

Funding Work Group Meeting 1, 7 June 2018

Meeting Materials

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Funding Work Group Meeting #1

Draft Agenda

MEETING DATE: Thursday, June 7, 2018

MEETING TIME: 2:30-5:00 pm

LOCATION: Council Chambers at Bend City Hall

Objectives

- Introduce charter and role
- Capture initial FWG ideas about potential funding sources
- Develop understanding and agreement about the process, timeline, format, and dates for FWG meetings
- Review information about previous funding plans and alternative approaches, and potential funding sources
- Discuss methods and potential criteria for evaluating funding sources
- Discuss high-level agenda for the next FWG meeting and outline action steps needed before next meeting

Agenda

1. Welcome, introductions, agenda overview, potential opportunity for public comment, funding suggestions activity (25 minutes)

Activity: We will give FWG members a chance upfront to outline any funding ideas they have and gauge which of these are most compelling to the group. This information will ensure that the staff/consultant team captures these suggestions when they prepare information for FWG#2 about a wide range of potential funding sources.

2. Funding Work Group charge and process, legal briefing, and work plan (40 min)

This agenda item will touch briefly on the FWG charter (an action item) and legal advice on conflicts of interest relative to funding policy (informational).

The main topic for this agenda item is the work plan for the FWG. Please see the attached memo.

BREAK (10 min)

3. Overview of funding plans and funding sources (25 min)

This is an information and discussion item - please review the attached memorandum prior to the meeting (main content, the Appendix is optional reading). To maximize discussion

time, staff will provide only a few brief comments, followed by FWG discussion. The goal of this agenda item is get everyone grounded in the Why, What, and How Much foundation of transportation funding.

4. Initial discussion about evaluating funding options (methods and criteria) (30 min)

This agenda item will include a presentation on funding methods and criteria. It is step 1 in a two-meeting sequence of discussion on this topic. At FWG 2 in July, the group will discuss and develop evaluation criteria for funding packages.

5. Public comment (10 minutes) – 3 minutes per person at discretion of committee

6. Scheduling next meetings, close/initial discussion of next meeting (10 min)

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, or any other accommodations are available upon advance request. Please contact Emily Eros no later than June 3 at eeros@bendoregon.gov or 541-693-2132. Providing at least 3 days notice prior to the event will help ensure availability.

Funding Work Group Charter (draft)

PREPARED FOR: Project Management Team

PREPARED BY: Joe Dills

UPDATED: April 25, 2018

Overview

This memo describes the purpose, membership, staffing, meeting guidelines, and preliminary meeting commitment for the Funding Work Group.

Purpose

The purposes of the Funding Work Group are to:

- Advise the Citywide Transportation Advisory Group (CTAC) on matters regarding transportation funding in Bend
- Work collaboratively with, and provide guidance to, the staff and consultant project team in the preparation of the Bend Transportation Funding Plan
- Review, provide input on, and recommend a draft Funding Plan to the CTAC

Membership

The following guidelines were developed:

- 5-7 CTAC members with a high interest and/or background in funding issues.
- A variety of perspectives and background should be included. Examples of expertise include: economic development, land development, infrastructure planning/funding, law, banking and finance.
- At least one of the CTAC co-chairs should be a member of the Work Group

13 CTAC members volunteered for the Work Group and the CTAC co-chairs selected the following people:

Funding Work Group co-chairs:

- Karna Gustafson
- Steve Hultberg
- Mike Riley
- Ruth Williamson

Funding Work Group members:

- Katy Brooks
- Suzanne Johannsen
- Richard Ross
- Nicole Mardell
- Dale Van Valkenburg

Staffing

Lead for the Funding Work Group – Emily Eros

Lead for funding strategies – Emily Eros

Support – Tyler Deke, Cassie Walling, Susanna Julber, Sharon Wojda, Camilla Sparks, Elizabeth Oshel

Senior staff “at the table” with the Work Group membership: Nick Arnis, Eric King, Cam Sparks, Elizabeth Oshel. These key staff have expertise that should be integrated into the Committee discussions, hence the “at the table” role for them.

Consultants: Bob Parker, lead for deliverables, and Joe Dills, facilitator

Collectively, the staff listed above will work as an Internal Funding Team between Work Group meetings.

Meeting Guidelines and Protocols

Same as those adopted by the CTAC.

Work Plan and Meeting Commitment

Preliminary and subject to change:

- Meeting 1: Kickoff; committee charge, review of previous funding plans, overview of funding tools (June, 2018)
- Meeting 2: Initial Funding Assessment; detailed review of existing and potential funding tools (July)
- Meeting 3: Overview of funding gaps and preliminary funding alternatives (Sept)
- Meeting 4: Refined funding alternatives/packages (Oct)
- Meeting 5: Draft funding plan and recommendations (April, 2019)
- Meeting 6: Draft funding plan and recommendations (May, 2019)

Funding Work Group Process and Work Plan

PREPARED FOR: Bend TSP/MTP Funding Work Group

COPY TO: Project Team

PREPARED BY: Bob Parker, ECONorthwest

DATE: May 31, 2018

This memorandum summarizes the Funding Work Group (FWG) process and work plan. It outlines meetings and tentative meeting agendas and describes how the FWG effort will interact with the Community Transportation Advisory Committee (CTAC) and Steering Committee (SC). This memo supports agenda items for FWG meeting 1 where we will discuss the work program and process and solicit input.

Funding Work Group Charge

The purposes of the Funding Work Group (FWG) are to:

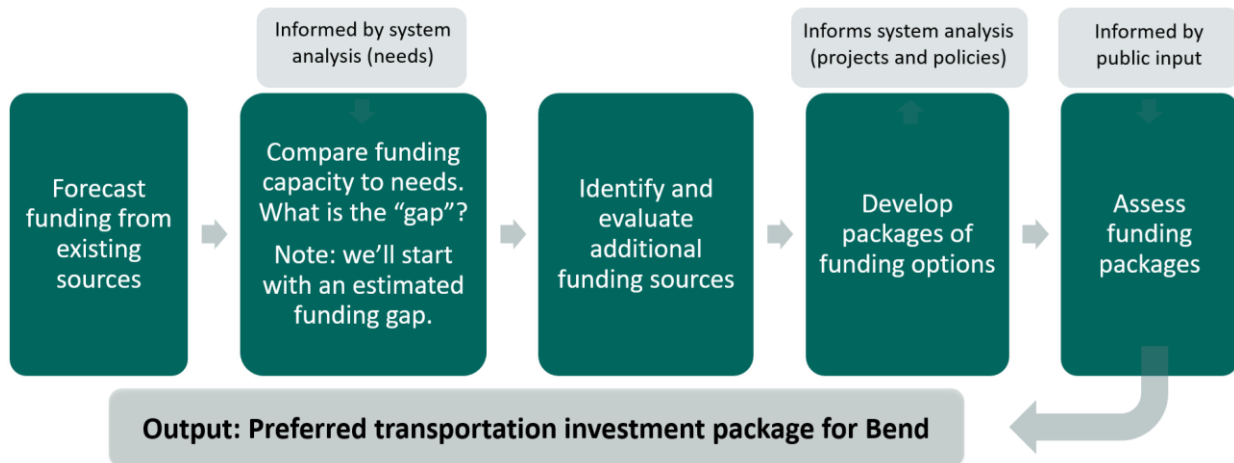
- Advise the Citywide Transportation Advisory Group (CTAC) on matters regarding transportation funding in Bend
- Work collaboratively with, and provide guidance to, the staff and consultant project team in the preparation of the Bend Transportation Funding Plan
- Review, provide input on, and recommend a draft Funding Plan to the CTAC

Funding Work Group Process and Work Plan Overview

The FWG is a subcommittee of the CTAC. This structure creates efficiencies in both information sharing and reporting. With respect to information sharing for FWG meetings, staff's intent is to provide written summaries of written analysis at least one week prior to meetings and to spend minimal time briefing the group on that information. The objective is to provide the FWG as much time as possible to discuss and deliberate the information you feel is necessary to make informed judgments about transportation funding.

Figure 1 provides a conceptual overview of the work plan. The process starts with forecasted funding from existing sources. That information is compared to needs as determined by the systems analysis to identify the funding gap. Additional funding sources are considered and evaluated to address the gap and are eventually crafted into packages of funding options. The FWG then assesses options—a step that is informed by public input and feedback from the CTAC and SC.

Figure 1. Funding Work Group Work Plan



Due to timing issues with the systems analysis, we propose to start with a hypothetical funding gap that is informed by previous plans, preliminary systems analysis, and other information. This gap will be refined later in the process, once we have a more definite figure.

Proposed FWG Meeting Topics and Outcomes

This section outlines the proposed FWG meetings and provides a brief description of each meeting as well as the outcomes we hope to achieve.

Meeting 1: Kickoff; committee charge, review of previous funding plans, overview of funding tools

The first meeting will provide a brief overview of the committee charge, followed by a process overview of what policy requires of the city. The consultant will then provide an overview of the funding plans in the current MTP and TSP. Finally, the consultant will provide a high-level overview of existing and potential funding mechanisms.

Outcomes:

- Input on FWG charter, schedule and process
- Input/direction on evaluation criteria
- List of questions/desired information for meeting #2
- Meeting dates for FWG#2-4, Agenda review for FWG #2

Meeting 2: Initial Funding Assessment; detailed review of existing and potential funding tools

The second meeting focuses on funding tools. The consultant will prepare a memo summarizing the funding tools along key criteria (stability, capacity, equity, etc.) prior to the meeting. The bulk of the meeting will be a facilitated discussion concerning the funding tools—with an emphasis on new tools or existing tools that could be enhanced.

Outcomes:

- Discussion / input on individual funding tools
- FWG provides direction to consultant – tools to focus on; tools to potentially eliminate
- Discussion / input about packaging funding options
- Agenda review for FWG #3

Meeting 3: Overview of funding gaps, and preliminary funding options

In Meeting 3, the FWG will discuss work by the consultant team on projected transportation costs (from the existing TSP/MTP), revenues, and the estimated funding gap between costs and revenues. At this early point in the process, this will be a discussion of a hypothetical (but not unrealistic) funding gap, and how it might be addressed. The consultant and staff will develop 3-5 funding option packages based on input from meeting 2. The discussion will focus on preferred funding options to address identified gaps, using evaluation criteria.

Outcomes:

- Information about costs, revenues and gaps
- Discussion about funding options
- Input about how to refine funding options
- Work group request for additional information on funding options
- Agenda review for FWG #4

Meeting 4: Review of refined funding alternatives/packages

Meeting 4 will focus on narrowing the funding strategies. The consultant will present funding alternatives that address the gap using input from meeting 3 on preferred funding tools.

Outcomes:

- Preferred funding option package
- Additional considerations for funding plans
- Meeting dates for FWG#5-6

Meeting 5: Draft TSP and MTP funding plan review

Meeting 5 will begin with a consultant presentation on the draft TSP funding plan and funding recommendations, as well as the draft MTP funding plan and funding recommendations. At this juncture, the neighborhood outreach process will have been completed and that community feedback combined with citywide transportation needs. The meeting will solicit FWG input on the draft funding plans.

Outcomes:

- Comments on draft TSP funding plan and draft MTP funding plan
- Direction to consultant about additional research or analysis

Meeting 6: Draft funding plan and recommendations

The consultant will modify the draft funding plans consistent with committee input and present the final draft funding plans to the FWG. This meeting's outcome will be a FWG recommendation to the CTAC.

Outcomes:

- FWG recommendation to CTAC

FWG Interaction with Other Committees

Ultimately, the Steering Committee will make final decisions about funding and other elements of the TSP. Table 1 shows planned meetings of the FWG, CTAC, and SC and potentially interactions between the committees. Additionally, members of both the CTAC and SC may attend the FWG meetings.

Table 1. Funding Work Group Input in Relationship to CTAC and SC Process

Accurate as of May 30, 2018 – the project schedule and work plan are dynamic and subject to change.

Month	Funding Work Group	Community Transportation Advisory Committee	Steering Committee
2017			
June	#1 – Preliminary input on criteria and funding sources		#2 (week of July 30): Approve goals, input on scenarios
July	#2 (week of July 16): Funding assessment and detailed review of potential funding sources, funding evaluation criteria	#4 (week of July 16): Recommend goals to Steering Committee, future conditions, scenario input	
August		#5 (week of August 20): Recommend city-wide scenarios and evaluation measures, FWG update	
September	#3 (week of 9/10/18): Funding option packages		#3 (week of 9/3): Approve citywide scenarios for evaluation, evaluation measures, goals, FWG update
October	#4 (week of 10/8/18): Identify best funding packages		
November		#6 (week of 11/19/18): Confirm city-wide framework, commentary on funding packages	
December			#4 (week of 12/10/18) Confirm city-wide framework, commentary on funding packages
2019			
January			
February			
March		#7 (week of 3/25/19): Neighborhood recommendations	
April	#5 (April 2019): Funding recommendations, draft TSP and MTP funding plan		#5 (early April 2019): Neighborhood recommendations
May	#6 (May 2019): Funding recommendations and MTP and TSP funding chapters		
June			#6 (June 2019): Confirm combined system; review performance measures

M E M O R A N D U M

To: Members of Committees, Boards, Commissions

From: Mary Alice Winters, City Attorney

Re: Conflicts of Interest for Public Officials for City Committees, Boards and Commissions (Permanent, Temporary, Ad Hoc)

Date: 4/27/2018

Although you serve on this advisory committee, board or commission as a volunteer, you are a member of a governing body providing recommendation(s) to the City Council. You are therefore a public official, subject to the conflict of interest laws. The Bend Municipal Code states that board, commission and committee members appointed by the City are considered “public officials” subject to State Ethics Law. BMC Section 1.20.015(E). These rules are in place to protect you as an appointed member of a public body, participating in official action. The rules distinguish between **actual and potential conflicts of interest**. Because you are making recommendations only, any conflicts will be **potential** conflicts, and only need to be publicly announced prior to taking action and you can continue participating in discussions and decision-making.

Decisions of the committee cannot be invalidated for failing to disclose a conflict but if a complaint is made to the Ethics Commission and upheld, you could face sanctions, including a letter of reprimand or a personal civil fine of a maximum of \$5,000 for each violation. By disclosing the nature of the conflict and having it reflected in the public record (the minutes) of the public body, you are protected.

A potential conflict is one that could result in a financial benefit or detriment to you, a relative, or client, or a business with which you or the family member or client, are associated. A non-profit is not a business, nor is a government agency, for purposes of the rules about potential conflicts.

If you believe a decision that is before the committee could have a direct financial effect on you, your business, or that of a family member or client, you should announce that conflict before taking part in discussion or a vote on that issue.

We are not concerned with financial benefit or detriment that is merely speculative, or very distant from the committee recommendation – it is more if the recommendation could directly impact you or the other parties mentioned.

As a general rule, if you have the same interest as all residents (for example, if you were making a recommendation on water or sewer rates, or class of citizens), you do not need to declare a conflict, because you have the same general financial interest in rates as all the other rate payers of the city. The same analysis applies to other classes of citizens or businesses.

For more information please see the Oregon Government Ethics Law Guide for Public Officials, especially pages 21-24, which can be found on the Oregon Government Ethics website: <http://www.oregon.gov/ogec/Pages/index.aspx> Ethics commission staff are available to provide informal telephone advice, or written opinions if needed, to help with compliance. The website also has the contact information for Ethics Commission staff.

The ethics rules apply to the person or official as an individual. However, the City Attorney's office is also here to help you, so if you have a question about a particular association of yours, or want to know if you should declare a conflict at any time throughout this process, feel free to contact any of the attorneys. We can discuss the concern with you, or call the ethics commission with or for you.

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Overview of Transportation Funding Plans and Funding Sources

PREPARED FOR: Bend Transportation Plan Funding Work Group
COPY TO: Project Team
PREPARED BY: Bob Parker, Beth Goodman, Sadie DiNatale, and Korinne Breed,
ECONorthwest
DATE: May 31, 2018

Summary

This Overview of Funding Plans and Funding Sources memorandum provides the background information to craft Bend's Transportation Funding Plan. It explores several key themes and provides the following conclusions:

Why prepare a funding plan, and how will it benefit Bend?

The transportation funding plan is a key tool that will guide investments, stabilize funding, and support Bend's livability objectives. The funding plan will:

- *Guide Bend's return on public investment* by addressing questions such as: How will Bend fund new roads, bridges, paths and other capital improvements (called 'modernization' projects)? How will Bend fund transit, operations and preservation (e.g., maintenance)?
- *Stabilize funding* which is important for Bend because transportation revenue has been highly variable. When funding is more predictable, both the public and private sectors are in a better position to deal with planned growth, address congestion, increase safety, and budget wisely.
- *Enhance community livability* by making strategic investments in the transportation system. When funding is more predictable, both the public and private sectors are in a better position to deal with planned growth, address congestion, increase safety, and budget wisely.

In addition to these purposes, transportation planning (including funding planning) in Bend is both a federal and state requirement; the memo details the funding-related regulations that govern these requirements.

What is a funding plan and what plans are we updating?

Funding plans are typically included as a chapter in transportation system plans. The process involves forecasting funding from existing sources, comparing that information to needs determined by systems analysis, and identifying the funding gap. It is axiomatic that a funding gap will exist—need always exceeds capacity. Thus, funding plans address hard choices that cities or regions must make seeking an appropriate balance between modernization, operations and preservation, and transit. The matching of funding capacity to needs involves a complicated assessment of the portfolio of current funding sources and new funding sources.

Long-range planning is inherently an uncertain process. The further out in time improvements are needed, the less certainty there is. This is especially true for funding plans. Many funding sources fluctuate with the economy or depend on the political environment and this can be difficult to forecast – particularly in a dynamic area like Bend, which is experiencing very high population growth and a booming economy. Thus, long range plans must, and do, make assumptions about the future. Those assumptions build from the foundational (population and employment forecasts) to the aspirational (how much are residents willing to pay). That does not obviate the need for planning, but it does underscore the need for ongoing monitoring and evaluation.

What we are updating – The Bend MTP and TSP

The Bend Metropolitan Planning Organization (Bend MPO) is responsible for preparing a long-range regional transportation plan for the Bend metropolitan area. That plan is called the Bend Metropolitan Transportation Plan (Bend MTP); it prioritizes transportation projects over a 25-year period. The Bend MTP takes a “big-picture” look at future demand for all modes of transportation in the Bend region and how that demand might be accommodated by investments in infrastructure. A key requirement for regional transportation plans is that they be fiscally constrained—the cost of actions identified in the Bend MTP cannot exceed the level of funding considered reasonably available in the region.

The City of Bend is responsible for maintenance and capital improvements for the transportation system under the City’s jurisdiction. Accordingly, the Bend TSP is a long-range (20-year) plan that implements the transportation element of the Bend Comprehensive Plan. The TSP focuses on transportation policies, implementation strategies, and recommended projects and programs for meeting transportation needs. It also provides guidance for Bend’s five-year Capital Improvement Program (CIP) which addresses transportation elements that include construction and modernization needs of roads, sidewalks and bike lanes. The capital funding levels outlined in the TSP include the City-funded projects in the MTP, plus additional capital improvements to facilities not included in the MTP (e.g. local streets and collectors). Many of these planned improvements focus on improving connectivity or making bicycle, pedestrian and safety improvements.

Where’s the money?

Transportation funding comes from a range of federal, state, and local sources. Examples of these sources include: federal and state gas taxes, local levies, bonds, grants, and user fees. Sources are evaluated, in part by how they affect or impact different populations. In broad terms, decision makers should be choosing among public investments with the highest net benefits and the lowest net costs. Every funding source will have its advantages and disadvantages; this raises key procedural questions about how to evaluate transportation funding sources.

A core set of criteria are commonly used to evaluate funding sources including: financial effectiveness (yield, stability, growth potential), transportation efficiency, fiscal efficiency, equity, political acceptability, and legality. The evaluation of any region’s transportation alternatives is unavoidably in the world of multi-criterion (multi-impact) analysis. Weighting is often used to measure the relative importance of each evaluation criterion.

I. Purpose

The purpose of this memorandum is to provide an overview of funding plans and funding sources, as background information for crafting Bend's Transportation Funding Plan. It addresses the following practical questions:

- Why prepare a funding plan, and how will it benefit Bend?
- What is a funding plan, and what plans are we updating?
- Where's the money?

Funding transportation is expensive, and can be complicated and political. Recognizing this, the City established the Funding Work Group (FWG) as a subcommittee to the Citywide Transportation Advisory Committee (CTAC) to focus on funding. This memorandum provides foundational information for the FWG to craft a plan that: addresses – head on – the high costs of transportation; cuts through the complications; and works toward consensus.

A description of federal, state, and local funding sources is available on the CTAC website, alongside other reference materials for the first Funding Work Group meeting. These funding sources will be explored in greater detail in future FWG meetings.

II. Why prepare a funding plan, and how will it benefit Bend?

Guiding Investments, Stabilizing Funding, and Supporting Livability

Guiding Bend's Return on Public Investment - Transportation planning is a necessary and prudent step for local governments. Bend's transportation systems and programs will comprise the highest percentage of all capital infrastructure investments over time. For reference, the 2040 Bend Metropolitan Transportation Plan (MTP), which was adopted in 2014, identified \$188M in projects. The current Bend Transportation System Plan (TSP), the funding plan portion of which was updated in 2012, identified \$273M of projects (these plans are discussed in further detail in the sections that follow). To steer future investments, the transportation funding plan in the updated TSP will guide many important decisions to be made by the City Council, MTP Board, and community. How will Bend fund new roads, bridges, sidewalks, paths, bicycle infrastructure and other capital improvements (called 'modernization' projects)? How will it fund transit, operations and preservation (e.g., maintenance)? The funding plan recommended by the Funding Working Group will address all these questions in the context of an overall transportation vision for Bend.

Guiding Bend's Return on Public Investment - Transportation planning is a necessary and prudent step for local governments. Bend's transportation systems and programs will comprise the highest percentage of all capital infrastructure investments over time. To steer future investments, the transportation funding plan in the updated TSP will guide many important decisions to be made by the City Council, Bend MPO Board, and community. How will Bend fund new roads, bridges, paths and other capital improvements (called 'modernization' projects)? How will it fund transit, operations and preservation (e.g., maintenance)? How will Bend fund identified missing infrastructure (i.e., unpaved existing roads, missing sidewalks, bicycle infrastructure, etc.)? The funding plan recommended by the Funding Working Group will address all these questions in the context of an overall transportation vision for Bend.

Stabilizing Funding – As described later in this memo, transportation revenue in Bend has historically been highly variable (see Figure 4 on page 14). A new funding plan is an opportunity stabilize Bend's transportation funding picture. When funding is more predictable, both the

public and private sectors are in a better position to deal with planned growth, address congestion, increase safety, and budget wisely.

Livability – Streets, paths and trails in Bend comprise large and highly used portion of the city’s public places. They are much more than corridors of travel; they are the places where the community experiences daily life in Bend – from walking to school, to strolling downtown, to daily commutes. The funding plan will help deliver what the community says it wants, such as new roads, better sidewalks, bike lanes and transit, safer streets, or a cleaner environment, and identify when and where those improvements are needed. Achieving these outcomes will be highly influenced by the type of investments made in the transportation system, and how those investments are intended to support land use, economic development, housing affordability, and a host of other aspects of community life.

Regulatory Drivers

Transportation planning in Bend is both a federal and state requirement. Federal regulations mandate that a Metropolitan Planning Organization (MPO) be designated for areas over 50,000 in population. The primary function of a MPO is to conduct a *continuing, cooperative, and comprehensive* transportation planning process that will result in plans and programs that consider all transportation modes and will support metropolitan community development and social goals. At the state level, Statewide Planning Goal 12 is one of nineteen planning goals. These goals were designed to be implemented through inclusion in regional and local comprehensive plans. Under Goal 12, local governments must adopt transportation plans which “provide and encourage a safe, convenient and economic transportation system.” Thus, Bend has a legal mandate to develop transportation plans, including funding strategies.

III. What is a funding plan and what plans are we updating?

Elements of a Funding Plan

Funding plans are typically included as a chapter in transportation system plans. The process of developing a funding plan usually starts with forecasted funding from existing sources. That information is compared to needs as determined by the systems analysis used to identify the funding gap. Additional funding sources are considered and evaluated to address the gap and are eventually crafted into packages of funding options. It is axiomatic that a funding gap will exist—need always exceeds capacity.

Thus, funding plans address hard choices that cities or regions must make. They must match funding capacity to needs—a process that is neither simple nor certain. Local governments’ capacity to pay for transportation (and other public services) is, in part, determined by resident desires and willingness to support funding. In other words, cities provide the transportation system that their residents are willing to pay for. That includes seeking an appropriate balance between modernization, operations and preservation, and transit. The matching of funding capacity to needs involves a complicated assessment of the portfolio of current funding sources and new funding sources.

Long-range planning is inherently an uncertain process. Moreover, the further out in time, the less certainty. This is especially true for funding plans. Many funding sources fluctuate with the economy or depend on the political environment and this can be difficult to forecast—particularly in a dynamic area like Bend, which is experiencing very high population growth and a booming economy. Thus, long range plans must, and do, make assumptions about the future. Those assumptions build from the foundational (population and employment forecasts) to the

aspirational (how much are residents willing to pay). That does not obviate the need for planning, but it does underscore the need for ongoing monitoring and evaluation.

In the context of working with uncertainty, we use the following principles:

- Acknowledge where uncertainty exists
- Clearly state and document all assumptions
- Identify the relative importance of each assumption—including which assumptions can and cannot be changed
- Conduct sensitivity testing of key assumptions to understand how the assumptions affect results.

Different jurisdictions generally approach funding plans in similar ways, though the timing and depth of engagement do vary. Many jurisdictions address funding at the end of their planning process, which in our view is a mistake. Funding is inherently a political process and deserves ample public input and dialog. Bend clearly recognizes this and has developed a robust process for balancing the difficult trade-offs between level of service and willingness to pay.

Our approach will include a thorough review, analysis, and recommendations of funding tools, including those outside the standard toolbox, that other communities have implemented or explored.

Transportation Funding Principles

Projects to improve the transportation system are funded through a mix of federal, state, and local revenues distributed through a variety of funding programs that dictate how this revenue can be spent. In addition to revenue generation and spending by multiple jurisdictions, revenue sharing among jurisdictions and cooperation among multiple jurisdictions on individual projects makes describing transportation funding complicated. In this section, we explain some key transportation funding principles, and provide definitions of key terms, with the intent of making this evaluation of transportation funding less complicated and easier to understand.

Funding vs. Financing

The terms “funding” and “financing” are often used interchangeably; there is an important difference. Providing transportation facilities and services costs money, and somebody has to pay those costs. The ultimate source of revenue for these costs is *funding*. Funding comes from households and businesses that pay taxes and fees that give the various levels of government money to build and maintain the surface transportation system, and to operate programs that improve mobility. Examples of funding mechanisms are tolls, fuel taxes, registration fees, impact fees, and property taxes.

For each of these mechanisms, one can determine who is paying. When the funds for transportation costs are borrowed and paid back over time, then these costs have been *financed*. Public agencies finance costs for the same reasons that households and businesses do—to reduce the current out-of-pocket costs by spreading out payments over time (e.g., financing a housing purchase with a home mortgage; the funding to pay the mortgage over time typically comes from the homebuyer from income received from a job). The ultimate source of funding for financed costs is not the financing instrument itself—e.g., bonds—but rather the revenue sources used to repay the borrowed funds.

Since financed costs must be paid back over time, financing the costs does not increase the total amount of funding available in an area over a long-term planning period. Financing the costs merely makes future funds available earlier, at the cost of the interest charged to borrow

the funds. Financing the project costs decreases the level of future funds available for transportation by adding the cost of interest.

Sources, Mechanisms, and Programs

“Source,” “mechanism,” and “program” are terms that are often used interchangeably when discussing funding, but each term is distinct for the purposes of this analysis:

- A *source* is the entity that pays for the funding. We look at sources of funding two different ways (1) the unit of government that provides funding directly to a project (government source), and (2) the group of persons or businesses that pay the money to the government (the ultimate source).
- A *mechanism* (also called a tool) is the method that is used to charge persons or businesses to generate the funding. Examples of funding mechanisms include gas tax, vehicle registration fees, and transit ticket sales.
- A *program* is an ongoing, well-defined approach for spending a specific sum of money, usually with a specified funding source, and with clear rules on what projects can receive funding, and what dollar amounts those projects can receive. The Federal Transit Administration (FTA) Flexible Funding Surface Transportation Block Grant Program is an example of a funding program. In Oregon, the State Highway Fund is a key program that provides money to local governments.

Capital vs. Operations and Maintenance

Our analysis looks at both capital and operations and maintenance costs:

- *Capital costs* are one-time, up-front costs associated with the construction and implementation of a project.
- *Operations and maintenance* (O&M) costs are long-term, ongoing costs associated with keeping a project in working order after the capital investment is complete.

Capital costs are frequently presented as a lump-sum number, whereas O&M costs are frequently presented as an average annual number. An important reason to separate these two types of costs is that some funding sources may only be available, or appropriate to use on either capital or O&M costs, but not both. Thus, the regional funding capacity for new capital projects will be less than the total amount of funding forecast in the region, since some of that funding will need to fund O&M needs.

What we are updating – The Bend MTP and TSP

“Its two, two...two plans in one!”

This project is a unique collaboration between the Bend MPO and the City of Bend to update the Bend MTP and TSP in a coordinated fashion. The plans are related, but operate under different legal frameworks and address different priorities and have different geographic boundaries (see Figure 1). The Bend MTP focuses on regional facilities, which include state facilities (e.g. highways), major and minor arterials, and some major collectors. Furthermore, the MTP must be fiscally constrained (see below for further discussion of what it means for a plan to be “fiscally constrained”). The TSP funding plan encompasses all of the City-funded capital projects that are included in the MTP, but also includes non-regional facilities (e.g. local streets and collectors). Identifying funding strategies and packages for both plans will be key activities for the Funding Work Group.

The two plans will likely share the same timeline. We are planning to draft the initial funding plan for the MTP as well as the TSP in spring 2019; the FWG would review both drafts at the April 2019 meeting and finalize the plans at the May 2019 meeting.

Bend MTP

The Bend Metropolitan Planning Organization (BMPO, Bend MPO) is responsible for preparing a long-range regional transportation plan for the Bend metropolitan area. That plan is called the Metropolitan Transportation Plan (MTP). The MTP takes a “big-picture” look at future demand for all modes of transportation in the Bend region and how that demand might be accommodated by investments in infrastructure. The MTP is an initial step in developing the region’s network of transportation facilities and services; it serves as a framework for more detailed project planning.

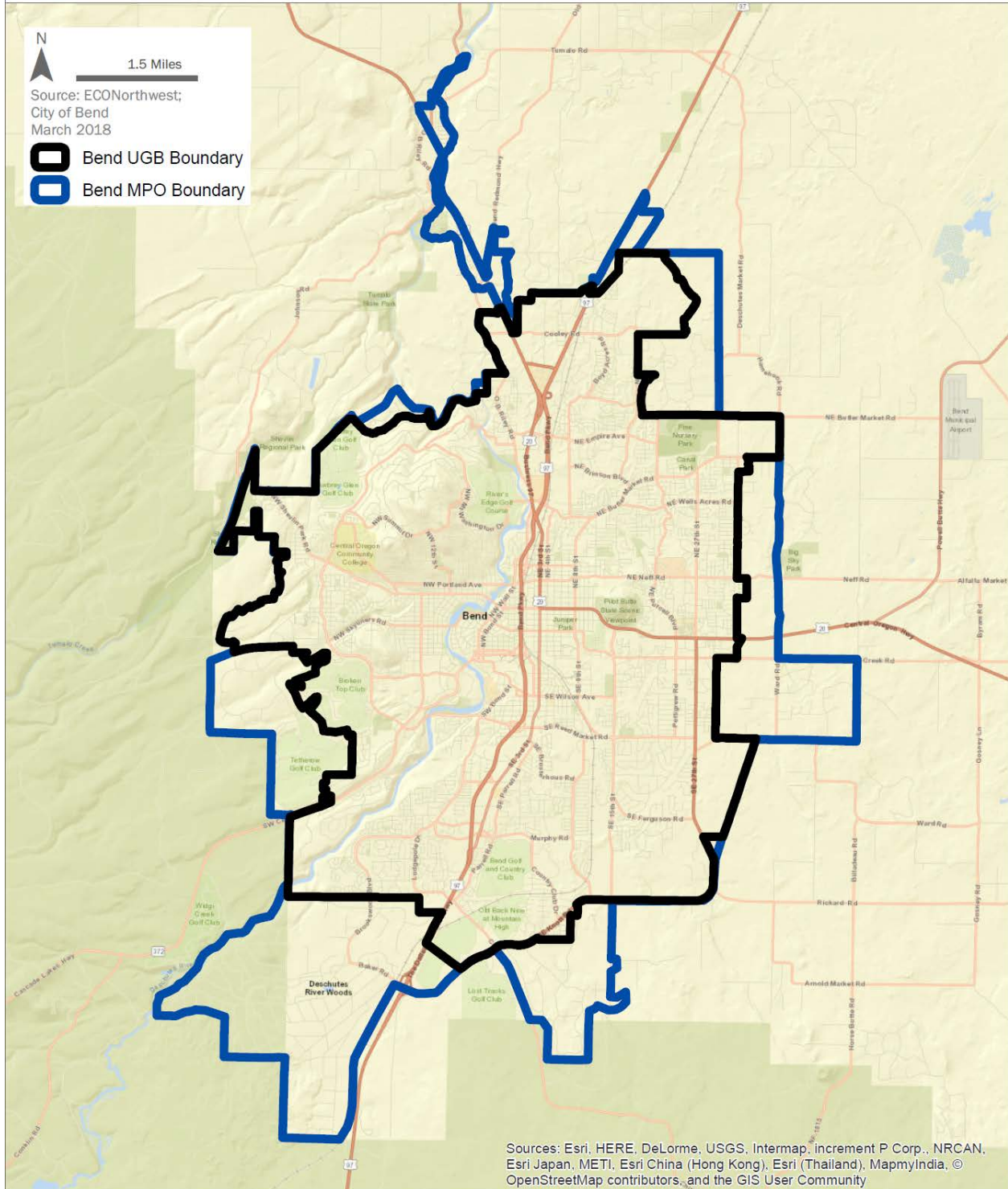
The bulk of people and freight using the transportation system are traveling on roads in cars or trucks. In addition, many walkways and bicycle facilities are part of the roadway system. The roadway system in the United States, and in the Bend MPO, is primarily owned and operated by the public sector. While the system of freeways, highways, and streets function as a single system, it is the shared responsibility of federal, state, and local governments to build and maintain this system.

Road systems in urban areas are extensive and cross many jurisdictions. Efficiently building and maintaining such a complex system requires planning to coordinate the investments of multiple jurisdictions. Large urban areas (such as Bend) are required by federal and Oregon law to coordinate plans for transportation improvements at a regional level, through a metropolitan transportation planning organization. The regional (or metropolitan) transportation plan serves this function by considering long-run transportation needs at a regional level and identifying policies, programs, and projects to meet these needs. The Bend area is considered a large urban area for these transportation planning purposes, and the Bend MPO is the regional transportation planning organization for the Bend area. The plans of local jurisdictions responsible for the transportation system in the Bend MPO must be consistent with the policies, programs, and projects identified in the MTP.

While measures in a metropolitan transportation plan can include policies, strategies, and programs, the primary focus of the plan is on capital investments to improve existing roadways, construct new roadways, and improve transit service. A key requirement for regional transportation plans is that they be fiscally constrained—the cost of actions identified in the MTP cannot exceed the level of funding considered reasonably available in the region. In addition, projects must be in the metro to be eligible for most federal and state funding programs. ODOT, Deschutes County, and Bend each prepare short-term capital improvement plans that identify projects that will be funded in the near future, generally the next three to five years. Projects built and operated by jurisdictions in the Bend MPO area must be consistent with the MTP in order to be eligible for federal funding.

Figure 1. Bend Metropolitan Planning Organization Boundary (MTP) and Bend Urban Growth Boundary (TSP)

Bend MPO and UGB Boundary



The cost of all projects in a region that could contribute to system improvements almost always exceeds the financial resources considered reasonably available to pay for the projects. For these reasons, the biggest and defining task of a metropolitan transportation plan is to select and prioritize projects within the constraint of available funding. A metropolitan transportation plan also describes projects beyond those that fall within whatever definition of fiscal constraint that a region ultimately chooses. These projects are considered illustrative: they could be included in the fiscally constrained set of projects if new funding sources are found. Moreover, even if they are not part of the fiscally-constrained set of projects, they are potentially part of a longer-run transportation plan, and give local governments some ability to conduct certain planning studies that might be necessary given the long time it takes for project development.

Bend MTP funding priorities and strategies

The MTP prioritizes transportation projects over a 25-year period (2015-2040) for the MPO boundary and establishes how and when to fund them. Projects that fall beyond fiscal constraint can still be listed, but only as “illustrative projects” to be funded only if additional, new revenues can be found and earmarked.

The funding plan for the current MTP is organized by entity, as specific jurisdictions have responsibility for funding different components of the regional transportation system. For example, the City of Bend, who owns most of the roadways within the MPO boundary, is expected to fund the operations, maintenance, and administration of those roads. The City of Bend also typically funds capital expenses for non-state facilities within the Urban Growth Boundary.

Another funding entity delineated in the MTP is the Oregon Department of Transportation (ODOT), which builds, maintains, and operates state highways in the region, including highways routed over the city street system, has responsibility over highway projects, including capital projects as well as related operations, maintenance, and administration. In 2015, total funds allocated for both the former and latter was about \$1 million. The MTP forecasted that, by 2040, and in constant 2015 dollars, total highway funds for the region are expected to be \$844,000 indicating that funds will not keep up with inflation. Sources of revenue come from a share of the State Highway Fund and other Federal Highway funds.

Deschutes County is responsible for building and maintaining part of the roadway network (approximately 58 miles of arterials, collectors, local roads, and forest highways). When Deschutes County’s capital projects are relevant to the Bend MPO, they will be included in the MTP. The current MTP does not include any projects or funding from Deschutes County because the County CIP did not include any projects that fall within the Bend MPO.

Finally, Cascades East Transit (CET) possess responsibility over the public transportation system. The MTP acknowledges the forecasted funding and expenditures for CET up to 2014 and notes when there is an expected gap. However, the MPO is not responsible for long-term transit budgeting.

Figure 2 shows that the 2014 Bend MTP identified nearly \$188 million in total resources for MTP projects over the 2015-2040 period. Figure 2 shows both the source and the allocation of these funds. The majority of financial resources (about \$155 million) were identified as coming from the City of Bend. The remainder (about \$33 million) were identified as coming from ODOT. Deschutes County was not identified as a funding source due to the relatively low amount of funds available and a degree of uncertainty about what these funds would be used for. Of the total revenue, about \$188 million was available for projects in the MTP. This is about \$7.5

million annually. About 83% of MTP revenues were allocated for roadway projects, with 8% for bike-pedestrian projects (often referred to as “bike-ped” projects), 6% for ITS (Intelligent Transportation Systems), and 2% for safety projects.

Figure 2. Bend MPO 2015-2040 Revenue Allocation by Project Type

MTP Projects	City of Bend	ODOT	Total
ITS	\$ 5,000,000	\$ 7,000,000	\$ 12,000,000
Safety	\$ 3,000,000	\$ 1,000,000	\$ 4,000,000
Stand-Alone Bike/Ped	\$ 15,000,000	\$ -	\$ 15,000,000
Roadway	\$ 131,969,746	\$ 24,593,012	\$ 156,562,758
Subtotal	\$ 154,969,746	\$ 32,593,012	\$ 187,562,758

Note: Figure 2 shows funding from all federal, state, and local sources allocated to the BMPO; ITS = Intelligent Transportation Systems; “Roadway” projects are built to complete streets standards and include bike/ped facilities where applicable

City of Bend and ODOT funding shown in Figure 2 comes from a range of sources. Bend Metropolitan Planning Organization outlined the key funding sources in their 2014 MTP.

- **State Highway Fund (SHF)** is composed of several major funding sources: Motor Vehicle Registration and Title Fees, Driver License Fees, Motor Vehicle Fuel Taxes, and Weight-Mile Tax. The SHF funds are apportioned to three jurisdiction levels in the following amounts: State (50%), Counties (30%), and Cities (20%).
- **Statewide Transportation Improvement Program (STIP)** is Oregon’s four-year transportation capital improvement program. This program defines which projects will be funded by what amount of money throughout the planned four-year program period. Projects at all jurisdiction levels are included in the program; Federal, state, county, and city. Sources of funding for the STIP are the same as the State Highway Fund.
- **Surface Transportation Block Grant Program (STP)** is a major federal transportation program to provide “flexible” funds for transportation projects at the state and local levels. Funds are “flexible” in that they can be spent on a variety of transportation related projects, e.g., mass transit, bike-ped. The bulk of federal funding comes from fuel taxes.
- **System Development Charges (SDC)** are fees collected when new development occurs within the City of Bend. These fees are then used to partially fund capital improvements, such as new streets within the city.

A broad array of other city funding sources are described and forecast in the MTP. Those sources are also described in the TSP and are discussed in more detail in the support materials on funding sources.

Bend TSP

The City of Bend is responsible for maintenance and capital improvements for the transportation system under the City’s jurisdiction. The TSP provides guidance on priorities, projects, and funding, and the City puts these into action through a Capital Improvement Program (CIP) process. The Bend CIP represents a five-year planning forecast of prioritized transportation system improvements. This document is updated annually and approved by City Council. Resulting funding priorities are incorporated in the City’s Budget. The CIP addresses transportation elements that include construction and modernization needs of roads, sidewalks and bike lanes. Many of the planned improvements focus on improving connectivity or making bicycle, pedestrian, and safety improvements.

Bend TSP Funding Plan

Bend's TSP prioritized transportation projects over a 20-year period and articulates how and when to fund them. Project prioritization considers City Council priorities, directives laid out in the City's Capital Improvements Program (CIP) and the Transportation Implementation Plan (TIP), and the TSP itself. For more context, the TIP is a document which provides City staff with policy direction and design guidance to implement the goals of Bend's General Plan and their TSP.

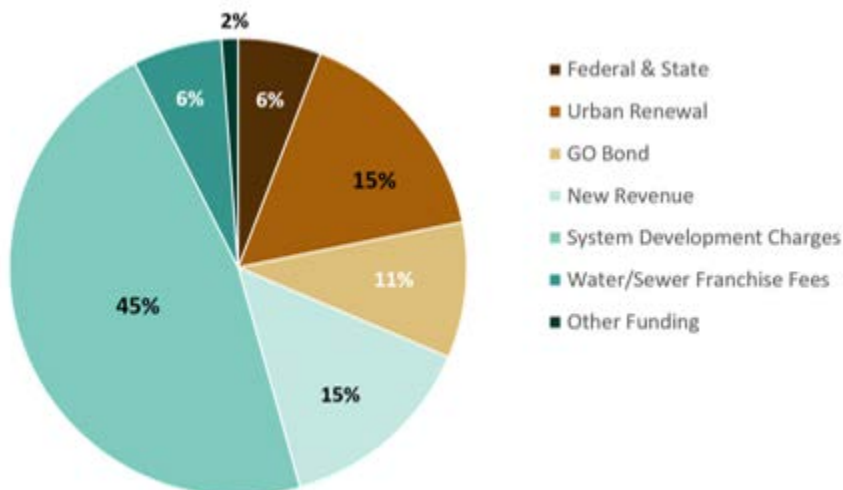
Ultimately, seven policies and three benchmarks/guidelines direct the funding plan. They encapsulate standard budgeting principles, such as encouraging transparency and public involvement, and reinforce the need to continuously seek new funding opportunities. Policies also require that the five-year transportation CIP be developed and updated annually to ensure "a balanced transportation system" and that the City and Council use the 2001 adopted Transportation Implementation Plan (TIP) to guide the development of projects outlined in the CIP.

Because all 20-year priorities cannot be funded at once, projects are classified into near-term projects (1-10 years), mid-term projects (11-20 years), and far-term projects (beyond 20-years). Near term project priorities are classified further into two- and five-year priorities in the CIP.

The funding plan forecasts funding capacity and need and matches those to transportation system priorities over the 20-year period. The identified 20-year needs in the 2012 TSP were \$213 million (excluding an additional \$60 million forecasted for urban renewal districts) while the funding growth forecast was between \$193 million to \$233 million, contingent on the estimated rate of growth (slow versus strong).

Specific revenue sources fund prioritized transportation system projects. Figure 3 shows projected funding sources in the 2012 plan. The chart shows that the majority of funding (45%, when including urban renewal in the total) was projected to come from system development charges. The next two largest sources were urban renewal (15%) and "new revenue" (15%).

Figure 3. Allocation of transportation system funding sources, 2012



Below are additional details about each of the funding sources identified in Figure 3:

- **Federal and State** programs include Surface Transportation Program (STP) funds, Moving Ahead for Progress in the 21st Century (MAP-21) funds, and a number of grants such as:
 - The Oregon Transportation Investment Act (OTIA) I and II
 - The Oregon Jobs and Transportation Act (JTA)
 - Connect Oregon
 - The Oregon Statewide Transportation Improvement Program (STIP)
 - Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants
 - The American Recovery and Reinvestment Act of 2009 (ARRA)
- **Urban Renewal** districts in Bend include 1) The Juniper Ridge Urban Renewal Plan, and 2) The Murphy Crossing Urban Renewal Plan. Governed by ORS 457, they provide the authority to use tax increment financing to finance improvement projects.
- **Bend's General Obligation (GO) Bond**, passed by the voters in 2011, approved \$30 million in spending for transportation capital improvements. Bond revenue is generated by increasing property taxes over the life of the bond. Payments for this debt will complete in 2032.
- **New Revenue** in the TSP included four potential funding sources: local fuel tax, transportation utility fee, local option levy, and local vehicle registration fee.
- **System Development Charges (SDC)** fund growth related capital improvements projects. Charges are assessed on new developments through a methodology consistent with Oregon Revised Statutes. The Transportation SDC methodology was last adopted by City Council in September 2011 and is proposed to be updated in the next few years.
- **Water/Sewer Franchise Fees**, implemented in 2006, are currently a 3% charge on revenue generated by water and sewer franchises. The primary purpose of franchise fees is to maintain the right of way (roadways) used by the water and sewer utilities to provide their services, by funding the transportation capital improvements. Bend has allocated its water and sewer franchise fees to street maintenance, transportation capital improvements, and "accessibility" capital projects (curb ramps and sidewalk improvements to comply with the Americans with Disabilities Act). In an effort to increase funding for transportation improvements, water/sewer franchise fees are projected to increase to 4% on July 1, 2018.
- **Other Funding** included franchise fees from garbage and other utility providers, general fund allocations, Local Improvement Districts, developer contributions, public-private partnerships, and issuance of long term debt.

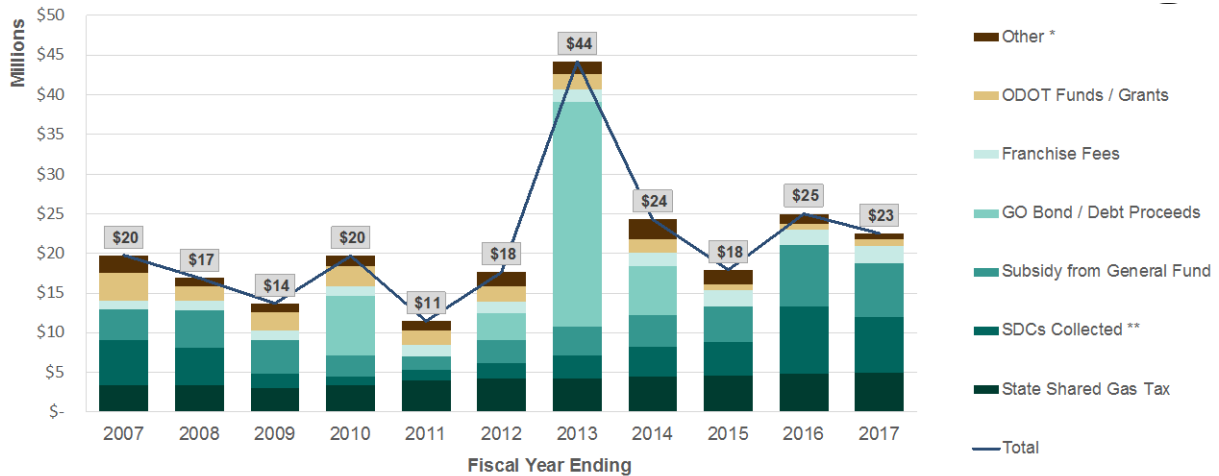
Experience with Existing TSP

How did the past TSP funding plan compare with actual funding sources? In general, the plan assumed higher funding levels, and a different distribution of funding, than Bend has recently experienced. In addition, the new revenue sources assumed in the plan did not materialize; this means that 15% of the sources in the funding plan were not realized. The City did pursue these options but it was unable to secure them. For example, a public vote came out against the local fuel tax in 2016. Local option levies, in general, struggle to gain public support; residents of many cities are often unenthusiastic about paying additional monthly fees in order to support maintenance-related costs. Finally, the City began to explore Transportation Utility Fees (TUF) just before the recession hit, and it determined that the economic climate was not suitable for a

new fee. After the economy recovered, the City was able to pass a General Obligation Bond as a major new source of transportation revenue; this made the timing unsuitable for an additional public fee.

Figure 4 shows transportation revenue sources for the 11-year period from 2007-2017. The results show the sources of City transportation funding, including a substantial influx of bond revenue in fiscal year 2013. The chart also illustrates just how highly variable these funding sources are, particularly transportation SDCs, and how greatly economic cycles can impact them. These funding variations are part of what makes long-term transportation planning so difficult.

Figure 4. Bend transportation revenue sources, 2007 to 2017



* Other category includes Developer Contributions, Sale of Assets, Interfund Transfers, Investment Income and other Miscellaneous revenue
 ** 10-Year SDCs collected was \$43.1M, of which \$30.6M or 71% could be used on eligible projects

For more information about the City of Bend’s historic transportation funding sources and levels, please see the presentation from CTAC meeting #2 held on April 10, 2018. This material is available on the CTAC website.

IV. Where’s the money?

Sources of Transportation Funding

The Transportation Funding Sources memo (available on the CTAC website) provides a comprehensive description of transportation funding sources. In summary, those sources are listed in Figure 5. The supporting documentation for this meeting provides a more detailed description of each of these sources.

Figure 5. Bend MTP and TSP Funding Sources

Funding Source	MTIP	TSP	Both
Federal			
ARRA One time Recovery Act – all funds already obligated		X	
Bend Metropolitan Planning Organization (BMPO) STBG funds	X		
Community Development Block Grants (CDBG)	X		

Funding Source	MTIP	TSP	Both
Emergency Relief program (ER)	X		
Federal Lands Access Program (FLAP)	X		
FTA Section 5303	X		
FTA Section 5307	X		
FTA Section 5309	X		
FTA Section 5310	X		
FTA Section 5311	X		
Highway Safety Improvement Program (HSIP)	X		
Metropolitan Planning	X		
Moving Ahead for Progress in the 21st Century – now the FAST Act		X	
National Highway Performance Program (NHPP) funds	X		
Secure Rural Schools and Community Self-Determination Act	X		
Statewide Planning and Research (SPR)	X		
Statewide Transportation Improvement Program (STIP)		X	
Surface Transportation Block Grant program (STBG)	X		
Surface transportation program (STP) funds (this is now STBG funds-changed named in FAST Act)		X	
TIGER Y		X	
Transportation Alternatives Program (TAP) N/A anymore, part of STBG	X		
State			
Connect Oregon (temp closed as funds pre-specified by HB 2017)		X	
Gas tax revenue	X		
Immediate Opportunity Fund (IOF)	X		
JTA (Closed, last bonds issued June 2017)		X	
Oregon Highway Fund	X		
OTIA (Closed, last bonds issued in OTIA III)		X	
Special Public Works Fund (SPWF)	X		
Special transportation fund (STF)	X		
Traffic control projects	X		
Local			
Cascade East Transit	X		
City of Bend	X		
Deschutes County	X		
Developer contributions/ Developer extractions		X	
Fairbox revenue	X		
Franchise fees			X

Funding Source	MTIP	TSP	Both
General fund allocation		X	
General obligation bonds			X
Local parking fees	X		
Local vehicle registration fee			X
Potential new sources (still TSP)		X	
Property taxes / Local option levy	X		
Public-private partnerships			X
Revenue bonds	X		
Special assessments/Local Improvement Districts (LIDS)			X
Special road districts	X		
Street utility fees	X		
Transient Room Tax (TRT)	X		
Transportation system development charges			X
Transportation system development charges		X	
Urban renewal funding			X

Evaluating Transportation Funding Sources

Evaluating funding sources includes an assessment of how funding policies affect different populations. In economic terms, the goal of government policy is to increase the economic and social well-being of the residents it serves. Ideally, policy makers and the public they represent would like to know how alternative investments perform relative to one another. They want to know what they get (benefits) for what they give up (costs). Adding benefits (positives) to costs (negatives) yields, in theory, a measure of net benefits. In broad terms, decision makers should be choosing among public investments with the highest net benefits.

A decision to change public policy or to make a public investment is a decision to try to change the future—an assumption of change is implicit in all such decisions. Thus, good evaluation requires a comparison of a proposed policy’s benefits and costs to whatever the benefits and costs would otherwise be without the policy. That “different future” is often referred to as the “base-case,” “trend,” or “status-quo” scenario or alternative. The base case represents how the world relevant to the policy decision is expected to look if policy does not change.

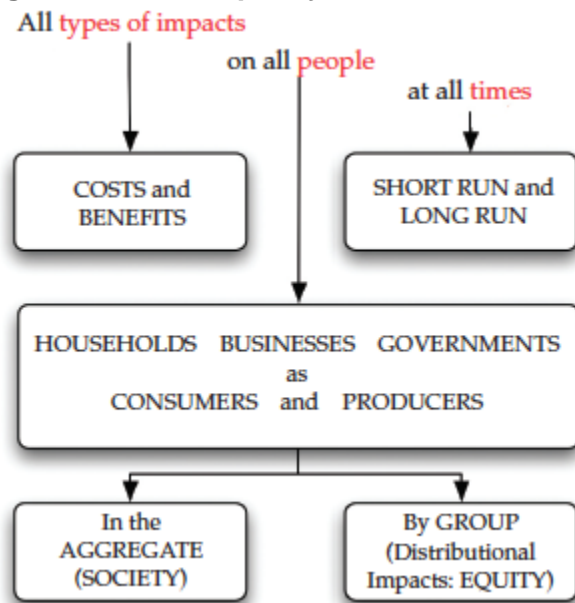
Figure 6 illustrates the challenge for policy evaluation: to measure all types of relevant impacts on all people at all times. The literature of policy evaluation and benefit-cost analysis sometimes refers to this goal as full-cost evaluation—usually synonymous with a framework that attempts to identify and quantify all impacts.

Figure 6 appears simple, but each of its boxes contains a lot complexity. Consider that there are:

- Potentially dozens of categories of impacts, many with multiple measures of impacts;
- Thousands of people, thousands of businesses, and scores of jurisdictions and interest groups in a metropolitan area, with overlapping affiliations; and

- Changes to both impacts and affected people that occur over time. At the most basic level, communities choose to incur costs now (e.g., to build transportation projects) because they expect an acceptable return from future benefits.

Figure 6. Goals of policy evaluation: what, who, and when



Source: The Land Use and Transportation Connection, APA Press, Terry Moore et al, (ECONorthwest)

This raises key procedural questions about how to evaluate transportation funding sources, and how to weigh those sources. We conducted a literature review focused on two questions:

1. What criteria have been used to evaluate transportation funding?
2. Are there examples of a matrix that has been used to evaluate transportation funding sources?

A core set of criteria are commonly identified in the literature:¹

- **Financial Effectiveness:** The ability of a finance program to generate the needed revenue is a key measure of its attractiveness.
 - Yield: Different revenue mechanisms will produce different yields. For instance, per capita membership fees are unlikely to produce adequate funding to support capital projects, although they may be quite sufficient for bolster an MPO's staffing capability.
 - Stability: A stable stream of revenue, or a flow of funds that remains relatively constant over time, is important if transportation agencies are to plan for, schedule, and execute transportation improvements in an efficient manner.
 - Growth Potential: The value of a revenue stream's potential for growth over time.

¹ Institute of Transportation Studies, Berkeley California (2005). Metropolitan-Level Transportation Funding Sources. http://www.narc.org/uploads/File/Transportation/Library/NCHRP_Metro_Funding.pdf "Legality" has been added as an additional essential factor.

- **Transportation Efficiency:** Revenue sources for transportation ought where possible to be structured in ways that encourage efficient use of the transportation system.
- **Fiscal Efficiency:** When taxes, fees, and charges employed in public finance are easy to collect, simple to understand, inexpensive to administer, and resistant to fraud, they are said to be fiscally efficient (Adams et al. 2002). This is sometimes called Administrative Ease.
- **Equity:** Equity in transportation finance addresses how transportation's costs and benefits are distributed, as well as how transportation related taxes, fees, and charges impact low-income versus high-income people. Cost-based determinations of equity suggest that users who impose the greatest cost on the transportation system should also pay the most.
- **Political Acceptability:** Plays a critical role in decisions about whether or not to use it, and politicians are unlikely to support fees or charges that are strongly opposed by the public. Political acceptability may be especially important in attempts to create new regional sources of transportation revenue
- **Legality:** If enabling legislation does not exist at the state or federal level, then funding sources face a much higher hurdle. As a result, most plans focus on funding sources that can be approved by local government under existing state or federal legislation.

Public policy nearly always has multiple goals, objectives, and, therefore, criteria. An implication is that public policy is trying to *optimize*, not maximize. Technically, one can only maximize a single criterion. Hence, goals like “minimize environmental impacts” are, practically and technically, an impossibility in the real world: pollution can be reduced from what it might have been in the absence of some policy choice or perhaps even reduced in an absolute sense, but it cannot be minimized in any scenario that keeps the economy and government running about like they do now. The evaluation of any region's transportation alternatives is unavoidably in the world of multi-criterion (multi-impact) analysis.

Because there are multiple criteria, one cannot avoid the issue of weighting: what is the relative importance of each measure/evaluation criterion? If no weights are specified, criteria implicitly get weighted equally. Social scientists have been working on developing a method for estimating the relative values of different objectives for decades without finding an ultimate solution. They never will. Among the difficulties:

- A city or region may consist of tens or hundreds of thousands of people, all of whom have slightly different values, preferences, and circumstances, and many will be affected somewhat differently by a change in policy.
- Regional economies, ecosystems, and public policies are complex and interrelated; many effects occur only over a long period; and outside market, social, and natural forces affect those systems. Thus, the net impact of a policy change on all significant aspects of those systems is impossible to predict.

Even if one could somehow add all the different types of impacts for all individuals to get some estimate of the total net impact, and even if that impact were positive, policy makers might still decide that negative impacts on some people are too great to justify the total net benefits to society as a whole.

Besides weighting, there are several ways to visualize and compare multiple aspects of different funding sources. Below are three examples. Figure 7 simply describes advantages and disadvantages of a variety of funding sources. Figure 8 depicts the results of multiple criteria. Figure 9 is highly visual and intuitively shows the magnitude and implications of sources.

The purpose of these examples is to give the FWG a view towards how funding sources can be compared and evaluated against one another. For the second FWG meeting, the staff and consultant team will prepare information about a variety of potential new and enhanced funding sources. In order to ensure that we present this information in the most effective way, we need input from the FWG as to which criteria are most important, whether any important criteria are missing, and whether the FWG has initial reactions and thoughts as to how they may be interested in comparing funding sources.

Figure 7. Funding matrix with advantage and disadvantage descriptions²

Name	Description	Advantages	Disadvantages
1. Fare increases	Increase fares or change fare structure to increase revenues.	Widely applied. Is a user fee (considered equitable).	Discourages transit use. Is regressive.
2. Discounted bulk passes	Discounted passes sold to groups based on their ridership.	Increases revenue and transit ridership.	Increases transit service costs and so may provide little net revenue.
3. Property taxes	Increase local property taxes.	Widely applied. Distributes burden widely. Produces significant revenue.	Supports no other objectives. Is considered regressive.
4. Sales taxes	A special local sales tax	Distributes burden widely, including to non-residents. Significant revenue.	Supports no other objectives. Is regressive.
5. Tourist services taxes	Taxes on tourist services such as hotel rooms and vehicle rentals.	Primarily borne by non-residents. Is already collected.	If excessive, may reduce tourism.
6. Sin taxes	Taxes on goods such as liquor, cigarettes and gambling.	Incentivizes healthy behaviors.	These taxes are already high, and increases may harm local businesses.
7. Gas/fuel taxes	Obtain a dedicated portion of state fuel taxes, or use and potentially increase the local option fuel taxes.	Widely applied. Reduces vehicle traffic and fuel use.	Is considered regressive. Becomes less stable as fuel efficiency increases.
8. Vehicle fees, wheel levy	An additional fee for vehicles registered in the region.	Applied in some jurisdictions. Charges motorists for costs.	Is considered regressive.
9. Utility levy	A levy to all utility accounts in the region.	Easy to apply. Distributes burden widely.	Is small, regressive and support no other objectives.
10. Employee levy	A levy on each employee within a designated area or jurisdiction.	Charges for commuters.	Requires administration. May encourage sprawl and discourage job creation.
11. Road tolls	Tolls on some roads or bridges.	Reduces traffic congestion.	Costly to implement. Can encourage sprawl if only applied in city centers. Currently illegal on current roads.
12. Vehicle-mile tax	A distance-based fee on vehicles registered in the region.	Reduces vehicle traffic.	Costly to implement.
13. Parking taxes	Special tax on commercial parking transactions.	Is applied in other cities.	Discourages parking pricing and downtown development.
14. Parking levy	A special property tax on parking spaces throughout the region.	Large potential. Distributes burden widely. Encourages compact development.	Costly to implement. Opposed by suburban property owners.
15. Expanded parking pricing	Increase when and where public parking facilities (e.g. on-street parking) are priced.	Moderate to large potential. Distributes burden widely. Reduces parking & traffic problems.	Requires parking meters and enforcement, and imposes transaction costs.
16. Development impact fees	A fee on new development to help finance infrastructure, including transit.	Charges beneficiaries.	Limited potential.
17. Land value capture	Special taxes on property that benefit from the transit service.	Large potential. Charges beneficiaries.	May be costly to implement. May discourage TOD.
18. Station rents	Collect revenues from public-private development at stations.	Charges beneficiaries.	Limited potential.
19. Station air rights	Sell rights to build over stations.	Charges beneficiaries.	Limited potential.
20. Advertising	Additional vehicle & station advertising	Already used.	Limited potential. May be unattractive.

This table summarizes potential funding options identified in this study.

² Source: Litman, Todd (2016). Evaluating Middle Tennessee Region Public Transportation Funding Sources. Victoria Transport Policy Institute. <http://thetransitalliance.org/wp-content/uploads/2016/10/Evaluating-Middle-Tennessee-Region-Public-Transportation-Funding-Sources.pdf>

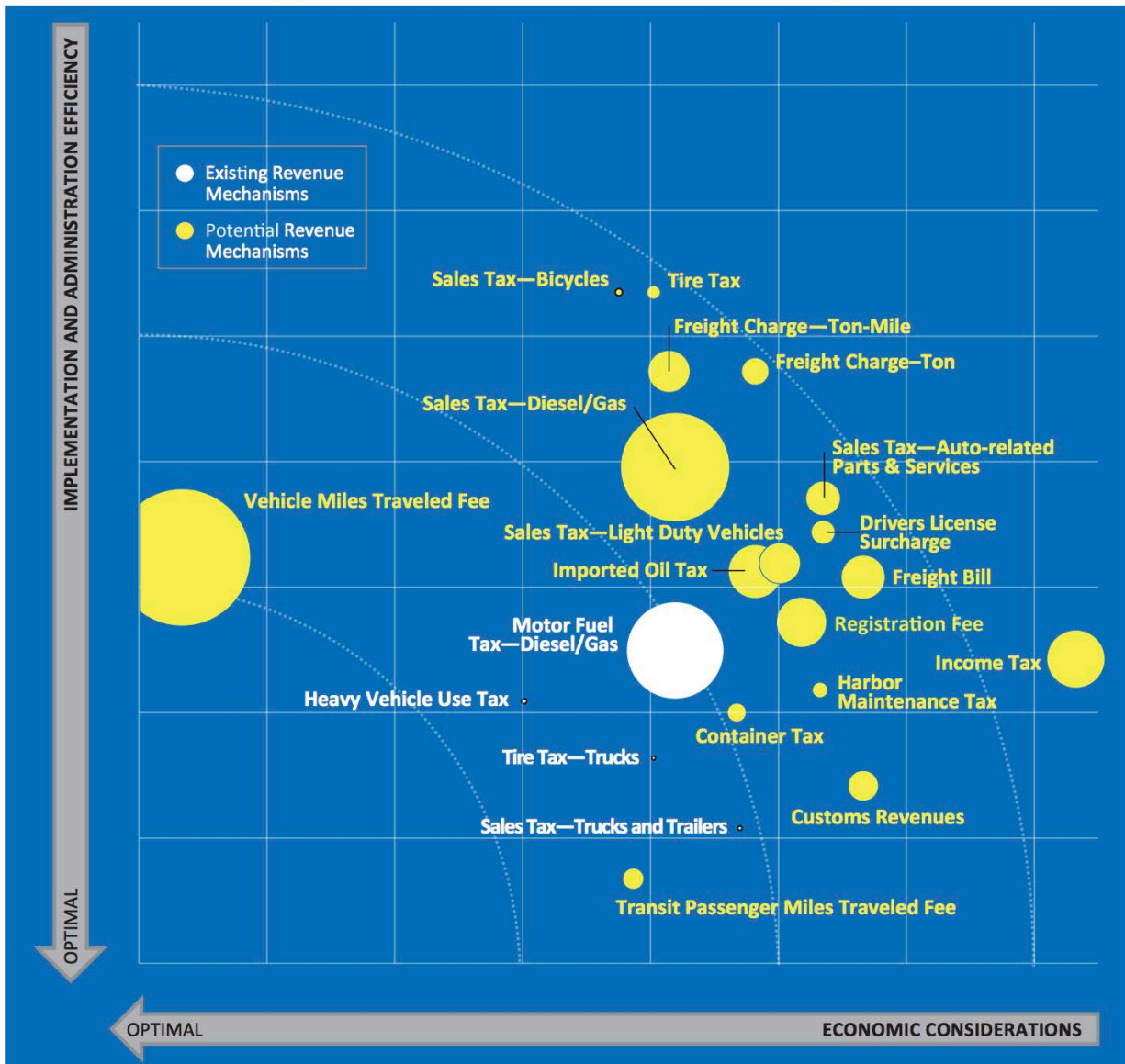
Figure 8. Funding matrix with several criteria³

Revenue Source	Revenue Criterion					
	Financial Effectiveness		Transportation Efficiency	Fiscal Efficiency	Equity	Political Acceptability
	Stability	Growth Potential				
Direct User Fees						
Fuel tax on motor & diesel fuels	++	-	+	++	-	±
Sales tax on motor & diesel fuels	++	+	+	++	-	±
Aviation fuels tax	+	++	--	++	++	±
Flat tolls (facility-based)	++	++	+	+	+	±
Variable tolls						
Area-based tolls	++	++	++	++	±	±
Time-based tolls	+	++	++	++	±	±
Congestion-based tolls	+	++	++	++	±	±
Emissions fees	+	+	++	--	--	-
Annual VMT fees	+	++	+	--	-	--
Non-User Fees						
Vehicle sales tax	+	++	-	++	-	+
Vehicle license/registration fees	+	++	-	++	--	+
Sales tax	+	++	--	++	--	+
Property tax	+	++	-	++	+	±
Commercial development tax	+	++	+	++	+	±
Residential development tax	+	++	+	++	+	±
Per-capita tax from MPO members	+	+	--	+	±	+

³ Source: Institute of Transportation Studies, Berkeley California (2005). Metropolitan-Level Transportation Funding Sources.

http://www.narc.org/uploads/File/Transportation/Library/NCHRP_Metro_Funding.pdf

Figure 9. Visual funding matrix⁴



Again, these examples are not necessarily exhaustive or ideal; rather, they are included as examples of the different ways that funding criteria can be considered, so that the FWG has an idea of the ways in which funding criteria can be evaluated other than through a weighted scoring. Future FWG memos and meetings will include more detailed discussion about funding criteria.

⁴ American Association of State Highway and Transportation Officials (2014). Matrix of Illustrative Surface Transportation Revenue Options. <http://downloads.transportation.org/TranspoRevenueMatrix2014.pdf>