Advisory Committee (CTAC) basing its decisions on the narrow demographics represented in the Neighborhood Summary;
- Members Leslie (via submitted comments) and Riley expressed concerns about safety considerations within the programs.

Mr. Kittelson indicated that the results of the Transportation Safety Action Plan (TSAP) will inform the Transportation System Plan (TSP) programs. Mr. Dills conducted a straw poll requesting a show of support for adding Table 2 programs as amended to the CTF, resulting in 18 in favor and two opposed. See attached discussion summary notes.

Regarding projects listed in Table 3 to be considered for inclusion in the CTF: Member Riley recommended safety be added to the Portland Avenue corridor project; Member Hultberg recommended all City-owned foot bridges that cross the Deschutes River be added to the table. Mr. Dills conducted a straw poll requesting a show of support for adding Table 3 projects as amended to the CTF, resulting in unanimous support. See attached discussion summary notes.

#### 5. Key Bicycling and Walking Routes and Projects

Ms. Swirsky reviewed Key Walking and Bicycling Routes, as outlined in the presentation. Discussion was considered educational. Mr. Dills indicated the inclusion of key routes to the CTF will be determined at the May meeting. See attached discussion summary notes.

Member Mendez moved to add the recommended additions from the Neighborhood Workshop Outcomes, with the amendments proposed, as modified by CTAC, to the project list. Member Johannsen seconded. Voting resulted in 18 in favor, one opposed, and one abstention.

Member Riley requested the language regarding the proposed location of the southern river crossing noted under 'Area 4 General Feedback' in the meeting packet be amended, and reflected in the minutes to indicate the location to be downstream of the State Scenic Waterway. Member Gustafson requested the results of the neighborhood workshop summary be considered but to note that they are not statistically valid, since in her opinion the workshops may have over-represented those who are more interested in bicycle and/or pedestrian than motorist facilities. Member McClure requested that her opinion that attendees of the neighborhood workshops drive cars be included in the minutes.

## **6. Safety and Mobility Policies**

Ms. Swirsky reviewed Policy Subgroup Outcomes and Draft Policy Language as outlined in the presentation. Members broke out into small groups to discuss policy lists. Small group facilitators submitted notes to City staff; notes were collected. Those will be distributed back to members in their packet for CTAC #10.

## **7. Public Comment**

Dave Kyle expressed concern about the Low Stress Network bisecting Nottingham Square.

## **8. Close and next meeting**

Meeting adjourned at 5:18pm.

Respectfully submitted,

Karen Swirsky  
Jenny Umbarger  
Growth Management Department

## **Accessible Meeting/Alternate Format Notification**



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# Minutes

## CTAC Meeting #10

Bend's Transportation Plan

**May 22, 2019**

Downtown Bend Library

601 NW Wall Street, Bend, Oregon



CITY OF BEND

### CTAC Members

Katie Brooks, *Member (absent)*

Louis Capozzi, *Member*

Garrett Chrostek, *Member (absent)*

Casey Davis, *Member*

Karna Gustafson, *Co-Chair*

Hardy Hanson, *Member*

Steve Hultberg, *Co-Chair (absent)*

Sally Jacobson, *Member*

Suzanne Johannsen, *Member*

Gavin Leslie, *Member*

Nicole Mardell, *Member (absent)*

Katie McClure, *Member*

Ariel Mendez, *Member*

Mike Riley, *Co-Chair*

Richard Ross, *Member*

Mel Siegel, *Member*

Iman Simmons, *Member (absent)*

Sid Snyder, *Member*

Glenn VanCise, *Member*

Dale Van Valkenburg, *Member*

Ruth Williamson, *Co-Chair*

Sharlene Wills, *Member*

Dean Wise, *Member*

### Ex-Officio Member

Dale Peer, *(absent)*

Gregory Bryant

Carolyn Carry-McDonald, *(absent)*

### City Staff / Elected Officials

David Abbas, *Transportation Services Director*

Nick Arnis, *Growth Management Director*

Anne Aurand, *Communications Director*

Tyler Deke, *MPO Manager*

Gena Goodman-Campbell, *City Councilor*

Russ Grayson, *Community Development Director*

Susanna Julber, *Senior Policy Analyst*

Robin Lewis, *Transportation Engineer*

Elizabeth Oshel, *Assistant City Attorney*

Ryan Oster, *City Engineer*

Brian Rankin, *Principal Planner*

Joshua Romero, *Community Relations Manager*

Jon Skidmore, *Chief Operating Officer*

Karen Swirsky, *Senior Planner*

Jenny Umbarger, *Administrative Support Specialist*

### Consultants

Joe Dills, *Angelo Planning Group*

Matt Kittelson, *Kittelson & Associates*

Chris Maciejewski, *DKS Associates*

Libby Barg Bakke, *Barney & Worth*

## **1. Welcome**

Mr. Dills called the meeting to order at 12:00pm. He indicated that the order of discussion items per the printed agenda may be adjusted throughout the meeting due to late arrivals of item facilitators.

## **2. Public comment**

Lucas Freeman, a representative of Bend Bikes, spoke about project prioritization criteria.

Richard Gilbert, a representative of Walkable NWX, spoke about neighborhood traffic calming.

Cher Wagner spoke about traffic calming on Mt. Washington Drive.

Neil Baunsguard, a representative of the Summit West Neighborhood Association, spoke in support of prioritizing safety and connectivity for bicycles and pedestrians, and consideration of underserved populations.

Deven Sisler, a representative of Nottingham Square, spoke in support of moving Key Route 1 out of Nottingham Square and to 15<sup>th</sup> Street.

Rory Isbell, a representative of Central Oregon LandWatch (COLW), spoke in support of low-stress network (LSN) key routes, about COLW's position on several policies, and about prioritization criteria.

Don Wilfong spoke in support of Reed Market Road becoming a four-lane road.

Andrew Gorman spoke in support of a westbound bike lane on Greenwood Avenue between 3<sup>rd</sup> Street and Bond Street.

Jeanne Berry, a representative of Century West Neighborhood Association, spoke about speeds on Mt. Washington Drive and traffic in southern Bend.

## **3. Introductory items**

Mr. Dills reviewed the meeting agenda and the Draft Phase 3-4 Work Plan, as outlined in the presentation.

#### **4. Key Bicycling and Walking Routes and Projects**

Ms. Swirsky reviewed the results of the Key Bicycle and Walking Routes online exercise and the proposed changes to key routes, as outlined in the presentation.

Member Mendez requested clarification on the need to change Route 1. Ms. Swirsky indicated it was in response to public comment and feedback from committee members. Member Riley expressed concern about winter maintenance on Routes 1, 2, 3 and 4. Ms. Lewis and Mr. Abbas indicated the City is working with Bend Park and Recreation District (BPRD) to develop a fully maintained system. City staff to further explore maintenance of routes. Member Snyder inquired if the BPRD trail map will be incorporated in the Transportation System Plan (TSP). Ms. Swirsky confirmed it will. Member Johannsen recommended moving the section of the LSN of 3<sup>rd</sup> Street to Parrell Road. Member Riley recommended the language in Table 2 regarding winter maintenance be amended to specifically address trail segments, and the partnership effort with BPRD be included in policy language. Member Mendez inquired if within Route 6, an overcrossing for bicycles and pedestrians at Franklin Street versus widening the underpass is possible. Ms. Swirsky indicated it has not been considered due to land use impacts.

Member Van Valkenberg moved to approve including Key Routes 1-12 on the TSP Project list with the proposed changes, as well as the following:

- a. Incorporate the BPRD trail map in the TSP
- b. Move the LSN section along 3<sup>rd</sup> Street to Parrell Road
- c. Amend the language in Table 2 to include winter maintenance for trail segments
- d. Include the winter maintenance partnership effort with BPRD in policy language

Member Riley seconded. Yes – 19, No – 1 (Member Gustafson), Abstain – 0.

#### **5. Introductory items, cont.**

Libby Barg Bakke of Barney & Worth, Inc. reviewed the Transportation Outreach Strategy, as outlined in the presentation.

Ms. Goodman-Campbell, Mr. Abbas and Mr. Skidmore reviewed Council's 2019-21 Transportation and Infrastructure Goal, as outlined in the presentation. Member Capozzi inquired if a budget for the implementation of a communications program has been approved. Ms. Julber indicated the process is a three-phase approach, including investigation and research, strategy and development, and education and outreach, in preparation for presenting a package of projects and programs in May 2020. Member Leslie inquired about Council's position on policies. Ms. Goodman-Campbell indicated there is an aggressive plan for capital projects, and that Council recognizes the need for policies. Member Ross inquired about the City's new parking program. Mr. Skidmore indicated there will be a new Parking Services Division that will expand parking programs beyond downtown. It will reside within a new Transportation Department that will be formed in early 2020.

Mr. Dills requested committee members declare any conflicts of interest. Member Gustafson disclosed her employment with Central Oregon Builders Association. Member Van Valkenberg disclosed his employment with Brooks Resources.

## **6. Safety and Mobility Policies**

Ms. Swirsky reviewed Safety and Mobility Policies, as outlined in the presentation. Ms. Gustafson expressed concern about using the word *'only'* in Proposed Revised Mobility Policy No. 8. Ms. Swirsky indicated *'f) Or other measures.'* could be added for clarification. Member Riley expressed concern that specific roadways are not identified in policies. Ms. Swirsky indicated policy language should be broad and applicable at the policy level to capture intent. Per committee discussion, *'emergency services'* will be added to Proposed Revised Mobility Policy No. 1.

Member Leslie expressed concern that policies are not measurable. Ms. Oshel indicated policies are intended to be guiding principles, and action items determine how the policies will be implemented and measured. Member Snyder recommended including language in the introduction of the TSP document that indicates there will be measurement for all policies.

Member Gustafson expressed concern about the action item in Draft Safety Policy No. 2 that references amending the Bend Development Code. Mr. Dills acknowledged that safety with regard to its impact on Council goals requires further discussion. Member Leslie recommended that a broader approach should be taken regarding safety in policy language. Ms. Swirsky indicated the City will work on explicit policy language. Member Capozzi expressed the need to include policy language that allows for lower speed limits. Ms. Swirsky indicated the ability to do so is contingent upon whether or not current legislation is passed at the State level. In response to a concern shared by Member Snyder, Ms. Swirsky indicated additional work will be done around the term *'vulnerable users'*.

## **7. Equity Policies**

Ms. Julber and Ms. Swirsky reviewed Equity Policies, and Transit, Technology and TDM Policies, as outlined in the presentation. Ms. Swirsky indicated, per member Ross' request, transit policies will be discussed when CET is further along with the Bend Transit Plan update. CTAC concurred.

Committee members formed breakout groups led by staff to discuss policies.

Report outs:

Mr. Maciejewski: Define who *'equity'* applies to; does equity belong in the Comprehensive plan rather than the TSP; how is technology policy advanced into action.

Mr. Kittelson: Replace *'will'* with a different word as it is too strong in many policies; delineate actions from policies, where applicable.

Ms. Julber: Stronger language regarding regulating autonomous vehicles; address conflicts regarding curb use; define “vulnerable users”, and revise language to allowing targeting of specific populations.

Ms. Lewis: Areas of the community need caught up before fairness can apply; need an evaluation of roadways being avoided due to users feeling unsafe; maintain language that all mobility providers will be required to use open data standards; remove “of driving age” from language.

## **8. Introduction to Project Prioritization Criteria**

Mr. Kittelson and Mr. Maciejewski reviewed Project Prioritization Criteria, as outlined in the presentation. Member Leslie expressed concern about a lack of criteria for Vehicle Miles Travelled (VMT) reduction, and recommended considering a policy change versus a project or program. Member Ross recommended adding criteria that expands access to housing and employment. Member Mendez inquired if maintenance costs are included in the criteria. Mr. Kittelson indicated cost estimates, including maintenance, are being developed. Member Gustafson expressed concern that the criteria are narrow, and recommended removing the word “affordable”. Member Riley recommended the Increase System Capacity, Quality and Connectivity for All Users goal be categorized by subject. After discussion, committee members agreed to provide written feedback to Ms. Swirsky by Wednesday, May 29.

## **9. Wilson Avenue Analysis**

Mr. Maciejewski reviewed the Wilson Avenue Extension Analysis, as outlined in the presentation, followed by general committee discussion.

## **10. Public comment**

Denise LaBuda, representing The Council on Aging, encouraged CTAC to plan for an aging community.

Don Wilfong expressed opposition to the extension of Wilson Avenue.

## **11. Close and next meeting**

Meeting adjourned at 3:26pm.

Respectfully submitted,

Jenny Umbarger  
Growth Management Department

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DRAFT



# Draft Prioritization Criteria Comments

June 18, 2019

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

Does the project or program:

*Streets, transit, bicycle, & pedestrian to be evaluated independently*

- Add to or enhance the street system?
- **Add to or enhance** the transit network?
- **Add to or enhance** the bicycle network?
- **Add to or enhance** the pedestrian network?
- Increase the reliability of transit, on-time freight operations and vehicular travel?
- Address known areas of existing or future congestion?
- **Address a near-term or long-term need?**

CTAC Comment	Response
<b>Add specific criteria that link to the Goal.</b>	Specific criteria updated to be identified individually. This goal will include separate evaluations of the project/programs for each mode.
<b>Add capacity?</b>	Capacity addressed in street system enhancements and known areas of congestion.
<b>Improve connectivity?</b>	Modal “network” includes connectivity.
<b>Increase total miles of bike routes?</b>	Addressed in enhancements to the bicycle network
<b>Increase # of people who walk, bike or use transit?</b>	Addressed in enhancements to the bicycle and transit network

CTAC Comment	Response
<p><b>Does the project reduce VMT? I believe this is a better place for VMT than environment. The primary reason to reduce VMT is to improve system capacity.</b></p>	<p>VMT is not a capacity tool; it is a proxy for Greenhouse Gas. VMT was addressed under “Environment” goal within SC approved goals and objectives.</p>
<p><b>You could say that safety is already in here implicitly, but maybe better to mention it explicitly, thus leading into the next row of the table.</b></p>	<p>Safety will be addressed within the “Ensure safety for All Users” criteria</p>
<p><b>Add: Enhance high-use corridors between residential, job centers and activity/recreation centers?</b></p>	<p>Addressed in “known areas of existing or future congestion”</p>
<p><b>This is so broad it will be meaningless and therefore useless. It needs to be broken up into a few pieces. I suggest the following, which add three new bullets/criteria:</b></p> <ul style="list-style-type: none"> <li>• <b>Increases travel time reliability</b></li> <li>• <b>Improves connectivity</b></li> <li>• <b>Increases sidewalk network</b></li> <li>• <b>Increases bike network</b></li> <li>• <b>Increase transit network/routes/ frequency?</b></li> <li>• <b>Increases roads</b></li> <li>• <b>Addresses known areas of existing congestion or areas of predicted future congestion</b></li> </ul>	<p>Criteria updated to individually address street system, bicycle, pedestrian, and transit</p>
<p><b>Does a project or program have to address all three in order to satisfy the second criterium?</b></p>	<p>Criteria updated to individually address street system, bicycle, pedestrian, and transit</p>
<p><b>For consistency could change “street system” to “street network”</b></p>	<p>Change made.</p>
<p><b>Staff comment: add criteria to evaluate if a project is a near-term or long-term need.</b></p>	<p>Criteria added</p>

**Goal: Ensure Safety for All Users**

Will the project or program:

- Reduce **the potential for** fatalities and serious injuries?
- Address known safety concern areas?

CTAC Comment	Response
<p><b>What is the definition of ‘safety’? If we reduce it to ‘fatalities and serious injuries’ then we will fall far short of the community’s definition. We should adopt measures of ‘risk’ that add ‘user experience/street condition’ to ‘outcomes’. We have already heard challenges to the stress level assessments that we are using for the bike network. The valid assessment is how ‘safe’ people actually feel - so we should aim to put in place the means to capture the user experience rather than rely on worst case outcomes. This means funding projects to capture the user experience - hardware (sensors, cameras) and software (crowd-sourcing apps) as well as associated technology: data networks and data mining/reporting systems and the necessary associated human resources to manage and operate these capabilities.</b></p>	<p>The Bend TSP will incorporate outcomes from the ongoing Bend TSAP work which is more closely analyzing those elements.</p>
<p><b>Add:</b></p> <ul style="list-style-type: none"> <li>• <b>Increase visibility to road safety?</b></li> <li>• <b>Improve the assessment of ‘Safety/User Risk in the transportation system?’</b></li> </ul>	<p>This TSP update relies on a broad, systemwide evaluation. These elements will be considered within the TSAP analysis.</p>
<p><b>Will the project reduce the <u>potential</u> for fatalities and serious injuries?</b></p>	<p>Change made.</p>
<p><b>As noted in #10 meeting discussion, fear of unsafe corridors, causing people to avoid them, invisibly skews the data, so need to devise means to evaluate and include it in the considerations.</b></p>	<p>Information to evaluate this criteria is not available for this TSP update, but should be considered within future more focused safety analyses.</p>
<p><b>I think the second bullet ought to say something more like this: “Addresses unsafe conditions/ locations identified by staff analysis and/or identified by the public?”</b></p>	<p>This criteria would be valuable, but data to accomplish is not included within the scope or schedule of this TSP update. The TSAP process will identify projects that will be added to the TSP project list.</p>

CTAC Comment	Response
<p><b>I think you should add a bullet about improving safety for people walking, biking or using other mobility devices (wheelchairs, scooters, etc.)</b></p>	<p>Modes are not explicitly identified in the language to address safety for all users, as defined by the goal.</p>
<p><b>Will the project reduce the <u>potential</u></b></p>	<p>Change made.</p>
<p><b>Does a project or program have to address all three in order to satisfy the second criterium?</b></p>	<p>No. The criteria allows for fully or partially addressing the criteria. The evaluation results may also include comments providing context to the criteria evaluation.</p>

**Goal: Facilitate Housing Supply, Job Creation, & Economic Development to Meet Demand/Growth**

Does the project or program:

- Serve **all prioritized** Opportunity Areas or Expansion Areas, **including those prioritized by City Council**
- Allow the development of other priority areas identified for employment or **affordable** housing?

CTAC Comment	Response
<p><b>The dilemma here is that we may prioritize projects that serve the needs of people and businesses that have yet to locate to Bend or who may not even have Bend on their radar at the expense of projects that serve identified needs of the existing community. Some way to weigh the value of these two categories of projects/programs is needed. Unless we quantify the value to the existing community of new residents and businesses, how will we be able to compare a project/program for an Expansion Area with one that brings direct benefit to the existing community. Not to mention justify the tax bite. In principle, as I have offered previously, projects that directly improve the transportation system for the existing, tax-paying community ought to merit prioritization for funds raised from the existing tax base. Funding for new infrastructure to support new residential construction/business parks should be given a lower priority or have their development costs met by Developers and Construction companies (ongoing costs will be met by the new residents/businesses) – unless there is a clear, quantifiable benefit to the existing community</b></p>	<p>Criteria is reflective of SC approved goals and objectives. CTAC will have the ability to provide input as which projects warrant near-term, mid-term, or long-term priority.</p>
<p><b>Provide additional access to/capacity in commercial and light industrial zones.</b></p>	<p>Evaluated by criteria for priority areas for employment.</p>
<p><b>Facilitate access for employees to walk/bike to employment areas from residential areas.</b></p>	<p>Evaluated by criteria for priority areas for employment.</p>
<p><b>There is no such thing as “prioritized” Opportunity Areas or Expansion areas. “Prioritized” should be removed. Also, there is nothing on economic development. So, there should be a criteria added to handle that. As I stated earlier, the criteria should apply to all housing.</b></p>	<p>City Council identified priority opportunity and expansion areas, though long-term projects identified by the TSP will address all opportunity and expansion areas. Criteria revised.</p>

CTAC Comment	Response
<p><b>Keep the word “prioritized”. My understanding is that the Council has prioritized both OAs (BCD) and EAs (SE and NE).</b></p>	<p>City Council identified priority opportunity and expansion areas, though long-term projects identified by the TSP will address all opportunity and expansion areas. Criteria revised.</p>
<p><b>Break this into two:</b></p> <ul style="list-style-type: none"> <li>• <b>Allow the development of other areas targeted for employment?</b></li> <li>• <b>Allow the development of other areas targeted for affordable housing?</b></li> </ul>	<p>Retained as a single criteria, though evaluation will note which type of area is being served.</p>

**Goal: Protect Livability & Ensure Equity and Access**

Does the project or program:

*Protect Livability:*

- Support livability by helping ensure roads are used for their classification (i.e. reduce cut-through traffic on local streets)?

*Ensure Equity and Access:*

- 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?

CTAC Comment	Response
<p><b>Livability is not restricted to misuse of streets. Citywide, air, noise and environmental pollution result from the overall increase in VMT. Add a criteria to assess projects/programs for their ability to reduce VMT (overall and per capita) as a separate, major measurement of project/program value.</b></p>	<p>Comment noted. VMT was addressed under “Environment” goal within SC approved goals and objectives.</p>
<p><b>Add a criteria to assess projects/programs for their ability to reduce VMT (overall and per capita) as a separate, major measurement of project/program value.</b></p>	<p>Comment noted. VMT was addressed under “Environment” goal within SC approved goals and objectives.</p>
<p><b>Improve transportation options for areas zoned medium and high density residential?</b></p>	<p>Criteria will address all areas, including medium and high density residential areas.</p>
<p><b>Maybe first bullet is backwards: engineer (or tweak) the roads so as to make them naturally/obviously most suitable for their intended level of traffic.</b></p>	<p>Comment noted</p>
<p><b>What does “transportation access” mean? I suggest changing the second bullet to read: <i>“Improve transportation options for underserved populations? (Use the list in the draft equity policies to be sure capturing all groups—something like seniors, youth, low-income and disabled.)”</i></b></p>	<p>Criteria has been revised.</p>

CTAC Comment	Response
<p><b>Consider adding these:</b></p> <ul style="list-style-type: none"> <li>• <b>Increases SRTS</b></li> <li>• <b>Increases total lane miles of complete streets</b></li> </ul>	<p>SRTS is a specific program administered by the City. Total lane miles of complete streets is reflective of a performance measure the City may consider within a monitoring program.</p>
<p><b>Pet peeve of mine is the use of the term “cut-through traffic”. There’s really no way to change people’s behavior regarding short cuts without making all roads private/gated. Also the use of a grid system is valuable for the overall operation of the system. In favor of removing the “i.e.” piece under the first bullet.</b></p>	<p>Language is intended to convey meaning of “ensure roads are used for their classification”</p>
<p><b>Staff comment: Add specific equity language and address equity and livability separately as criteria.</b></p>	<p>Criteria added.</p>

**Goal: Steward the Environment**

Does the project or program:

- 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?

CTAC Comment	Response
<b>What is a habitat area?</b>	Areas significant to area wildlife, such as identified wildlife corridors.
<b>Improve walkable and bikeable neighborhoods.</b>	Addressed more clearly within the first goal and criteria.
<b>Could be more positive – not just “limit” and “preserve” but even “improve” wherever feasible?</b>	Comment noted.
<b>I think the first and third bullet could be combined into one, unless I am missing something</b>	Natural features may be different than wildlife areas.

**Goal: Have a Regional Outlook and Future Focus**

Does the project or program:

- ~~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?

CTAC Comment	Response
<p><b>Add:</b></p> <ul style="list-style-type: none"> <li>• Introduce mobility options that materially enable/support other Goals?</li> </ul>	<p>Addressed more clearly within the first goal and criteria.</p>
<p><b>Other planned infrastructure projects need to be assessed as envisioned in the comments on Goal #3 and weighted accordingly in any prioritization of transportation projects</b></p>	<p>The prioritization criteria will not weight the priority of specific projects. CTAC will have the opportunity to share input to project priority.</p>
<p><b>Provide safe and convenient transportation options for commuters to/from Bend</b></p>	<p>Comment noted. The Bend TSP must focus on facility within Bend but considers all trips within the City regardless of origin or destination.</p>
<p><b>Again, could be more positive and forward looking, e.g., bullet 2: support leveraging emerging technologies as early as feasible, enhance Bend’s image as a go-to city ready to be an early adopter of new ideas and technologies.</b></p>	<p>Comment noted. Language retained to keep criteria clear and concise.</p>
<p><b>The first bullet is not related to anything in the adopted goals statement. And what does the first bullet mean, specifically “regional economic health”? What’s the measure and who decides what it is? I say get rid of that bullet and keep the others.</b></p>	<p>Criteria removed.</p>
<p><b>When creating the goal we talked about how this goal could be used to support pilot projects and demonstration projects – to allow for flexibility and experimentation without being a full CIP. Would be in favor of adding the following bullet:</b></p> <p><i>“Does the project or program:</i></p> <ul style="list-style-type: none"> <li>• <i>Serve as a demonstration or pilot project to determine viability of new techniques, tools, or technology?”</i></li> </ul>	<p>The prioritization criteria will consider a broad range of projects, not just pilot and demonstration projects.</p>

**Goal-Implement a Comprehensive Funding and Implementation Plan**

~~Is the project or program:~~

- ~~• Cost effective when considering the benefits and trade-offs?~~
- ~~• A good match to existing or future funding sources?~~
- ~~• Align with the community's vision?~~

CTAC Comments	Response
<ul style="list-style-type: none"> <li>• <b>A good match to existing or future funding sources' needs finer definition. e.g. greater consideration should be given to a program that links use to payment for the transportation system.</b></li> <li>• <b>Future funding sources' is an open ended and undefined measure since we have not had substantive discussions on the value of potential new sources such as a Land Value Tax or a Local Income Tax. I asked for this discussion back in November.</b></li> <li>• <b>What is the community's vision and what process captured it?</b></li> <li>• <b>Affordable to maintain for the life of the project.</b></li> <li>• <b>Bullet 2: change "or" to "and anticipated".</b></li> <li>• <b>I honestly do not get why this is being used as a selection criteria. None of the bullets here relate to any of the bullets in the adopted goals, and none of the bullets there are related to the CTF, only the funding plan and we are not evaluating that here. If you are trying to develop something new that will appeal to Moseley (and others?) who want some sort of cost-benefit/ROI approach, then just say so and add that in as a new criteria unrelated to the goals. But then we get into a whole discussion of how we define cost/benefit. And who chooses the definition? The first bullet is woefully inadequate (too subjective) to the task. Someone will need to do much better/be more specific.</b></li> </ul>	<p>This goal and evaluation criteria will be removed from the prioritization criteria and addressed within the funding work.</p>

CTAC Comments	Response
<ul style="list-style-type: none"><li>• <b>Bullet two seems meaningless to me. It depends on which sources we choose, which comes later, so why ask this here/now?</b></li><li>• <b>Finally, what vision are you talking about? The CTAC vision? Where is that articulated, except in the goals? And if it is the goals, isn't that essentially what these criteria as a whole are supposed to do—show us how well a CTF project aligns with the goals (vision)?</b></li><li>• <b>So I say get rid of this whole category, or maybe come up with something much better defined/more specific for just cost-benefit.</b></li><li>• <b>Equitable in its funding mechanism?</b></li></ul>	

# 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 used<sup>1</sup>
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.

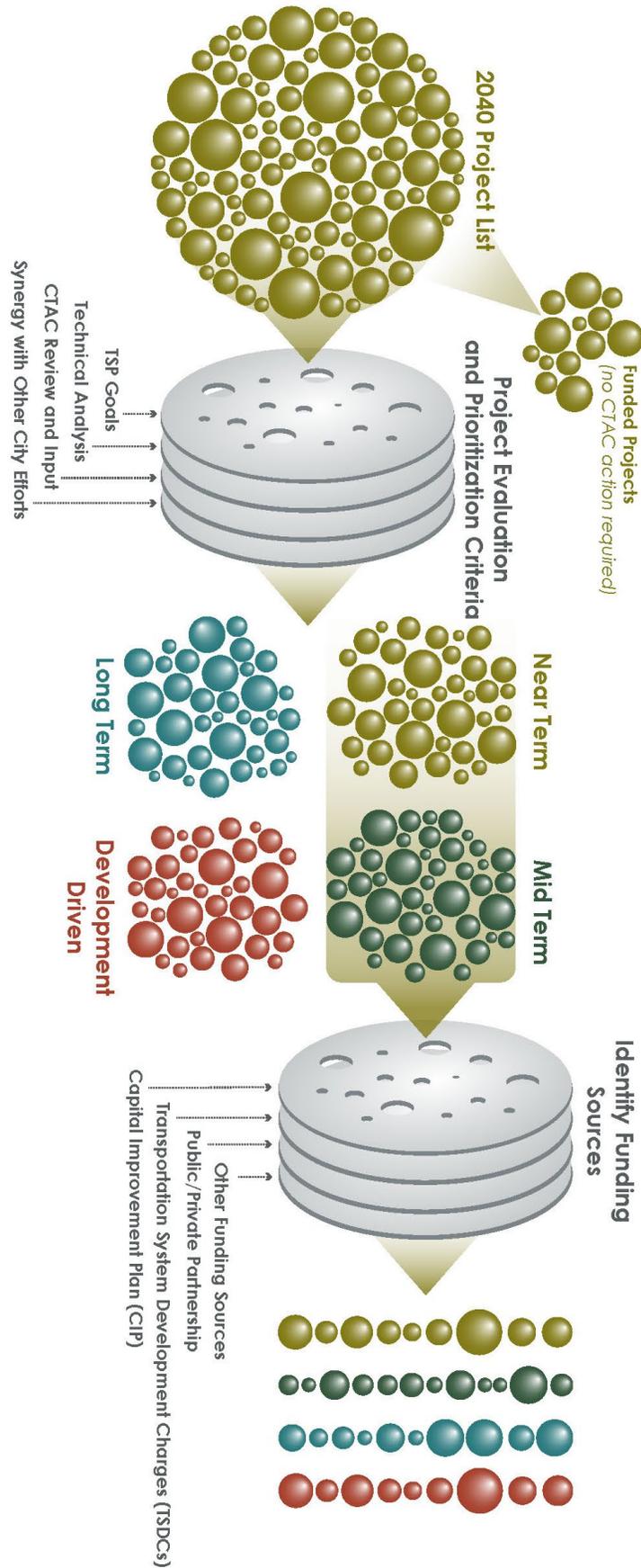
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<sup>1</sup> Funding assumptions will be based on the Initial Funding Assessment, as further discussed by the Funding Work Group. An example of a funding assumption is the rate to be used for a Transportation Utility Fee.

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

Goal	Application to Prioritization Criteria
<p><b>Ensure Safety for All Users</b></p>	<p>Will the project or program:</p> <ul style="list-style-type: none"> <li>• Reduce <b>the potential for</b> fatalities and serious injuries?</li> <li>• Address known safety concern areas?</li> </ul>
<p><b>Facilitate Housing Supply, Job Creation, and Economic Development to Meet Demand/Growth</b></p>	<p>Does the project or program:</p> <ul style="list-style-type: none"> <li>• Serve <b>all prioritized</b> Opportunity Areas or Expansion Areas, <b>including those prioritized by City Council?</b></li> <li>• Allow the development of other priority areas identified areas for employment or <b>affordable</b> housing?</li> </ul>
<p><b>Protect Livability and Ensure Equity and Access</b></p>	<p>Does the project or program:</p> <p><i>Protect Livability:</i></p> <ul style="list-style-type: none"> <li>• Support livability by helping ensure roads are used for their classification (i.e. reduce cut-through traffic on local streets)?</li> </ul> <p><i>Ensure Equity and Access:</i></p> <ul style="list-style-type: none"> <li>• <b>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?</b></li> <li>• Improve <b>access to safe, comfortable, affordable and reliable transportation choices to meet daily transportation needs of disadvantaged <del>transportation access</del> for underserved populations?</b></li> </ul>
<p><b>Steward the Environment</b></p>	<p>Does the project or program:</p> <ul style="list-style-type: none"> <li>• Limit impacts to natural features and the environment?</li> <li>• Reduce VMT and/or increase non-single occupancy vehicle travel)?</li> <li>• Preserve the functionality or quality of habitat areas?</li> </ul>
<p><b>Have a Regional Outlook and Future Focus</b></p>	<p>Does the project or program:</p> <ul style="list-style-type: none"> <li>• <del>Support regional economic health?</del></li> <li>• Help prepare Bend for future technology?</li> <li>• Help to implement other planned infrastructure projects within the City of Bend or by a partner agency?</li> </ul>

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



# 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,<sup>1</sup> 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.

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<sup>1</sup> 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”<sup>2</sup> 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.

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<sup>2</sup> 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

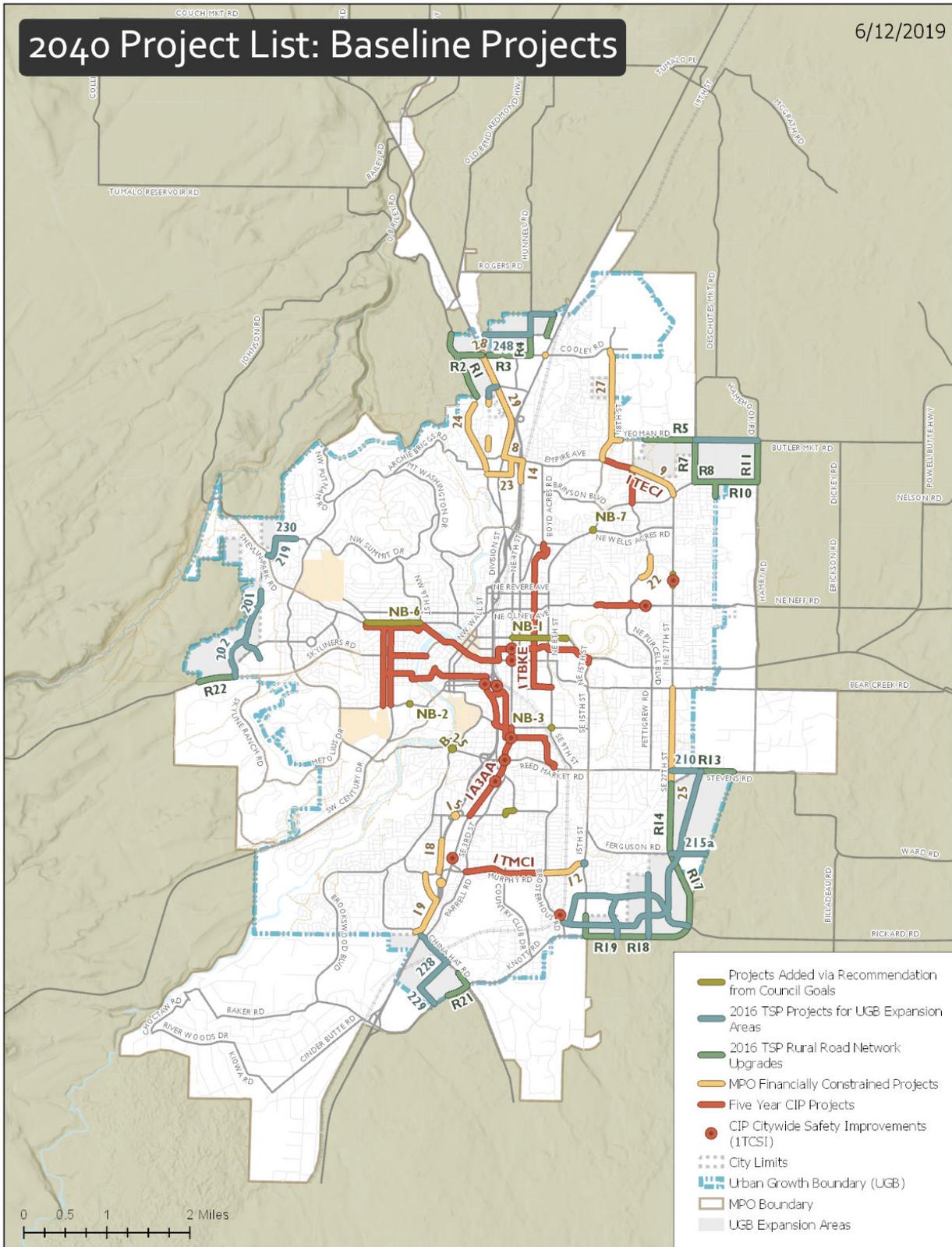


Table 1. Baseline Transportation Projects

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

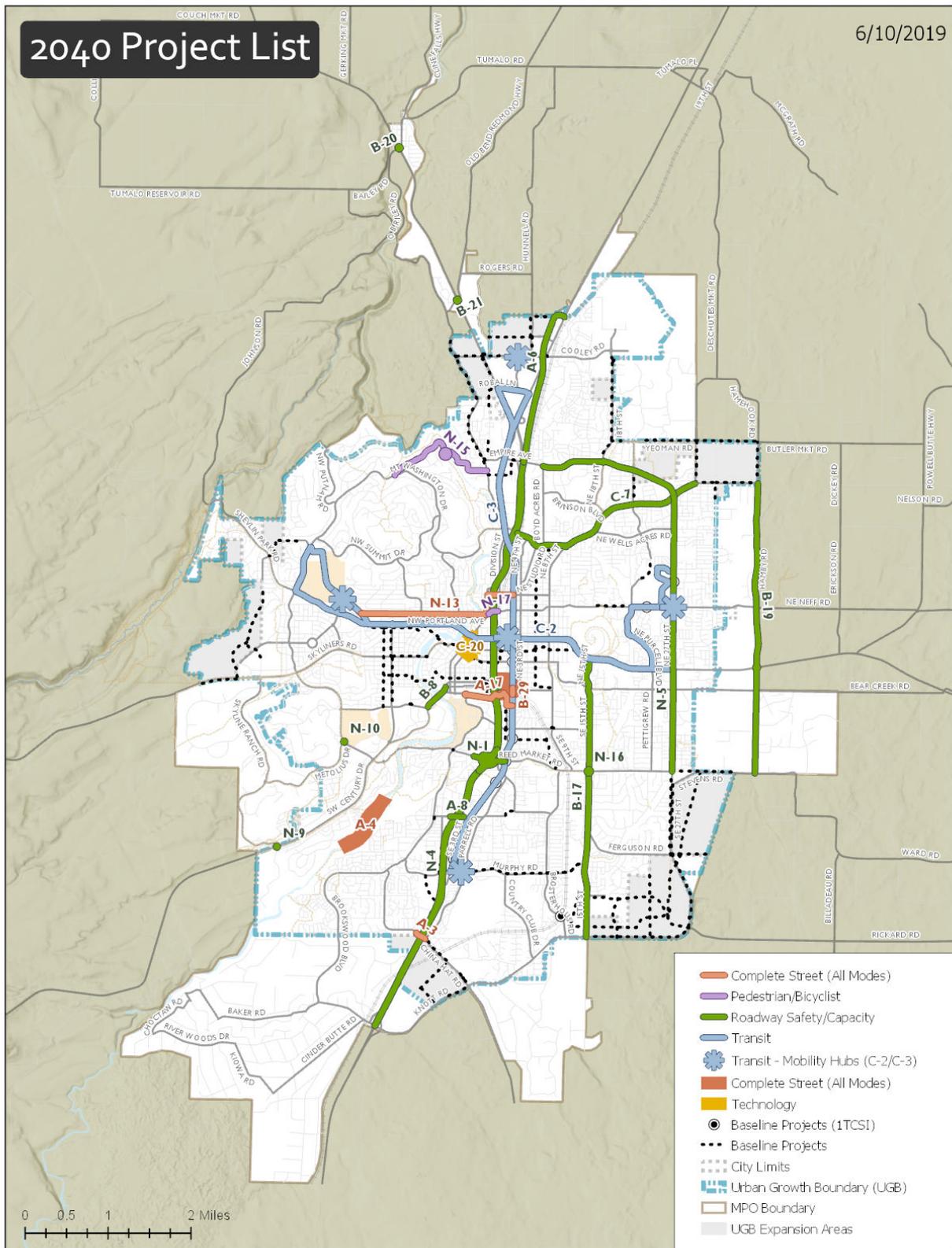


Table 2. 2040 Project List (including CTAC recommended additions)

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 <b>CTAC Recommended Addition</b>	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 <b>CTAC Recommended Addition</b>	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 <b>CTAC Recommended Addition</b>	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 <b>CTAC Recommended Addition</b>	Various	Evaluate and repair/replace bridges to accommodate pedestrian and bicycle traffic.	Pedestrian/Bicyclist
N-15	Archie Briggs Road Improvement Project <b>CTAC Recommended Addition</b>	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 <b>CTAC Recommended Addition</b>	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 <b>CTAC Recommended Addition</b>	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 <b>CTAC Recommended Addition</b>	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

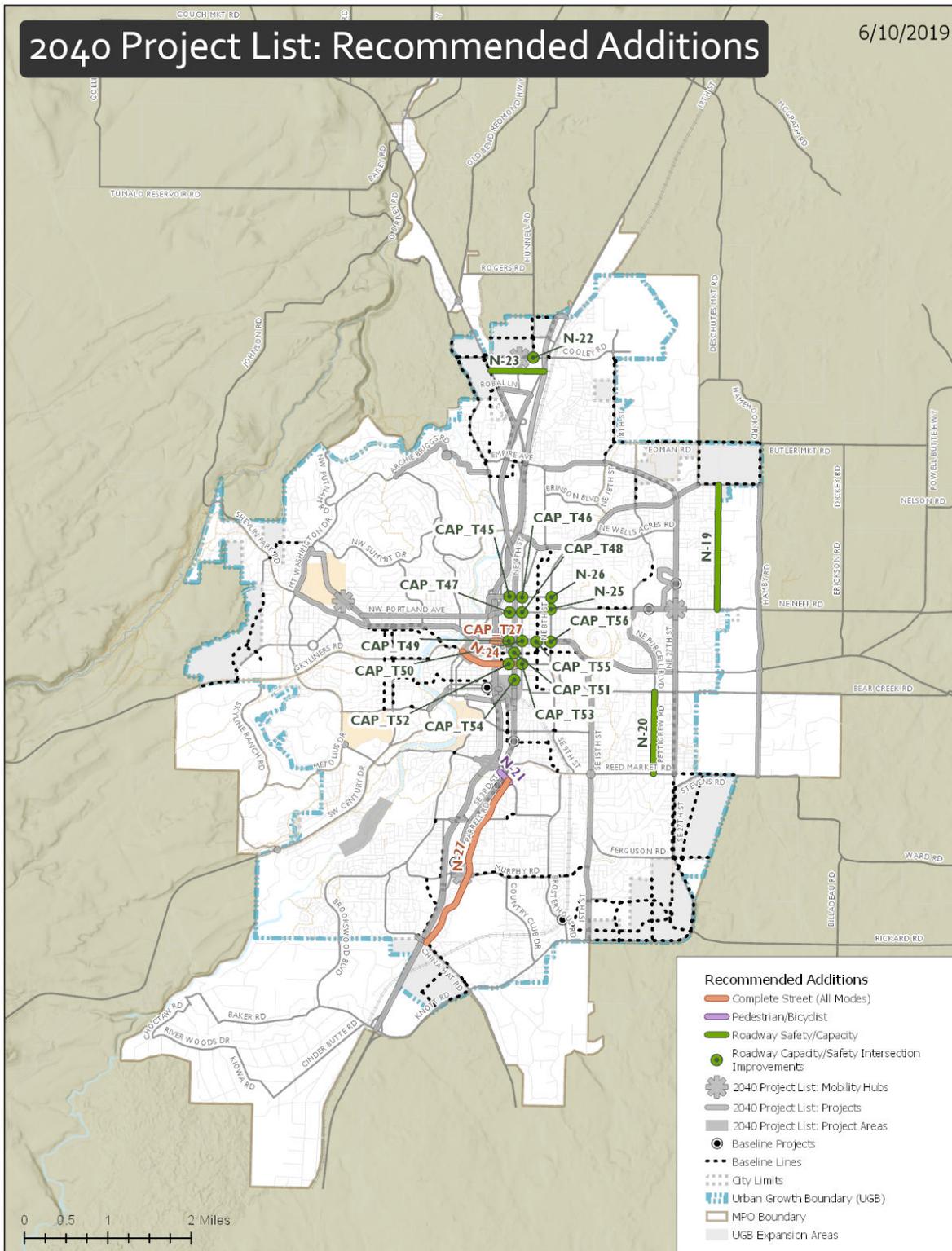


Table 3. Recommended Additions to 2040 Project List (Post CTF)

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 <sup>nd</sup> Street Intersection improvement	Revere Avenue/2 <sup>nd</sup> 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

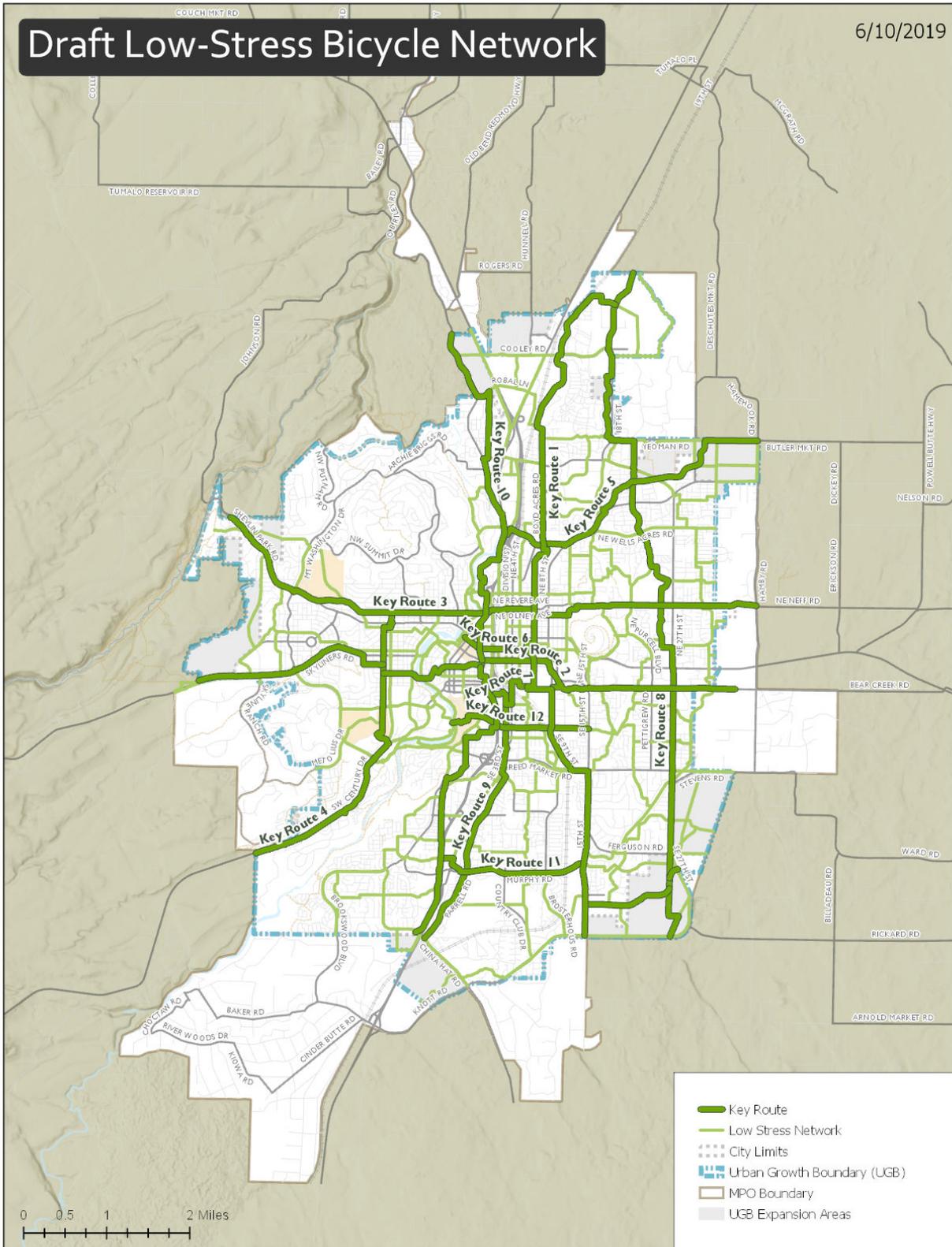


Table 5. Recommended Low-Stress Bicycle Network Projects on Key Routes

Key Routes & Projects	Project Extents	Facility Type & Description	Cost Projection
<b><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></b>			
<b>R1-A</b>	<b>SE 9<sup>th</sup> St:</b> Wilson Ave to Reed Market Rd	<b>Shared use path adjacent to roadway:</b> Close sidewalk gap and create low-stress bikeway.	\$\$
<b>R1-B</b>	<b>SE 9<sup>th</sup> St:</b> Wilson Ave to Glenwood Ave	<b>Buffered bike lane:</b> Re-stripe roadway to include buffered bike lanes when roadway is repaved.	\$
<b>R1-C</b>	<b>NE Boyd Acres Rd:</b> Butler Market Rd to Empire Ave	<b>Shared use path adjacent to roadway:</b> Close sidewalk gap and create low-stress bikeway.	\$\$\$
<b><i>ROUTE 2: NW Crossing to new Affordable Housing: Route runs east-west connecting Skyliners Rd, Franklin Ave and Bear Creek Rd</i></b>			
<b>R2-A</b>	<b>NW Franklin Ave:</b> Harriman Ave to RR undercrossing	<b>Improve transition at Hill St:</b> Project would manage the conflict between right turns and crosswalk to sidewalk under RR. <b>Crosswalk:</b> Create safe crossing of Franklin at Harriman.	\$
<b>R2-B</b>	<b>Franklin Ave Underpass:</b> Hill St to 1 <sup>st</sup> St	<b>Shared use path adjacent to roadway:</b> Widen sidewalk paths under RR and Hwy 97 to modernize design for roadside safety.	\$\$\$\$
<b>R2-C</b>	<b>Franklin Ave:</b> 1 <sup>st</sup> St to 5 <sup>th</sup> St	<b>Buffered bike lane:</b> Re-stripe roadway to include buffered bike lane westbound; includes crosswalks at 2 <sup>nd</sup> St & 4 <sup>th</sup> St and signal timing enhancements at 3 <sup>rd</sup> St.	\$
<b>R2-D</b>	<b>Bear Creek SRTS:</b> Larkspur Trail to Coyner Trail	<b>Trail:</b> Close sidewalk gap and create a connection between Coyner and Larkspur Trail.	\$
<b>R2-E</b>	<b>Bear Creek Rd:</b> Cessna Ave to east UGB	<b>Shared use path adjacent to roadway:</b> Close sidewalk gap and create low-stress bikeway extending to 170 new affordable housing units.	\$\$\$
<b><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></b>			

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

<sup>3</sup> STRS: Safe Routes to School

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

<sup>4</sup> BNSF RR: Burlington Northern Santa Fe Railroad

<sup>5</sup> RRFB: Rectangular Rapid Flashing Beacon



## Draft Equity & Technology/Transit/TDM Policies: 2nd Review;

## Draft Bicycle/Pedestrian/Complete Streets Policies: 1st Review

**PREPARED FOR:** CTAC

**PREPARED BY:** Susanna Julber and Karen Swirsky, City of Bend

**DATE:** June 7, 2019

### Introduction

For CTAC #11 Meeting on June 18, 2019, we'll be reviewing the revised draft Equity and Technology/Transit/TDM Policies, based on comments from the small group exercise during CTAC #10 and internal City review. Tables 1 and 2 provide a summary of the proposed revisions based on comments received at CTAC #10 and from Legal and other City Department staff. We've also included the text so that you can see the Actions, but we'd like to focus on policy language at the upcoming meeting.

**Please review the revised draft *Equity and Technology/Transit/TDM* policies for CTAC #11, below, and be prepared to let us know which policies are “good to go” and which need further refinement at our July 26<sup>th</sup> workshop. Proposed changes are shown in **yellow highlight**.**

At CTAC #11, we'll also be introducing Bicycle/Pedestrian/Complete Streets policies (Table 3).

At the July 24 Funding Work Group meeting, we will be working with the Funding policies.

Please understand that we expect these policies to continue to evolve until the Steering Committee and the City Council adopt the Transportation Plan. Our goal is to create a set of policies that are implementable, and provide broad and measurable policies that are forward-thinking and reflective of the Committee's goals.

**Table 1: Draft Equity Policies & Actions (Second Review)**

	Draft Equity Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	<p><b>Introduction:</b> 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 for employment, housing, healthcare, education, recreation, and shopping. The City also recognizes that a significant portion of Bend’s residents qualify as low-income and that their needs require particular attention in prioritizing and funding transportation investments, programs, and services.</p>	<ul style="list-style-type: none"> <li>• Concern about highlighting past practice in pre-amble and focus on how we move ahead to treat everyone fairly</li> <li>• How do we put teeth in this?</li> <li>• Is equity bigger than transportation and should be included in comp plan? Land use/housing affordability obviously connected.</li> <li>• Overall, policy needs to be a sustained, continuous effort- not just a one-time look.</li> <li>• “Particular attention”- recognize we are way behind.</li> <li>• Define daily needs and vulnerable. Wonder if this should be a policy. Generally, “fairly providing” might not do it- we have to catch up”.</li> </ul>	<p><b>Introduction:</b> 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.</p>	

	Draft Equity Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
1.	<p>The City defines Transportation Equity as being achieved when everyone has access to safe, affordable, and reliable transportation choices to meet their daily transportation needs. Transportation equity helps ensure that disparities are mitigated and access to key destinations is fairly provided.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Fund data collection to identify historically underfunded populations, to better identify and understand their transportation needs.</li> <li>• Adapt policies and actions to address evolving needs.</li> <li>• Analyze crash and fatality data to determine if rates disproportionately effect 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.</li> </ul>	<ul style="list-style-type: none"> <li>• How do we measure this?</li> <li>• "... Are mitigated"? Mitigated is a weird word.</li> <li>• Disparities and fairly-needs catch up.</li> <li>• Add "attractive/appealing" to Safe, affordable, etc.</li> <li>• Use of Everyone- worried about resources to ensure EVERYONE has access. Add "daily needs" instead of key designations.</li> </ul>	<p>The City defines Transportation Equity as being achieved when everyone has access to safe, <b>comfortable</b>, affordable, and reliable transportation choices to meet their daily transportation needs. Transportation equity helps ensure that disparities are <b>reduced</b> and access to <b>daily needs</b> and key destinations are fairly provided.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Fund data collection to identify historically underfunded populations, to better identify and understand their transportation needs <b>and target projects and programs to improve transportation-related conditions for these residents.</b></li> <li>• Adapt policies and actions to address evolving needs.</li> <li>• Analyze crash and fatality data to determine <b>if rates are higher in neighborhoods that are more diverse than the City as a whole.</b> Ensure that the annual CIP process includes projects that will improve safety outcomes and processes that build trust within these areas.</li> </ul>	
2.	<p>The City will equitably distribute the benefits and costs of transportation system plans and improvements. The City will prioritize and support programs and projects, both capital and maintenance, that eliminate</p>	<ul style="list-style-type: none"> <li>• What is "equitably distribute"? Have we defined this enough?</li> </ul>	<p>The City will equitably distribute the benefits and costs of transportation system plans and improvements. The City will <b>prioritize (change to balance??)</b> and support programs and projects, both</p>	

	Draft Equity Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	<p>transportation-related disparities faced by populations that have historically had significant unmet transportation needs or who have experienced disproportionately negative impacts from the limits of the existing transportation system. These populations include, but are not limited to:</p> <p>a. <i>People who cannot drive</i>, including many older adults, children, and persons with disabilities.</p> <p>b. <i>People experiencing challenges to self-sufficiency</i>, 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.</p> <p>c. <i>Communities experiencing racism and discrimination</i>.</p> <p>d. <i>People with limited mobility</i>. People in this category include many older adults and persons with disabilities.</p> <p>e. <i>Isolated community members living far from community centers and lacking reasonable access to goods and services</i>.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Create an equity lens for analyzing transportation benefits and shortcomings.</li> <li>• Analyze the impacts of transportation projects and programs on areas with</li> </ul>	<ul style="list-style-type: none"> <li>• Comment on a-f: <b>vulnerable</b> does not do it, these are who we are targeting</li> <li>• Add balance instead of prioritize?</li> <li>• Instead of "...faced by populations that have...." To "faced by vulnerable populations." Vulnerable populations that have been historically and that are currently....?</li> </ul> <p><b>Note: A couple of definitions of Vulnerable user:</b></p> <p><b>From World Report on Road Traffic Injury Prevention:</b> "Road users most at risk in traffic, such as pedestrians, cyclists and public transport passengers. Children, older people and disabled people may also be included in this category."</p> <p><b>Driver's Ed website:</b> "A vulnerable road user is typically defined by two categories – <b>protection and</b></p>	<p>capital and maintenance, that eliminate transportation-related disparities faced by <b>vulnerable populations that have historically had significant unmet transportation needs or who have experienced disproportionately negative impacts from the limits of the existing transportation system.</b> Vulnerable populations include, but are not limited to:</p> <p>a. <i>People who cannot drive</i>, including many older adults, children, and persons with disabilities.</p> <p>b. <i>People experiencing challenges to self-sufficiency</i>, 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.</p> <p>c. <i>Communities experiencing racism and discrimination</i>.</p> <p>d. <i>People with limited mobility</i>. People in this category include many older adults and <b>people</b> with disabilities.</p> <p>e. <i>Isolated community members lacking reasonable access to goods and services</i>.</p> <p><b>Actions:</b></p>	

	Draft Equity Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	<p>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</p>	<p><b>capability.</b> A road user is vulnerable due to a lack of protection. For example, unlike a car driver who is protected from impact by the vehicle shell and safety features, a cyclist will have very little in the way of impact protection. A road user is also vulnerable due to capability. For example, a young child is unlikely to safely cross a road in the same way an adult would by taking all safety considerations into account.”</p>	<ul style="list-style-type: none"> <li>• Create an equity lens for analyzing the transportation project and program benefits and shortcomings.</li> <li>• 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.</li> </ul>	
3.	<p>The City will actively engage and support all populations, regardless of age, race, disability, gender, income, or geography in transportation planning issues, outcomes and decisions, with particular attention to engaging people who have experienced transportation barriers.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Ensure that transportation planning staff have the training resources they need to</li> </ul>	<ul style="list-style-type: none"> <li>• Instead of “regardless” use “with respect to... age, race...”</li> <li>• ...will actively engage and support...”</li> <li>• Target vulnerable populations.</li> </ul>	<p>The City will actively engage and support all populations <b>with respect to</b> age, race, disability, gender, income, or <b>location in the City</b>, in transportation planning issues, outcomes and decisions, <b>and will actively engage and support</b> those who have experienced transportation barriers.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Ensure that transportation planning staff have the training resources they</li> </ul>	

	Draft Equity Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	address equity and diversity issues in infrastructure planning		need to address equity and diversity issues in infrastructure planning.	
4.	The City will avoid, minimize and/or mitigate disproportionately high and adverse human health or environmental effects of transportation projects, including social and economic effects, on minority and/or low-income populations.	<ul style="list-style-type: none"> <li>More than fatal and injury, comfort and avoidance feelings are important.</li> </ul>	The City will <b>strive to avoid</b> , minimize and/or mitigate disproportionately high and adverse human health or environmental effects of transportation projects, including <b>safety-related</b> , social, and economic effects on minority and/or low-income populations.	

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**Table 2: Draft Technology/Transit/TDM Policies & Actions (Second Review)**

	Draft Tech/Transit/TDM Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	<p><b>Introduction:</b> 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.</p>	<ul style="list-style-type: none"> <li>• How do we get City Council to actively engage in private/public partnerships? It has been more of a wait/see to date, need teeth to make it happen.</li> <li>• General comment: word “will”</li> <li>• Be careful with policies vs. actions</li> </ul>		
1.	<p>The City will partner with public and private sectors to test and implement new mobility technologies. Pilot and/or demonstration projects will create efficient opportunities to test emerging mobility techniques and technologies to better understand their impacts, costs, and opportunities.</p>	<ul style="list-style-type: none"> <li>• Borders on action- consider higher level language</li> <li>• “...will partner when available...”</li> </ul>	<p>The City will <b>look for opportunities to</b> partner with public and private sectors to test and implement new mobility technologies, <b>including through pilot and/or</b> demonstration projects <b>to</b> create efficient opportunities to test emerging mobility techniques and technologies to better understand their impacts, costs, and opportunities.</p>	
2.	<p>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 will be required to use open data standards to report accurate, complete and</p>	<ul style="list-style-type: none"> <li>• Need to say we will have standards for open data to effectively engage w/ 3<sup>rd</sup> parties, requirements for them, not just city.</li> <li>• Can use identity stripped data, table felt this is critical,</li> </ul>	<p>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</p>	

	Draft Tech/Transit/TDM Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	<p>timely information on use, compliance and other aspects of operations.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>The City Office of Performance Management 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.</li> </ul>	<p>action is needing “open sourced”</p>	<p>way <b>must</b> to use open data standards to report <b>anonymized</b>, accurate, complete and timely information on use, compliance and other aspects of operations.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li><b>The City Office of Performance Management will establish</b> a centralized transportation data system and provide transportation-related data to the public to increase transparency and accountability in meeting identified transportation performance measures.</li> </ul>	
<p>3.</p>	<p>The City will develop clear guidelines governing the location and management of Shared Active Transportation (or “micromobility”) vehicles in the right of way. This refers to small wheeled vehicles (bikes, e-bikes, e-scooters, etc.) provided for rent in short time increments which provide increased mobility options over short distances.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>The City will evaluate and develop clear guidelines to maximize benefits, address concerns, to governing the location and management of Shared Active Transportation (or “micromobility”)</li> </ul>	<ul style="list-style-type: none"> <li>Not just for rent, will be more for ownership in the future...</li> <li>Add something like, “as a tool for meeting our own mobility”</li> <li>Define what location means?</li> </ul>	<p><b>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.</b></p> <p><b>Action:</b></p> <p>The City will <b>evaluate and develop</b> clear guidelines <b>to maximize benefits, and address concerns to govern the</b> location and management of Shared Active Transportation (or “micromobility”)</p>	

	Draft Tech/Transit/TDM Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	vehicles in the right of way, as approved by the City.		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.	<ul style="list-style-type: none"> <li>• What if new method (beyond EVs) advances?</li> </ul>	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.  (note- this policy from the CASC)	
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 prioritize autonomous vehicles that employ shared ownership and are shared by multiple passengers over those that are privately owned. 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	<ul style="list-style-type: none"> <li>• 2<sup>nd</sup> part "the City will" seems like an action- avoid the word "will". Combine 1 and 5 into a general emerging technology policy.</li> <li>• Higher capacity AVs? Like 2<sup>nd</sup> half of revised policy?</li> <li>• 2<sup>nd</sup> part of sentence: "City will ..... to ensure successful system TTR and efficiency..."</li> </ul>	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  (not sure if we address comments- CTAC as a whole should recommend)	
6.	The City will manage the curb zone area of the right of way to ensure flexibility and adaptability as parking and mobility	<ul style="list-style-type: none"> <li>• Again avoid word "will"</li> </ul>	The City will manage the curb zone area of the right of way to ensure flexibility and adaptability as parking	

	Draft Tech/Transit/TDM Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	<p>technologies change. The City will use adjacent land use 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).</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• Create guidelines for curb management, and amend the Standards and Specifications and Bend Development Code to implement</li> </ul>	<ul style="list-style-type: none"> <li>• Add more teeth- what about freight/ drones?</li> </ul>	<p>and mobility technologies change. The City will use adjacent land use <b>characteristics, building type, and other physical attributes to determine</b> 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).</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• Create guidelines for curb management, and amend the Standards and Specifications and Bend Development Code to implement</li> </ul>	
7.	<p>The City will implement the Intelligent Transportation System Plan and work with ODOT and the MPO to regularly update the Plan.</p>		<p>The City will implement the Intelligent Transportation System Plan and work with ODOT and the MPO to regularly update the Plan.</p>	
8.	<p>The City will develop a program to require institutions and businesses with more than 150 employees/members/ students of driving age 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.</p> <p><b>Action:</b></p>	<ul style="list-style-type: none"> <li>• Be less specific about number of employees in the policy. 150 may be an action.</li> <li>• Wants “of driving age” taken out to capture parent drop-off.</li> </ul>	<p>The City will develop a program to require <b>larger</b> institutions and businesses <b>with more than 150 employees/members/ students of driving age</b> to implement and track a Transportation Demand Management plan that outlines targets, strategies, and evaluation measures to reduce vehicle miles traveled and reduce single-</p>	

	Draft Tech/Transit/TDM Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
	<ul style="list-style-type: none"> <li>• Create Transportation Demand Management program, amend the Bend Development Code to implement. Identify and fund staff to manage the program.</li> </ul>		occupancy vehicle trips, particularly at peak hours.	
9.	<p>The City will establish Mobility Hubs 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.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• Create a Mobility Hub program, identify and fund staff to develop and manage the program</li> </ul>	<ul style="list-style-type: none"> <li>• What does a regional center mean?</li> </ul>	<p>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.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• Create a Mobility Hub program, identify and fund staff to develop and manage the program</li> </ul>	
10.	<p>The City will continue to develop, document and promote its own Transportation Demand Management plan to serve as a role model for others.</p>	<ul style="list-style-type: none"> <li>• Does this mean City as an agency or community? Is this an action item?</li> </ul>	<p>The City will continue to develop, document and promote its own internal Transportation Demand Management plan to serve as a role model for others.</p>	

	Draft Tech/Transit/TDM Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
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.			<i>Postponed per CTAC agreement until CET completes its plan update.</i>
12.	The City will plan, prioritize, and implement needed improvements on corridors identified for high-capacity transit, including complete street elements and signal prioritization		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			<i>Postponed per CTAC agreement until CET completes its plan update.</i>
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			<i>Postponed per CTAC agreement until CET completes its plan update.</i>
15.	The City will fully implement the Downtown Parking Plan (2017).		The City will fully implement the Downtown Parking Plan (2017).	

	Draft Tech/Transit/TDM Policy/Actions	Comments from CTAC MTG #10	Suggested changes (CTAC & Internal Review)	Further Discussion at July Workshop: Y/N
16.	<p>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.</p>		<p>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.</p>	
17.	<p>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.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>Amend the Bend Development Code Title 6 to implement parking districts, and identify and fund staff to manage parking districts.</li> </ul>		<p>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.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>Amend the <b>Bend Development Code Title 6</b> to implement parking districts, and identify and fund staff to manage parking districts.</li> </ul>	
18.	<p>The City will monitor and update parking requirements on a 5-year cycle to allow for adjustments based on changes in behavior and parking demand over time.</p> <p><b>Action:</b></p> <p>Create program to regularly monitor parking utilization, and identify and fund staff to manage the program.</p>	<ul style="list-style-type: none"> <li>Seems too slow- maybe 2-3 years? Continuous?</li> <li>Can we do more w/ parking policy in VMT/capita improvement? More effect on parking policy?</li> <li>At least every 5 years.</li> </ul>	<p>The City will <b>regularly</b> monitor and update parking requirements <b>on a 5-year cycle</b> to allow for adjustments based on changes in behavior and parking demand over time.</p>	

**Table 3: Bicycle/Pedestrian/Complete Streets Policies (First Review)**

	<b>POLICY as of 4/25/19</b>	<b>Suggested changes from internal City Review</b>	<b>CTAC comments</b>
	<p><b>Introduction:</b> 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.</p>	<p>None</p>	
<p>1.</p>	<p>Streets will be designed and constructed as “complete streets.” A complete street allows everyone to travel safely along and across the street, by all travel modes. In addition to fulfilling a street’s basic transportation functions, complete streets will be designed to be attractive, safe, and accessible to individuals of all abilities.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<p>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).</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• <i>Adopt the Low Stress Bikeway Map and Bikeway Design Guide.</i></li> <li>• <i>Create and adopt a Pedestrian Master Plan (see Policy 2).</i></li> <li>• <i>Update the Standards and Specifications and/or Bend Development Code to identify how complete street elements will be incorporated during</i></li> </ul>	

	POLICY as of 4/25/19	Suggested changes from internal City Review	CTAC comments
		<i>development and redevelopment, new construction, reconstruction, and maintenance activities.</i>	
	<del>The City will provide bicycle and pedestrian facilities on all new roadways or in conjunction with capital improvement road reconstruction projects.</del>	Redundant with Policy #1	
2.	<p>The City will create 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, which provide at least a minimum pedestrian Level of Traffic Stress 1 for certain land use and end user contexts, including but not limited to: downtown and other commercial districts, Safe Routes to School, access to parks, and access to transit stops. The City will require pedestrian Level of Traffic Stress 2 at a minimum for all other new and reconstructed sidewalks and crosswalks. The City uses the following definitions for pedestrian Level of Traffic Stress 1 and 2:</p> <p>Pedestrian Level of Traffic Stress 1 facilities are designed to be suitable for all users, including children 10 years or younger, and people using a wheeled mobility device.</p> <p>Pedestrian Level of Traffic Stress 1 facilities are generally buffered, along lower speed roadways and</p>	<p>The City will create <b>and implement</b> 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.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li><b>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.</b></li> <li><b>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.</b></li> </ul>	

	POLICY as of 4/25/19	Suggested changes from internal City Review	CTAC comments
	<p>have suitable crosswalk facilities such as safety islands.</p> <p>Pedestrian Level of Traffic Stress 2 facilities may not be suitable for children under 10 without supervision as more attention to traffic is required. Pedestrian Level of Traffic Stress 2 facilities are also generally buffered, but traffic speeds may be higher.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• <i>Create a Pedestrian Master Plan that identifies key Level of Traffic Stress 1 or 2 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 key routes.</i></li> <li>• <i>Identify and map pedestrian Level of Traffic Stress (including sidewalk condition) for existing sidewalk facilities for use in developing the City's Pedestrian Master Plan and the City's Sidewalk Maintenance Program.</i></li> <li>• <i>Create a Sidewalk Maintenance Program that includes guidance for winter operations, ADA compliance, enhanced crosswalks, and sidewalk condition. The Sidewalk</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Amend the Bend Development Code and Standards and Specifications for sidewalk construction.</i></li> <li>• <i>Develop and implement a Wayfinding program for the pedestrian network.</i></li> </ul>	

	POLICY as of 4/25/19	Suggested changes from internal City Review	CTAC comments
	<p><i>Maintenance Program will allow shared maintenance responsibilities between the facility owner and the abutting property owner to ensure routes are usable regardless of the responsible party.</i></p> <ul style="list-style-type: none"> <li>• <i>Amend the Bend Development Code and Standards and Specifications to provide pedestrian Level of Traffic Stress 1 and 2 requirements and criteria for sidewalk construction.</i></li> <li>• <i>Develop and implement a Wayfinding program for the pedestrian network.</i></li> </ul>		
3.	<p>The City's Bikeway Master Plan consists of a Low Stress Network of interconnected bikeway facilities (see MAP), classified as Level of Traffic Stress 1 and 2. The City envisions a community where, within a short distance of their home, people can access a network of low-stress bikeways.</p> <p>The City uses the following definitions of bicycle Level of Traffic Stress 1 and 2:</p> <p>a) Level of Traffic Stress 1 facilities are designed so those who may have limited experience or confidence riding a bicycle in traffic can readily and safely use them. Typically, Level of Traffic Stress 1 bikeways are trails, separated paths, shared sidewalks, wide bike lanes on slow speed streets</p>	<p><b>The City will establish a network of low stress bikeway facilities as shown on Low Stress Bikeway Map and directed by the Bikeway Design Guide.</b> The City's bicycle Low Stress Network will be designed to accommodate small-wheeled vehicles, including shared micro-mobility transportation solutions, within local regulation and legal requirements.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• <b>Adopt the Low-Stress Network map as part of the Transportation System Plan.</b></li> <li>• <b>Adopt the Bikeway Design Guide to identify appropriate bikeway treatments.</b></li> <li>• <b>Amend the Bend Development Code to add clear and objective criteria so that development or redevelopment can be</b></li> </ul>	

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	<p>and neighborhood greenways.</p> <p>b) Level of Traffic Stress 2 bicycle facilities are designed for use by the majority of mature riders and youth with adult supervision; they offer a suitable level of comfort by providing separation between bicyclists and motor vehicle traffic. Typically, Level of Traffic Stress 2 facilities are located along lower speed roadways using buffered bike lanes.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• <i>Adopt the Low-Stress Network map as part of the TSP.</i></li> <li>• <i>Adopt a Bikeway Design Guide to identify appropriate bikeway treatments based on the classification of the roadway, topography, right of way, and topographic characteristics.</i></li> <li>• <i>Amend the Bend Development Code to add criteria to allow segments of the Low Stress Network to be completed through development.</i></li> <li>• <i>Amend the Standards and Specifications to incorporate the Bikeway Design Guide into transportation system design.</i></li> <li>• <i>Create an implementation program to complete the construction of the Low Stress Network.</i></li> <li>• <i>Develop and implement a</i></li> </ul>	<p><i>required to complete segments of the Low Stress Network.</i></p> <ul style="list-style-type: none"> <li>• <i>Amend the Standards and Specifications to incorporate the Bikeway Design Guide into transportation system design.</i></li> <li>• <i>Implement the Low Stress Network through City projects and private development.</i></li> <li>• <i>Develop and implement a Wayfinding program for the Low Stress Network.</i></li> </ul>	

	POLICY as of 4/25/19	Suggested changes from internal City Review	CTAC comments
	Wayfinding program for the Low Stress Network.		
	<del>The City's bicycle Low Stress Network will be designed to accommodate small wheeled vehicles, including shared micromobility transportation solutions, within local regulation and legal requirements.</del>	Incorporated into Policy 3	
4.	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.	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 <b>and Pedestrian Master Plan.</b>	
5.	<p>The City will work with the School District to develop Safe Routes to School plans so that students can safely and conveniently walk and bike to school on Level of Traffic Stress 1 facilities. Safe Routes to School plans will identify routes of travel, presence/absence of Level of Traffic Stress 1 bikeways and sidewalks, and appropriate crosswalks. The Safe Routes to School plans will include identified funding and a construction timetable for providing missing infrastructure.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• Create Safe Routes to School plans and implementation programs and identify funding sources for construction</li> <li>• Amend the Bend Development Code to require Safe Routes to School plans for</li> </ul>	<p><b>The City recognizes the importance of providing students with safe and comfortable walking and biking routes to school.</b></p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• <b>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.</b></li> <li><b>Safe Routes to School plans will identify routes of travel and infrastructure needs including bikeways, sidewalks and crosswalks to accomplish the following:</b></li> </ul>	

	POLICY as of 4/25/19	Suggested changes from internal City Review	CTAC comments
	<p><i>new schools.</i></p>	<ul style="list-style-type: none"> <li>• <i>Elementary Schools: Level of Traffic Stress 1 routes within 1 mile of the school.</i></li> <li>• <i>Middle and High Schools: Level of Traffic Stress 1 or 2 routes within 1.5 miles of the school.</i></li> </ul> <p><i>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.</i></p> <ul style="list-style-type: none"> <li>• <i>Amend the Bend Development Code to clarify School District requirements to provide bike and pedestrian routes to new schools.</i></li> </ul>	
<p>6.</p>	<p>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.</p>	<p>None</p>	
<p>7.</p>	<p>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.</p>	<p>None</p>	

	POLICY as of 4/25/19	Suggested changes from internal City Review	CTAC comments
	<p>The City requires buffered sidewalks or the equivalent pedestrian facilities and crosswalks as part of roadway construction, reconstruction, and development, except as specifically exempted.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• <i>Develop clear and objective standards for exemptions to sidewalk and crosswalk requirements.</i></li> </ul>	<p>Redundant with Policy 1</p>	
<p>8.</p>	<p>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.</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• <i>Develop requirements and clear and objective criteria for the installation of enhanced crosswalks and amend the Bend Development Code to incorporate these.</i></li> <li>• <i>Create a Street Lighting Program to update the Standards and Specifications to provide adequate illumination at crosswalks and intersections.</i></li> </ul>	<p>None</p> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Update the Standards and Specifications to provide adequate illumination at crosswalks and intersections</i></li> </ul>	

	POLICY as of 4/25/19	Suggested changes from internal City Review	CTAC comments
9.	<p>The City recognizes the importance of maintaining the biking and walking system for year-round use.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>Develop a program to provide year-round operations and maintenance of key walking and biking routes, including sidewalks, shared use paths, bikeways, access to transit stops and crosswalks.</li> </ul>	<p>Bicycle and pedestrian facilities should be maintained for year-round use.</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>Update the City's Winter Maintenance and Operations plan to incorporate walking and biking facilities.</li> <li>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.</li> </ul>	

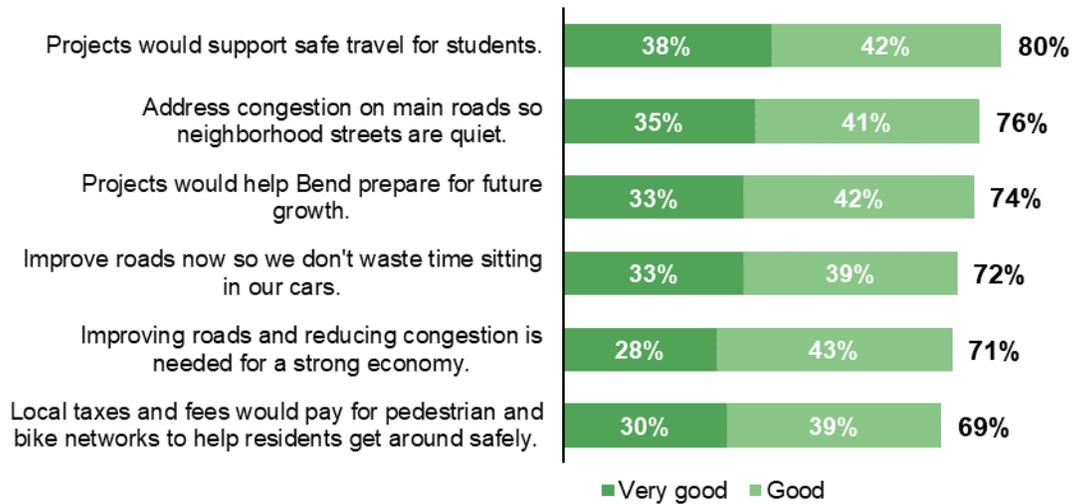
## **Bend Transportation—Capital Improvement Funding Telephone Survey – May 2019**

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

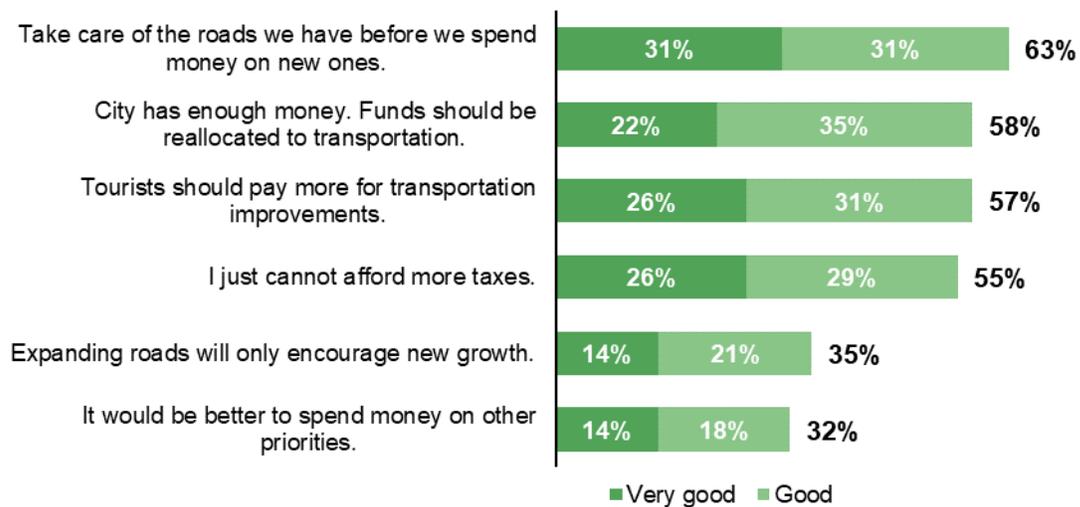
<https://www.bendoregon.gov/Home/ShowDocument?id=41929>

### **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).