Chapter 19: Financial Analysis

Introduction

The Bend Metropolitan Planning Organization (BMPO) 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, and serves as a framework for more detailed project planning.

The rules of the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) require the MTP to be “fiscally constrained,” meaning that the cost of projects included in the MTP cannot exceed the capacity of the region to fund the projects. This chapter estimates the level of transportation-related funding that jurisdictions in the Bend MPO can reasonably expect to have available over the planning period. This report provides a basis for making decisions about the amount of revenue available over the next 25 years to fund regional transportation improvements.

The purpose of this chapter is to provide the financial context for the discussion and evaluation of projects. This chapter presents an analysis of funding resources that the BMPO can reasonably expect to fund the projects in the Plan and to support operations and maintenance of the transportation system. This report summarizes research on reasonably available funding resources, and compares those resources to estimated project costs, to help generate the fiscally constrained project list.

This chapter focuses on estimating revenues that will be available over the next 25 years for transportation improvements in the region. Other parts of the plan discuss potential projects, their benefits, and their costs. A subsequent and critical step in the planning process is the comparison of the revenue estimates in this report to project performance measures and costs in other reports to decide on the best package of transportation improvements that can be assembled within the agreed upon revenue constraints.

This MTP addresses only the regional transportation system. Regional facilities include all state transportation facilities, major arterials and minor arterials, and some major collectors. Local facilities (the remainder of the collector system and local roads) are not addressed in the plan.

Framework

Context

Legislative framework

The bulk of people and freight using the transportation system are traveling on roads in cars, trucks, and buses. In addition, many walkways and bicycle facilities are part of the roadway system. The roadway system in the United States 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 joint 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 are required by federal and Oregon law to coordinate plans for transportation improvements at a regional level. 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 plans of local jurisdictions responsible for the transportation system in the Bend metropolitan area must be consistent with the policies, programs, and projects identified in the MTP.

While measures in an MTP can include policies, strategies, and programs, the focus of an MTP is usually 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 MTP to be eligible for most federal and state funding programs. ODOT, Deschutes County, the City of Bend, and Cascades East Transit (CET) 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 BMPO area must be consistent with the MTP in order to be eligible for federal funding.

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.

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.

To organize this review of available transportation funding in the Bend metropolitan area, the chapter focuses on the sources of public funding for transportation and how those funds are spent.

There is a distinction between the terms "funding" and "financing," which often get used interchangeably. Providing transportation facilities and services costs money, and somebody has to pay for these costs. The ultimate source of revenue for these costs is funding. 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 as households and businesses—to reduce the current out-of-pocket costs by spreading out payments over time.

Definitions

Revenue sources:

- **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 (59%), Counties (25%), and Cities (16%).
- **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.
- **Surface Transportation 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.
- **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.

Other key terms and acronyms:

- **Peak Hour Trips (PHTs)** are those trips made during the busiest hour within the morning and evening peak traffic flow periods. In this report PHTs are used to forecast SDC revenue arising from future, new development.

- **Fiscal Year End (FYE)** denotes the completion of a one-year, or 12-month, accounting period. For example, FYE 2015 refers to the 2014-15 fiscal year, ending June 30, 2015.
- **Year of Expenditure (YOE)** denotes that dollar values are reported as nominal values, which increase over time due to assumed inflation rates.
- **Constant 2015 $** denotes that dollar values are reported in constant terms based on FYE 2015 values. These values remain constant over time, and do not reflect changes in value due to inflation.

Methods

To complete this chapter, the following steps were followed:

- **Reviewed existing data and previous studies.** Primary documents reviewed included ODOT's *June 2010 Revenue Forecast* and the Bend Transportation System Plan. Also reviewed were:
  - City of Bend Adopted Biennial Budgets, 2013-2015 and 2011-2013
  - ODOT Fund Apportionments, Receipt Distribution for FY 2013-2014
  - City of Bend Transportation Operations Forecast, January 2014
  - ODOT Statewide Transportation Improvement Plan 2015-2018
  - Deschutes County, Oregon Proposed Budget Fiscal Year 2015
  - Deschutes County, Oregon Adopted Budget Fiscal Year 2013
  - Bend MPO Peak Hour Trip (PHT) Forecast, DKS Associates
- **Conferred with staff from relevant State and local agencies.** Discussions with staff from agencies that provide transportation services to gain insight into local transportation funding plans and policies.

Assumptions

We relied upon numerous assumptions to forecast future revenues and expenditures. Throughout this chapter, we identify the assumptions used in our analysis. However, there are a few key assumptions applied to numerous calculations throughout our analysis. Those assumptions are the future inflation rate, and the pace of future development, as measured by Peak Hour Trips (PHT). Exhibit 1 shows the assumed inflation rate of 3.1 percent, which is the same rate used by ODOT in their most recent long-range revenue forecast. Exhibit 2 shows the assumed phasing of new PHTs, based on projections from DKS Associates.

Exhibit 1. Assumed inflation index used in this analysis, FYE 2015 to 2040

FYE	Index
2015	1.0000
2016	1.0310
2017	1.0630
2018	1.0960
2019	1.1300
2020	1.1650
2021	1.2011
2022	1.2383
2023	1.2767
2024	1.3163
2025	1.3571
2026	1.3992
2027	1.4426
2028	1.4873
2029	1.5334
2030	1.5809
2031	1.6299
2032	1.6804
2033	1.7325
2034	1.7862
2035	1.8416
2036	1.8987
2037	1.9576
2038	2.0183
2039	2.0809
2040	2.1454

Source: ODOT Long-Range Revenue Tables 2013 v3.

Exhibit 2. Forecast growth in Peak Hour Trips, BMPO, FYE 2015 to 2040

FYE	PHT	Total PHT
2015	716	52,318
2016	726	53,044
2017	736	53,780
2018	746	54,526
2019	756	55,282
2020	767	56,049
2021	777	56,826
2022	788	57,614
2023	799	58,413
2024	810	59,223
2025	821	60,044
2026	833	60,877
2027	844	61,721
2028	856	62,577
2029	868	63,445
2030	880	64,325
2031	892	65,217
2032	904	66,121
2033	917	67,038
2034	930	67,968
2035	943	68,911
2036	956	89,867
2037	969	70,836
2038	982	71,818
2039	996	72,814
2040	1,011	73,825

Source: PHT forecast provided by DKS

Organization of this chapter

The remainder of this chapter describes future revenue forecasts. It is organized first by jurisdiction, including separate sections for the City of Bend, Oregon Department of Revenue, Deschutes County, and Cascades East Transit. Within each of those sections, we first describe revenues for operations, maintenance, and administration, and then describe revenues available for capital projects. All forecasts are shown in both Constant 2015 dollars as well as Year of Expenditure dollars.

Revenue forecasts

The revenue forecasts in this chapter are organized first by the entity receiving the revenue (City, County, ODOT, and CET), and then by the purpose of the revenue (operations and maintenance and administration versus capital projects). We provide recent historical data on these revenues, and then long-term forecasts.

City of Bend

The City of Bend owns and maintains the vast majority of the roadway network in the BMPO. Thus, the City of Bend has primary responsibility for funding transportation operations and maintenance and new capital projects in the BMPO. As such, the majority of our analysis focuses on these City of Bend revenue sources.

Operations and maintenance and administration

The City of Bend's budget is biennial; revenue amounts for the three most recent biennia are reported below in Exhibit 3. The City's total resources for transportation operations and maintenance have grown over this time period, exceeding $20 million in available funds in the 2013-15 biennium. Intergovernmental revenues (primarily allocations of State Highway Fund revenue) is the largest revenue source, accounting for more than half of all revenue. The City's general fund is the next largest source of revenue for transportation operations and maintenance and administration.

Exhibit 3. Historical transportation revenues for operations, maintenance and administration, City of Bend, Biennium 2009-11 to 2013-15 (YOE dollars)

	Actual 2009-11	Adjusted 2011-12	Adopted 2013-15
Resources			
Beginning Working Capital	$ 1,446,559	$ 2,203,600	$ 2,631,500
Franchise Fees	$ 952,026	$ 987,900	$ 1,016,500
Intergovernmental Revenues	$ 8,265,194	$ 9,819,300	$ 10,614,500
Charges For Services		$ 51,800	
General Fund Subsidy-Overlay	$ 2,235,00	$ 3,513,889	$ 4,600,000
General Fund Subsidy-Operations			$ 300,000
License and Permits	$ 53,052	$ 68,200	$ 215,400
Interfund Charges	$ 1,051,289	$ 2,071,100	$ 1,114,600
Interfund Transfers		$ 240,936	
Investment Income	$ 21,959	$ 23,900	$ 30,800
Miscellaneous	$ 160,724	$ 60,800	$ 47,100
Total Resources	*$ 14,185,803*	*$ 19,041,425*	*$ 20,570,400*

Sources:
City of Bend, Oregon 2013-2015 2013 Adopted Biennial Budget; Page 223
City of Bend, Oregon 2011-2013 Adopted Biennial Budget; Page 163

Exhibit 4 shows ODOT forecasts for total State Highway Fund (SHF) revenues. ODOT forecasts steady growth in total SHF revenue through 2040, but the rate of growth (1.3%) is equal to the anticipated rate of inflation, resulting in a static annual funding amount as measured in constant 2015 dollars. SHF revenues have several major sources: Motor Vehicle Registration and Title Fees, Driver License Fees, Motor Vehicle Fuel Taxes, and Weight-Mile Tax. Note that the forecast of SHF revenue is divided into two categories: “current law” reflects revenues from these sources according to the rates in place prior to 2014, and “additional” revenue reflects increases in certain State taxes and fees that began taking effect in FYE 2014.

Exhibit 4. Projected State Highway Fund revenues, State of Oregon, FYE 2015 to 2040 (millions)

FYE	YOE $			Constant 2015 $		
	"Current Law"	"Additional"	Total SHF Revenues	"Current Law"	"Additional"	Total SHF Revenues
2015	$ 1,073	$ 29	$ 1,103	$ 1,073	$ 29	$ 1,103
2016	$ 1,087	$ 50	$ 1,137	$ 1,055	$ 48	$ 1,103
2017	$ 1,101	$ 71	$ 1,172	$ 1,036	$ 67	$ 1,103
2018	$ 1,116	$ 93	$ 1,208	$ 1,018	$ 85	$ 1,103
2019	$ 1,130	$ 116	$ 1,246	$ 1,000	$ 102	$ 1,103
2020	$ 1,145	$ 140	$ 1,285	$ 983	$ 120	$ 1,103
2021	$ 1,160	$ 165	$ 1,324	$ 966	$ 137	$ 1,103
2022	$ 1,175	$ 191	$ 1,365	$ 949	$ 154	$ 1,103
2023	$ 1,190	$ 218	$ 1,408	$ 932	$ 170	$ 1,103
2024	$ 1,206	$ 246	$ 1,451	$ 916	$ 187	$ 1,103
2025	$ 1,221	$ 275	$ 1,496	$ 900	$ 203	$ 1,103
2026	$ 1,237	$ 306	$ 1,543	$ 884	$ 218	$ 1,103
2027	$ 1,253	$ 337	$ 1,591	$ 869	$ 234	$ 1,103
2028	$ 1,270	$ 370	$ 1,640	$ 854	$ 249	$ 1,103
2029	$ 1,286	$ 405	$ 1,691	$ 839	$ 264	$ 1,103
2030	$ 1,303	$ 440	$ 1,743	$ 824	$ 279	$ 1,103
2031	$ 1,320	$ 478	$ 1,797	$ 810	$ 293	$ 1,103
2032	$ 1,337	$ 516	$ 1,853	$ 796	$ 307	$ 1,103
2033	$ 1,354	$ 556	$ 1,910	$ 782	$ 321	$ 1,103
2034	$ 1,372	$ 598	$ 1,970	$ 768	$ 335	$ 1,103
2035	$ 1,390	$ 641	$ 2,031	$ 755	$ 348	$ 1,103
2036	$ 1,408	$ 686	$ 2,094	$ 741	$ 361	$ 1,103
2037	$ 1,426	$ 732	$ 2,159	$ 728	$ 374	$ 1,103
2038	$ 1,445	$ 781	$ 2,225	$ 716	$ 387	$ 1,103
2039	$ 1,463	$ 831	$ 2,294	$ 703	$ 399	$ 1,103
2040	$ 1,482	$ 883	$ 2,366	$ 691	$ 412	$ 1,103

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

SHF revenue is allocated to three jurisdiction levels: State, Counties, and Cities. Exhibit 5 reflects these allocations. Note that the "Additional" revenues allocate a higher share of SHF revenues to cities and counties than to the State, so that the amount of SHF revenue for cities and counties increases over time in constant 2015 dollars, while the State share of SHF revenue decreases.

Exhibit 5. Allocation of projected State Highway Fund revenues, State of Oregon, FYE 2015 to 2040 (millions)

	YOE $				Constant 2015 $			
FYE	State Share	County Share	City Share	Total	State Share	County Share	City Share	Total
2015	$ 653	$ 272	$ 177	$ 1,103	$ 653	$ 272	$ 177	$ 1,103
2016	$ 672	$ 281	$ 184	$ 1,137	$ 651	$ 273	$ 178	$ 1,103
2017	$ 691	$ 291	$ 190	$ 1,172	$ 650	$ 274	$ 179	$ 1,103
2018	$ 710	$ 301	$ 197	$ 1,208	$ 648	$ 275	$ 180	$ 1,103
2019	$ 730	$ 312	$ 204	$ 1,246	$ 646	$ 276	$ 180	$ 1,103
2020	$ 751	$ 323	$ 211	$ 1,284	$ 645	$ 277	$ 181	$ 1,103
2021	$ 772	$ 334	$ 218	$ 1,324	$ 643	$ 278	$ 182	$ 1,103
2022	$ 794	$ 345	$ 226	$ 1,365	$ 641	$ 279	$ 182	$ 1,103
2023	$ 817	$ 357	$ 234	$ 1,408	$ 640	$ 280	$ 183	$ 1,103
2024	$ 840	$ 369	$ 242	$ 1,451	$ 638	$ 281	$ 184	$ 1,103
2025	$ 864	$ 382	$ 250	$ 1,496	$ 637	$ 281	$ 184	$ 1,103
2026	$ 889	$ 395	$ 259	$ 1,543	$ 635	$ 282	$ 185	$ 1,103
2027	$ 914	$ 409	$ 268	$ 1,590	$ 634	$ 283	$ 186	$ 1,103
2028	$ 940	$ 422	$ 277	$ 1,640	$ 632	$ 284	$ 186	$ 1,103
2029	$ 967	$ 437	$ 286	$ 1,691	$ 631	$ 285	$ 187	$ 1,103
2030	$ 995	$ 452	$ 296	$ 1,743	$ 630	$ 286	$ 187	$ 1,103
2031	$ 1,024	$ 467	$ 306	$ 1,797	$ 628	$ 286	$ 188	$ 1,103
2032	$ 1,053	$ 483	$ 317	$ 1,853	$ 627	$ 287	$ 189	$ 1,103
2033	$ 1,084	$ 499	$ 328	$ 1,910	$ 626	$ 288	$ 189	$ 1,103
2034	$ 1,115	$ 516	$ 339	$ 1,969	$ 624	$ 289	$ 190	$ 1,103
2035	$ 1,147	$ 533	$ 350	$ 2,031	$ 623	$ 289	$ 190	$ 1,103
2036	$ 1,180	$ 551	$ 362	$ 2,093	$ 622	$ 290	$ 191	$ 1,103
2037	$ 1,215	$ 569	$ 374	$ 2,158	$ 620	$ 291	$ 191	$ 1,103
2038	$ 1,250	$ 588	$ 387	$ 2,225	$ 619	$ 292	$ 192	$ 1,103
2039	$ 1,286	$ 608	$ 400	$ 2,294	$ 618	$ 292	$ 192	$ 1,103
2040	$ 1,323	$ 628	$ 414	$ 2,365	$ 617	$ 293	$ 193	$ 1,103

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

Cities share of SHF revenue is allocated to individual cities based on population. In FYE 2014, the City of Bend received approximately 2.88% of the total cities share of SHF revenue. We assume Bend continues to receive this same percentage of the city share of SHF revenues through the 2040 forecast horizon. To the extent that the City of Bend's population growth outpaces the growth of other cities statewide, the City could receive an increasing share of SHF revenue. However, population estimates used for these allocations are taken from the decennial U.S. Census, which means that these population figures are updated only once per decade.

Exhibit 6 shows the projected allocation of SHF revenue to the City of Bend. Of the projected $177 million in SHF revenue allocated to Oregon cities in FYE 2015, the City of Bend is forecast to receive approximately $5.1 million. This is forecast to grow to nearly $11.9 million in 2040, but in constant 2015 dollars the City of Bend's allocation of SHF money is anticipated to experience very modest growth during this period.

Exhibit 6. Allocation of projected State Highway Fund revenues to the City of Bend, State of Oregon, FYE 2015 to 2040

FYE	Allocation to City of Bend	
	YOE $	Constant 2015 $
2015	$ 5,102,633	$ 5,102,633
2016	$ 5,283,153	$ 5,124,300
2017	$ 5,469,561	$ 5,145,401
2018	$ 5,662,041	$ 5,166,096
2019	$ 5,860,786	$ 5,186,536
2020	$ 6,065,994	$ 5,206,862
2021	$ 6,277,870	$ 5,226,767
2022	$ 6,496,623	$ 5,246,405
2023	$ 6,722,472	$ 5,265,506
2024	$ 6,955,639	$ 5,284,235
2025	$ 7,196,357	$ 5,302,746
2026	$ 7,444,864	$ 5,320,800
2027	$ 7,701,404	$ 5,338,558
2028	$ 7,966,232	$ 5,356,170
2029	$ 8,239,609	$ 5,373,424
2030	$ 8,521,804	$ 5,390,476
2031	$ 8,813,095	$ 5,407,138
2032	$ 9,113,768	$ 5,423,571
2033	$ 9,424,120	$ 5,439,608
2034	$ 9,744,454	$ 5,455,410
2035	$ 10,075,085	$ 5,470,832
2036	$ 10,416,336	$ 5,486,036
2037	$ 10,768,543	$ 5,500,890
2038	$ 11,132,048	$ 5,515,557
2039	$ 11,507,209	$ 5,529,919
2040	$ 11,894,390	$ 5,544,136

Source: Calculated by ECONorthwest based on the following sources:
ODOT Long-Range Revenue Tables 2013 v3
ODOT Fund Apportionments, Receipt Distribution for FY 2013-2014

In addition to SHF allocations, the City has additional revenue sources used for operations, maintenance, and administration of the transportation system. These revenue sources include an allocation from the City's general fund, and the City's franchise fees from garbage collection. The City provides a short-term (five-year) forecast of revenues and expenditures for transportation operations that is updated on an annual basis. The most recent update (January 2014) forecast general fund revenues to remain constant at $3,000,000 per year (YOE dollars). However, the City does not anticipate that this level of general fund subsidy will be sustainable long-term, and that this revenue stream should not be relied on beyond the short-term, five-year forecast period. Thus, our long-term forecast assumes no general fund revenue beyond FYE 2019.

The City does not have a current forecast of garbage franchise fee revenues for transportation. Conversations with the City's interim finance director indicated that this revenue amount is fairly flat over time, although modest growth (in YOE dollars) can be seen in Exhibit 3 over the past six years. Based on the historical budget data and input from the City's interim finance director, we have assumed that garbage franchise fee

revenues will experience growth equal to the rate of inflation, resulting in no change in funding levels as measured in constant 2015 dollars.

Other funding sources for operations, maintenance and administration include interfund charges and transfers, investment income, licenses and permits, charges for services and other miscellaneous sources. We forecast that these sources will increase over time based on the pace of new development (1.35% per year as measured by new PHTs), and the assumed rate of inflation (3.1% per year, as used in ODOT long-term revenue forecasts).

Exhibit 7 shows the forecast of City revenues for transportation operations, maintenance and administration in constant 2015 dollars. Total revenues are expected to decrease from $9.5 million per year in FYE 2015 to $7.3 million per year in FYE 2040. This decrease is due to the lack of general fund subsidy as a permanent funding source.

Exhibit 7. Projected annual revenue sources available for transportation operation and maintenance and administration, City of Bend, FYE 2015 to 2040 (Constant 2015 $)

FYE	Revenue for O & M and Administration				
	State Highway Fund	General Fund	Garbage Franchise Fees	Other	Total for O & M and Admin
2015	$ 5,102,633	$ 3,000,000	$ 508,250	$ 868,610	$ 9,479,493
2016	$ 5,124,300	$ 2,909,796	$ 508,250	$ 880,362	$ 9,422,708
2017	$ 5,145,401	$ 2,822,201	$ 508,250	$ 892,240	$ 9,368,092
2018	$ 5,166,096	$ 2,737,226	$ 508,250	$ 904,273	$ 9,315,845
2019	$ 5,186,536	$ 2,654,867	$ 508,250	$ 916,488	$ 9,266141
2020	$ 5,206,862	$ -	$ 508,250	$ 928,911	$ 6,644,023
2021	$ 5,226,767	$ -	$ 508,250	$ 941,490	$ 6,676,507
2022	$ 5,246,405	$ -	$ 508,250	$ 954,254	$ 6,708,909
2023	$ 5,265,506	$ -	$ 508,250	$ 967,755	$ 6,740,911
2024	$ 5,284,235	$ -	$ 508,250	$ 980,223	$ 6,772,708
2025	$ 5,302,746	$ -	$ 508,250	$ 993,489	$ 6,804,485
2026	$ 5,320,800	$ -	$ 508,250	$ 1,006,909	$ 6,835,959
2027	$ 5,338,558	$ -	$ 508,250	$ 1,020,514	$ 6,867,322
2028	$ 5,356,170	$ -	$ 508,250	$ 1,034,335	$ 6,898,755
2029	$ 5,373,424	$ -	$ 508,250	$ 1,048,334	$ 6,930,008
2030	$ 5,390,476	$ -	$ 508,250	$ 1,062,541	$ 6,961,267
2031	$ 5,407,138	$ -	$ 508,250	$ 1,076,922	$ 6,992,310
2032	$ 5,423,571	$ -	$ 508,250	$ 1,091,509	$ 7,023,330
2033	$ 5,439,608	$ -	$ 508,250	$ 1,106,272	$ 7,054,130
2034	$ 5,455,410	$ -	$ 508,250	$ 1,121,244	$ 7,084,904
2035	$ 5,470,832	$ -	$ 508,250	$ 1,136,397	$ 7,115,479
2036	$ 5,486,036	$ -	$ 508,250	$ 1,151,765	$ 7,146,051
2037	$ 5,500,890	$ -	$ 508,250	$ 1,167,323	$ 7,176,463
2038	$ 5,515,557	$ -	$ 508,250	$ 1,183,108	$ 7,206,915
2039	$ 5,529,919	$ -	$ 508,250	$ 1,199,096	$ 7,237,265
2040	$ 5,544,136	$ -	$ 508,250	$ 1,215,323	$ 7,267,709

Calculated by ECONorthwest based on the following sources:
ODOT Long-Range Revenue Tables 2013 v3.
City of Bend, Oregon 2013-2015; Page 223
City of Bend Transportation Operations Forecast, January 2014

Exhibit 8 shows the same long-term forecast of City revenues for transportation operations, maintenance and administration, but in nominal YOE dollars.

Exhibit 8. Projected annual revenue sources available for transportation operation and maintenance and administration, City of Bend, FYE 2015 to 2040 (YOE $)

FYE	Revenue for O & M and Administration				
	State Highway Fund	General Fund	Garbage Franchise Fees	Other	Total for O & M and admin
2015	$ 5,102,633	$ 3,000,000	$ 508,250	$ 868,610	$ 9,479,493
2016	$ 5,283,153	$ 3,000,000	$ 524,006	$ 907,653	$ 9,714,812
2017	$ 5,469,561	$ 3,000,000	$ 540,270	$ 948,451	$ 9,958,282
2018	$ 5,662,041	$ 3,000,000	$ 557,042	$ 991,083	$ 10,210,166
2019	$ 5,860,786	$ 3,000,000	$ 574,323	$ 1,035,631	$ 10,470,740
2020	$ 6,065,994	$ -	$ 592,111	$ 1,082,181	$ 7,740,286
2021	$ 6,277,870	$ -	$ 610,459	$ 1,130,824	$ 8,019,153
2022	$ 6,496,632	$ -	$ 629,366	$ 1,181,653	$ 8,307,642
2023	$ 6,722,472	$ -	$ 648,883	$ 1,234,767	$ 8,606,122
2024	$ 6,955,639	$ -	$ 669,009	$ 1,290,268	$ 8,914,916
2025	$ 7,196,357	$ -	$ 689,746	$ 1,348,264	$ 9,234,367
2026	$ 7,444,864	$ -	$ 711,143	$ 1,408,867	$ 9,564,874
2027	$ 7,701,404	$ -	$ 733,201	$ 1,472,194	$ 9,906,799
2028	$ 7,966,232	$ -	$ 755,920	$ 1,538,367	$ 10,260,519
2029	$ 8,239,609	$ -	$ 779,351	$ 1,607,515	$ 10,626,475
2030	$ 8,521,804	$ -	$ 803,492	$ 1,679,771	$ 11,005,067
2031	$ 8,813,095	$ -	$ 828,397	$ 1,755,275	$ 11,396,767
2032	$ 9,113,768	$ -	$ 854, 063	$ 1,834,172	$ 11,802,003
2033	$ 9,424,120	$ -	$ 880,543	$ 1,916,616	$ 12,221,279
2034	$ 9,744,454	$ -	$ 907,836	$ 2,002,766	$ 12,655,056
2035	$ 10,075,085	$ -	$ 935,993	$ 2,092,788	$ 13,103,866
2036	$ 10,416,336	$ -	$ 965,014	$ 2,186,856	$ 13,568,206
2037	$ 10,768,543	$ -	$ 994,950	$ 2,286,152	$ 14,048,645
2038	$ 11,132,048	$ -	$ 1,025,801	$ 2,387,867	$ 14,545,716
2039	$ 11,507,209	$ -	$ 1,057,617	$ 2,495,199	$ 15,060,025
2040	$ 11,894,390	$ -	$ 1,090,400	$ 2,607,355	$ 15,592,145

Calculated by ECONorthwest based on the following sources:
ODOT Long-Range Revenue Tables 2013 v3.
City of Bend, Oregon 2013-2015; Page 223
City of Bend Transportation Operations Forecast, January 2014

It is important to compare the forecast of City revenues for operations, maintenance and administration to a forecast of expenditures in these areas. The City of Bend spent $9.4 million on transportation operations, maintenance and administration in FYE 2014. The City's short-term forecast of expenditures for transportation operations show relatively little change in planned annual expenditures over the next five years. These projections are shown in Exhibit 9.

Exhibit 9. Projected annual expenditures for transportation operations and maintenance and administration, City of Bend, FYE 2015 to 2019

	Actual 2012-13	Estimate 2013-14	2014-15	2015-16	Projection 2016-17	2017-18	2018-19
Personnel	$2,627,463	$2,813,387	$3,116,679	$3,257,440	$3,268,773	$3,334,694	$3,508,616
Materials & Services and Debt	$1,626,162	$2,046,751	$2,095,492	$2,144,402	$2,193,790	$2,218,666	$2,244,039
Capital	$3,430,887	$2,803,100	$2,445,000	$2,175,000	$2,175,000	$2,175,000	$2,175,000
Interfund Transfers	$1,472,195	$1,770,700	$1,891,650	$1,977,309	$1,839,409	$1,867,099	$1,918,509
Total Expenditures	**$9,156,707**	**$9,433,938**	**$9,548,821**	**$9,554,151**	**$9,476,972**	**$9,595,459**	**$9,846,164**

Source: City of Bend Transportation Operations Forecast, January 2014.

Exhibit 10 compares annual revenues with expenditures for the City of Bend for transportation operations, maintenance and administration. In all years except for FYE 2015, the City is forecast to have more than enough revenue to cover the anticipated expenditures. Note that the small "deficit" that appears in FYE 2015 is not a cause for concern, as the City has a beginning fund balance of $2.4 million in FYE 2015 that is not reflected in the table below. Note that the long-term forecast of expenditures uses the City's short-term forecast through FYE 2019, then reduces that amount by $3,000,000 (YOE $) in FYE 2020, to reflect the reduction in City general fund subsidy. For all future years, annual expenditures are expected to remain virtually constant in constant 2015 dollars, with growth equal to the anticipated rate of inflation.

Exhibit 10. Projected annual revenues and expenditures for transportation operations and maintenance and administration, City of Bend, FYE 2015 to 2040

FYE	YOE $			Constant 2015 $		
	Revenues	Expenditures	Surplus (Deficit)	Revenues	Expenditures	Surplus (Deficit)
2015	$ 9,479,493	$ 9,548,821	$ (69,328)	$ 9,479,493	$ 9,548,821	$ (69,328)
2016	$ 9,714,812	$ 9,554,151	$ 160,661	$ 9,422,708	$ 9,266,878	$ 155,830
2017	$ 9,958,282	$ 9,476,972	$ 481,310	$ 9,368,092	$ 8,915,308	$ 452,784
2018	$ 10,210,166	$ 9,595,459	$ 614,707	$ 9,315,845	$ 8,754,981	$ 560,864
2019	$ 10,470,740	$ 9,846,164	$ 624,576	$ 9,266,141	$ 8,713,419	$ 552,722
2020	$ 7,740,286	$ 7,058,395	$ 681,891	$ 6,644,023	$ 6,058,708	$ 585,315
2021	$ 8,019,153	$ 7,277,205	$ 741,948	$ 6,676,507	$ 6,058,784	$ 617,723
2022	$ 8,307,642	$ 7,502,798	$ 804,844	$ 6,708,909	$ 6,058,950	$ 649,959
2023	$ 8,606,122	$ 7,735,385	$ 870,737	$ 6,740,911	$ 6,058,890	$ 682,021
2024	$ 8,914,916	$ 7,975,182	$ 939,734	$ 6,772,708	$ 6,058,788	$ 713,920
2025	$ 9,234,367	$ 8,222,413	$ 1,011,954	$ 6,804,485	$ 6,058,811	$ 745,674
2026	$ 9,567,874	$ 8,477,308	$ 1,087,566	$ 6,835,959	$ 6,058,682	$ 777,277
2027	$ 9,906,799	$ 8,740,105	$ 1,166,694	$ 6,867,322	$ 6,058,578	$ 808,744
2028	$ 10,260,519	$ 9,011,048	$ 1,249,471	$ 6,898,755	$ 6,058,662	$ 840,093
2029	$ 10,626,475	$ 9,290,390	$ 1,336,085	$ 6,930,008	$ 6,058,687	$ 871,321
2030	$ 11,005,067	$ 9,578,392	$ 1,426,675	$ 6,961,267	$ 6,058,822	$ 902,445
2031	$ 11,396,767	$ 9,875,322	$ 1,521,445	$ 6,992,310	$ 6,058,851	$ 933,459
2032	$ 11,802,003	$ 10,191,457	$ 1,620,546	$ 7,023,330	$ 6,058,948	$ 964,382
2033	$ 12,221,279	$ 10,497,082	$ 1,724,197	$ 7,054,130	$ 6,058,922	$ 995,208
2034	$ 12,655,056	$ 10,822,492	$ 1,832,564	$ 7,084,904	$ 6,058,947	$ 1,025,957
2035	$ 13,103,866	$ 11,157,989	$ 1,945,877	$ 7,115,479	$ 6,058,856	$ 1,056,623
2036	$ 13,568,206	$ 11,503,887	$ 2,064,319	$ 7,146,051	$ 6,058,823	$ 1,087,228
2037	$ 14,048,645	$ 11,860,507	$ 2,188,138	$ 7,176,463	$ 6,058,698	$ 1,117,765
2038	$ 14,545,716	$ 12,228,183	$ 2,317,533	$ 7,206,915	$ 6,058,655	$ 1,148,260
2039	$ 15,060,025	$ 12,607,257	$ 2,452,768	$ 7,237,265	$ 6,058,560	$ 1,178,705
2040	$ 15,592,145	$ 12,998,082	$ 2,594,063	$ 7,267,709	$ 6,058,582	$ 1,209,127

Calculated by ECONorthwest based on the following sources:
ODOT Long-Range Revenue Tables 2013 v3.
City of Bend, Oregon 2013-2015; Page 223
City of Bend Transportation Operations Forecast, January 2014

Capital projects

The revenue available to the City of Bend for transportation capital projects has varied over the past three most recent biennia, as shown in Exhibit 11. Total resources dropped from $16.7 million in 2009-11 to $12.7 million in 2011-2013, and then increased to $17.2 million in 2013-2015. The largest source of revenue has been Systems Development Charges (SDCs), accounting for anywhere from one-third to three-quarters of revenue, excluding beginning working capital (i.e. carryover from previous years). Other notable funding sources for transportation capital projects include intergovernmental revenues (primarily federal STP allocations) and water/sewer franchise fees.

Exhibit 11. Historical transportation capital revenue sources for the City of Bend, Biennium 2009-11 to 2013-15 (YOE dollars)

	Actual 2009-11	Adjusted 2011-13	Adopted 2013-15
Resources			
Beginning Working Capital	$ 5,895,902	$ 5,798,000	$ 9,023,700
Franchise Fees	$ 1,698,970	$ 1,997,700	$ 1,147,500
Intergovernmental Revenues	$ 630,902	$ 1,660,250	$ 767,500
Interfund Transfers:			
SDC Fund	$ 3,568,428	$ 3,041,050	$ 6,008,600
Other	$ 71,586	$ 50,600	$ 12,400
Contributions	$ 132,053	$ -	$ -
Investment Income	$ 103,747	$ 54,500	$ 66,300
Miscellaneous	$ 58,085	$ 44,400	$ 24,800
Sale of Capital Assets	$ 211,134	$ -	$ 120,000
Issuance of Long-Term Debt	$ 4,263,303	$ -	$ -
Loan Repayments	$ 27,214	$ 17,500	$ 6,800
Total Resources	*$ 16,658,324*	*$ 12,664,000*	*$ 17,177,600*

Sources:
City of Bend, Oregon 2013-2015 2013 Adopted Biennial Budget; Page 229
City of Bend, Oregon 2011-2013 Adopted Biennial Budget; Page 171

In FYE 2015 the BMPO is expected to receive approximately $1.0 million in STP revenue. Total federal highway funds going to Oregon are expected to grow over the forecast period and subsequently so is the amount of federal funds allocated to the BMPO, as shown in Exhibit 12. However, this growth is not anticipated to keep pace with inflation, resulting in declining revenues as measured in constant 2015 dollars.

Exhibit 12. Projected annual allocation of STP revenues to the Bend MPO, FYE 2015 to 2040

FYE	YOE $			Constant 2015 $		
	Total Federal Hwy Funds to Oregon	STP Allocation to Small Cities	STP to Bend MPO	Total Federal Hwy Funds to Oregon	STP Allocation to Small Cities	STP to Bend MPO
2015	$ 497,544,000	$ 10,905,000	$ 999,007	$ 497,544,000	$ 10,905,000	$ 999,007
2016	$ 504,510,000	$ 11,058,000	$ 1,012,993	$ 489,340,446	$ 10,725,509	$ 982,534
2017	$ 511,573,000	$ 11,213,000	$ 1,027,175	$ 481,253,998	$ 10,548,448	$ 966,298
2018	$ 518,735,000	$ 11,370,000	$ 1,041,555	$ 473,298,358	$ 10,374,088	$ 950,324
2019	$ 525,997,000	$ 11,529,000	$ 1,056,137	$ 465,484,071	$ 10,202,655	$ 934,634
2020	$ 593,412,000	$ 11,690,000	$ 1,070,923	$ 509,366,524	$ 10,034,335	$ 919,247
2021	$ 540,828,000	$ 11,854,000	$ 1,085,916	$ 450,277,246	$ 9,869,286	$ 904,101
2022	$ 548,400,000	$ 12,020,000	$ 1,101,118	$ 442,865,218	$ 9,706,856	$ 889,218
2023	$ 556,077,000	$ 12,188,000	$ 1,116,534	$ 435,558,079	$ 9,546,487	$ 874,547
2024	$ 563,862,000	$ 12,359,000	$ 1,132,166	$ 428,368,913	$ 9,389,197	$ 860,112
2025	$ 571,756,000	$ 12,532,000	$ 1,148,016	$ 421,307,199	$ 9,234,397	$ 845,933
2026	$ 651,884,000	$ 12,707,000	$ 1,164,088	$ 465,897,656	$ 9,081,618	$ 831,967
2027	$ 587,878,000	$ 12,885,000	$ 1,180,385	$ 407,512,824	$ 8,931,790	$ 818,235
2028	$ 596,108,000	$ 13,065,000	$ 1,196,911	$ 400,798,763	$ 8,784,374	$ 804,754
2029	$ 604,454,000	$ 13,248,000	$ 1,213,667	$ 394,191,992	$ 8,639,624	$ 791,488
2030	$ 612,916,000	$ 13,434,000	$ 1,230,659	$ 387,700,677	$ 8,497,691	$ 778,455
2031	$ 621,497,000	$ 13,622,000	$ 1,247,888	$ 381,309,896	$ 8,357,568	$ 765,622
2032	$ 716,819,000	$ 13,813,000	$ 1,265,358	$ 426,576,410	$ 8,220,067	$ 753,010
2033	$ 639,020,000	$ 14,006,000	$ 1,283,073	$ 368,842,713	$ 8,084,271	$ 740,591
2034	$ 647,967,000	$ 14,202,000	$ 1,301,036	$ 362,762,849	$ 7,950,957	$ 728,382
2035	$ 657,038,000	$ 14,401,000	$ 1,319,251	$ 356,775,630	$ 7,819,831	$ 716,361
2036	$ 666,237,000	$ 14,602,000	$ 1,337,721	$ 350,891,136	$ 7,690,525	$ 704,545
2037	$ 675,564,000	$ 14,807,000	$ 1,356,449	$ 345,098,079	$ 7,563,854	$ 692,914
2038	$ 789,057,000	$ 15,014,000	$ 1,375,439	$ 390,951,296	$ 7,438,934	$ 681,484
2039	$ 694,612,000	$ 15,224,000	$ 1,394,695	$ 333,803,643	$ 7,316,065	$ 670,236
2040	$ 704,337,000	$ 15,437,000	$ 1,414,221	$ 328,301,016	$ 7,195,395	$ 659,187

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

Exhibit 13 shows a forecast of future transportation SDC revenues for the City of Bend. SDC rates per peak hour trip (PHT) are forecast to increase over time. The rates from FYE 2015 to 2032 were provided by the City of Bend's Transportation System Plan (TSP) revenue forecasts, updated in 2013. For years 2033 to 2040, we forecast the SDC rates to grow at the average annual growth rate reflected in the City's TSP forecast. DKS forecast total PHTs in the year 2040 to be 73,825, compared to 52,318 reported PHTs in the year 2010. The annual projection of new PHTs was calculated by ECONorthwest, assuming a constant rate of growth from 2010 to 2040 (1.39% per year). SDC revenues are forecast to increase from $3.4 million in FYE 2015 to $12.3 million in FYE 2040 (YOE $). Even after adjusting for inflation and presenting the numbers in constant 2015 dollars, SDC revenues are still expected to increase by 70% over the forecast period.

Exhibit 13. Projected annual transportation SDC revenue, City of Bend, FYE 2015 to 2040

	YOE $			Constant 2015 $		
FYE	SDC ($/PHT)	PHT	SDC Revenue	SDC ($/PHT)	PHT	SDC Revenue
2015	$ 4,713	716	$ 3,374,524	$ 4,713	716	$ 3,374,524
2016	$ 4,807	726	$ 3,490,087	$ 4,663	726	$ 9,985,147
2017	$ 5,067	736	$ 3,729,100	$ 4,766	736	$ 3,508,090
2018	$ 5,340	746	$ 3,983,747	$ 4,872	746	$ 3,634,806
2019	$ 5,628	756	$ 4,255,017	$ 4,981	756	$ 3,765,502
2020	$ 5,741	767	$ 4,406,267	$ 4,928	767	$ 3,779,628
2021	$ 5,856	777	$ 4,549,889	$ 4,875	777	$ 3,788,102
2022	$ 6,172	788	$ 4,863,318	$ 4,984	788	$ 3,927,415
2023	$ 6,505	799	$ 5,197,624	$ 5,095	799	$ 4,070,905
2024	$ 6,856	810	$ 5,553,217	$ 5,208	810	$ 4,218,808
2025	$ 6,993	821	$ 5,741,204	$ 5,153	821	$ 4,230,494
2026	$ 7,133	833	$ 5,941,621	$ 5,098	833	$ 4,246,442
2027	$ 7,481	844	$ 6,313,859	$ 5,186	844	$ 4,376,722
2028	$ 7,849	856	$ 6,716,123	$ 5,175	856	$ 4,515,648
2029	$ 8,229	868	$ 7,142,613	$ 5,366	868	$ 4,658,023
2030	$ 8,352	880	$ 7,349,979	$ 5,283	880	$ 4,649,237
2031	$ 8,519	892	$ 7,599,210	$ 5,227	892	$ 4,662,378
2032	$ 8,979	904	$ 8,117,057	$ 5,343	904	$ 4,830,431
2033	$ 9,326	917	$ 8,551,942	$ 5,383	917	$ 4,936,186
2034	$ 9,686	930	$ 9,007,980	$ 5,423	930	$ 5,043,097
2035	$ 10,060	943	$ 9,486,580	$ 5,463	943	$ 5,151,271
2036	$ 10,449	956	$ 9,989,244	$ 5,503	956	$ 5,261,097
2037	$ 10,853	969	$ 10,516,557	$ 5,544	969	$ 5,372,168
2038	$ 11,272	982	$ 11,069,104	$ 5,585	982	$ 5,484,370
2039	$ 11,708	996	$ 11,661,168	$ 5,626	996	$ 5,603,906
2040	$ 12,160	1,011	$ 12,293,760	$ 5,668	1,011	$ 5,730,288

Calculated by ECONorthwest based on the following sources:
City of Bend Transportation System Plan, Revised Funding for Transportation Improvements 2003-2032.
PHT forecast provided by DKS
Note: PHT refers to "Peak Hour Trips"

Exhibit 14 shows a forecast of annual water/sewer franchise fee revenues for the City of Bend. Historically, 100% of these revenues have been allocated to transportation capital projects, although in the most recent fiscal year, 2014-15, the City deviated from past practices and allocated 50% of these SDC revenues to accessibility projects. Conversations with the City's interim finance director suggest that long-term forecasts should assume that the City acts in accordance with historical practices, and allocates 100% of these franchise fee revenues to transportation capital projects.

The City's TSP revenue forecasts, updated in 2013, project future rate increases for water/sewer customers, as well as future changes in consumption. Those projections only extend through FYE 2032, after which time, we forecast future franchise fee revenues based on the average annual growth rate of the TSP forecast period (3.0% per year in YOE $). Ultimately, this long-term forecast results in small annual fluctuations, but almost no long-term change in annual funding in constant 2015 dollars.

Annual water/sewer franchise fee revenues are expected to remain at approximately $1.1 to $1.2 million (constant 2015 $) for the duration of the forecast period.

Exhibit 14. Projected annual water/sewer franchise fee revenue available for transportation projects, City of Bend, FYE 2015 to 2040

Year	% Change in rate	% Change in consumption	Water/Sewer Franchise Fees	
			YOE $	Constant 2015 $
2015	6.0 %	0.0 %	$ 1,175,398	$ 1,175,398
2016	6.0 %	0.0 %	$ 1,245,922	$ 1,208,460
2017	6.0 %	0.5 %	$ 1,327,281	$ 1,248,618
2018	6.0 %	0.5 %	$ 1,373,935	$ 1,253,590
2019	6.0 %	0.5 %	$ 1,422,229	$ 1,258,610
2020	3.0 %	0.5 %	$ 1,472,220	$ 1,263,708
2021	3.0 %	1.0 %	$ 1,531,550	$ 1,275,123
2022	3.0 %	1.0 %	$ 1,593,271	$ 1,286,660
2023	2.0 %	1.0 %	$ 1,641,388	$ 1,285,649
2024	2.0 %	1.0 %	$ 1,690,958	$ 1,284,630
2025	2.0 %	0.0 %	$ 1,724,777	$ 1,270,928
2026	2.0 %	0.0 %	$ 1,759,273	$ 1,257,342
2027	2.0 %	-2.0 %	$ 1,758,569	$ 1,219,027
2028	2.0 %	-1.0 %	$ 1,775,803	$ 1,193,978
2029	2.0 %	0.0 %	$ 1,811,319	$ 1,181,244
2030	2.0 %	0.0 %	$ 1,847,545	$ 1,168,667
2031	2.0 %	0.5 %	$ 1,893,918	$ 1,161,984
2032	2.0 %	0.5 %	$ 1,941,455	$ 1,155,353
2033			$ 1,999,620	$ 1,154,182
2034			$ 2,059,528	$ 1,153,022
2035			$ 2,121,230	$ 1,151,841
2036			$ 2,184,781	$ 1,150,672
2037			$ 2,250,236	$ 1,149,487
2038			$ 2,317,652	$ 1,148,319
2039			$ 2,387,088	$ 1,147,142
2040			$ 2,458,604	$ 1,145,989

Calculated by ECONorthwest based on City of Bend Transportation System Plan, Revised Funding for Transportation Improvements 2003-2032.

Other funding sources for the City of Bend's transportation capital projects include:

- **Private contributions** from developers for non-creditable improvements. These contributions fluctuate significantly over time, but are forecast in the City's TSP revenue projections to stay at a constant level of $50,000 per year. Conversations with City staff indicate that this $50,000 per year funding level should be considered in constant 2015 dollars, recognizing that the actual funding amount in nominal YOE dollars will increase over time with inflation. Note that this funding level appears to be conservative based on a review of historical revenue amounts, which frequently exceeded $100,000 per year, even during the depths of the recent recession.

- **General obligation (GO) bonds** are one-time sources of additional revenue for transportation projects, approved by voters and repaid through property taxes. The City has a history of successfully passing GO bonds to pay for transportation projects, including most recently in 2012. The 2013 bonds are set to expire in 2032, at which time the City anticipates asking the voters to approve a new set of GO bond projects. The timing of the bonds are important to maximize voter support, as the new bonds can be framed as replacing the old bonds, resulting in no change in the property tax rate. The City assumes $40 million in GO bonds would be issued in 2032, though that dollar amount is reduced to $23.8 million in constant 2015 dollars.
- **Urban renewal** is a form of tax increment financing in which property tax revenues within a specified area are diverted to specific improvements in the area, instead of being allocated to other taxing districts. The City has two urban renewal plans in place that identify specific transportation capital projects to receive urban renewal funding. The City's TSP revenue forecasts assume a total of $30 million in urban renewal funding for transportation projects over the course of the 2040 forecast period. This amounts to $21.6 million in constant 2015 dollars.
- **Other** smaller revenue sources include investment income, sale of capital assets, interfund transfers, loan repayments, and other miscellaneous sources. These other sources are projected to total $144,844 per year in FYE 2015. We forecast that these sources will increase over time based on the pace of new development (1.39% per year as measured by new PHTs), and the assumed rate of inflation (3.1% per year, as used in ODOT long-term revenue forecasts).

Exhibit 15 shows the forecast of all City funding sources for transportation capital projects through 2040, in constant 2015 dollars. Total revenues are expected to grow over time from $5.7 million per year in FYE 2015 to $7.8 million per year in FYE 2040. Some years show substantially higher annual funding amounts, as urban renewal, and GO bond revenues become available for transportation projects.

Exhibit 16 shows the same long-term forecast of City revenues for transportation capital projects, but in nominal YOE dollars.

.

Exhibit 15. Projected annual revenue sources available for transportation capital projects, City of Bend, FYE 2015 to 2040 (Constant 2015 $)

FYE	Revenue for Capital Projects							
	SDCs	Water/Sewer Franchise Fees	STP	Private Contributions	GO Bonds	Urban Renewal	Other	Total for Capital
2015	$3,374,524	$1,175,398	$999,007	$50,000	$-	$-	$144,844	$5,743,773
2016	$3,385,147	$1,208,460	$982,534	$50,000	$-	$-	$146,854	$5,772,995
2017	$3,508,090	$1,248,618	$966,298	$50,000	$-	$4,703,669	$148,884	$10,625,559
2018	$3,634,806	$1,253,590	$950,324	$50,000	$-	$-	$150,943	$6,039,663
2019	$3,765,502	$1,258,610	$934,634	$50,000	$-	$-	$153,033	$6,161,779
2020	$3,779,628	$1,263,708	$919,247	$50,000	$-	$-	$155,159	$6,167,742
2021	$3,788,102	$1,275,123	$904,101	$50,000	$-	$-	$157,312	$6,174,638
2022	$3,927,415	$1,286,660	$889,218	$50,000	$-	$-	$159,499	$6,312,792
2023	$4,070,905	$1,285,649	$874,547	$50,000	$-	$-	$161,709	$6,442,810
2024	$4,218,808	$1,284,630	$860,112	$50,000	$-	$3,798,526	$163,949	$10,376,025
2025	$4,230,494	$1,270,928	$845,933	$50,000	$-	$-	$166,224	$6,563,579
2026	$4,246,442	$1,257,342	$831,967	$50,000	$-	$-	$168,525	$6,554,276
2027	$4,376,722	$1,219,027	$818,235	$50,000	$-	$-	$170,859	$6,634,843
2028	$4,515,648	$1,193,978	$804,754	$50,000	$-	$6,723,593	$173,231	$13,461,204
2029	$4,658,023	$1,181,244	$791,488	$50,000	$-	$-	$175,634	$6,856,389
2030	$4,649,237	$1,168,667	$778,455	$50,000	$-	$6,325,511	$178,074	$13,149,944
2031	$4,662,378	$1,161,984	$765,622	$50,000	$-	$-	$180,544	$6,820,528
2032	$4,830,431	$1,155,353	$753,010	$50,000	$23,803,856	$-	$183,051	$30,775,701
2033	$4,936,186	$1,154,182	$740,591	$50,000	$-	$-	$185,589	$7,066,548
2034	$5,043,097	$1,153,022	$728,382	$50,000	$-	$-	$188,164	$7,162,665
2035	$5,151,271	$1,151,841	$716,361	$50,000	$-	$-	$190,771	$7,260,244
2036	$5,261,097	$1,150,672	$704,545	$50,000	$-	$-	$193,415	$7,359,729
2037	$5,372,168	$1,149,487	$692,914	$50,000	$-	$-	$196,093	$7,460,662
2038	$5,484,370	$1,148,319	$681,484	$50,000	$-	$-	$198,811	$7,562,984
2039	$5,603,906	$1,147,142	$670,236	$50,000	$-	$-	$201,565	$7,672,849
2040	$5,730,288	$1,145,989	$659,187	$50,000	$-	$-	$204,361	$7,789,825

Calculated by ECONorthwest based on the following sources:
City of Bend, Oregon 2013-2015 2013 Adopted Biennial Budget; Page 229
ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.
PHT forecast provided by DKS
City of Bend Transportation System Plan Revised Funding for Transportation Improvements 2003-2032.

Exhibit 16. Projected annual revenue sources available for transportation capital projects, City of Bend, FYE 2015 to 2040 (YOE $)

FYE	Revenue for Capital Projects							
	SDCs	Water/Sewer Franchise Fees	STP	Private Contributions	GO Bonds	Urban Renewal	Other	Total for Capital
2015	$3,374,524	$ 1,175,398	$999,007	$50,000	$-	$-	$144,844	$5,743,773
2016	$3,490,087	$ 1,245,922	$1,012,993	$51,550	$-	$-	$151,406	$5,951,958
2017	$3,729,100	$ 1,327,281	$1,027,175	$53,150	$-	$5,000,000	$158,264	$11,294,970
2018	$3,983,747	$ 1,373,935	$1,041,555	$54,800	$-	$-	$165,433	$6,619,470
2019	$4,255,017	$ 1,422,229	$1,056,137	$56,500	$-	$-	$172,927	$6,962,810
2020	$4,403,267	$ 1,472,220	$1,070,923	$58,250	$-	$-	$180,760	$7,185,420
2021	$4,549,889	$ 1,531,550	$1,085,916	$60,055	$-	$-	$188.948	$7,416,358
2022	$4,863,318	$ 1,593,271	$1,101,118	$61,915	$-	$-	$197,507	$7,817,129
2023	$5,197,324	$ 1,641,388	$1,116,534	$63,835	$-	$-	$206,454	$8,225,535
2024	$5,553,217	$ 1,690,958	$1,132,166	$65,815	$-	$5,000,000	$215,806	$13,657,962
2025	$5,741,204	$ 1,724,777	$1,148,016	$67,855	$-	$-	$225,582	$8,907,434
2026	$5,941,621	$ 1,759,273	$1,164,088	$69,960	$-	$-	$235,800	$9,170,742
2027	$6,313,859	$ 1,758,569	$1,180,385	$72,130	$-	$-	$246,481	$9,571,424
2028	$6,716,123	$1,775,803	$1,196,911	$74,365	$-	$10,000,000	$257,646	$20,020,848
2029	$7,142,613	$1,811,319	$1,213,667	$76,670	$-	$-	$269,317	$10,513,586
2030	$7,349,979	$1,847,545	$1,230,659	$79,045	$-	$10,000,000	$281,517	$20,788,745
2031	$7,599,210	$1,893,918	$1,247,888	$81,495	$-	$-	$294,269	$11,116,780
2032	$8,117,057	$1,941,455	$1,265,358	$84,020	$40,000,000	$-	$307,599	$51,715,489
2033	$8,551,942	$1,999,620	$1,286,073	$86,625	$-	$-	$321,533	$12,242,793
2034	$9,007,980	$2,059,528	$1,301,036	$89,310	$-	$-	$336,098	$12,793,952
2035	$9,486,580	$2,121,230	$1,319,251	$92,080	$-	$-	$351,323	$13,370,464
2036	$9,989,244	$2,184,781	$1,337,721	$94,935	$-	$-	$367,237	$13,973,918
2037	$10,516,557	$2,250,236	$1,356,449	$97,880	$-	$-	$383,872	$14,604,994
2038	$11,069,104	$2,317,652	$1,375,439	$100,915	$-	$-	$401,261	$15,264,371
2039	$11,661,168	$2,387,088	$1,394,695	$104,045	$-	$-	$419,437	$15,966,433
2040	$12,293,760	$2,458,604	$1,414,221	$107,270	$-	$-	$438,437	$16,712,292

Calculated by ECONorthwest based on the following sources:
City of Bend, Oregon 2013-2015 2013 Adopted Biennial Budget; Page 229
ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.
PHT forecast provided by DKS
City of Bend Transportation System Plan Revised Funding for Transportation Improvements 2003-2032.

Summary of City revenue projections

Today, City revenues for transportation operations, maintenance, and administration ($9.5 million in FYE 2015) exceed revenues for capital projects ($5.7 million in FYE 2015). Over time, funding for operations, maintenance, and administration is expected to decrease, as the City's general fund subsidy is discontinued, and as other funds for transportation operations experience slow growth. Funding for transportation capital projects, on the other hand, is forecast to experience rather significant growth over time, fueled predominantly by growth in SDC revenue from new development, as well as period injections of one-time funds from GO bonds and urban renewal. Thus, in the later years of the forecast period, funding for capital projects is expected to exceed funding for operations. These summary numbers are shown in Exhibit 17 in constant 2015 dollars.

Exhibit 17. Summary of projected annual revenue sources available for transportation, City of Bend, FYE 2015 to 2040 (Constant 2015 $)

FYE	O&M and Administration	Capital Projects	Total
2015	$ 9,479,493	$ 5,743,773	$ 15,223,266
2016	$ 9,423,002	$ 5,772,995	$ 15,195,997
2017	$ 9,368,688	$ 10,625,559	$ 19,994,247
2018	$ 9,316,752	$ 6,039,663	$ 15,356,415
2019	$ 9,267,366	$ 6,161,779	$ 15,429,145
2020	$ 6,645,576	$ 6,167,742	$ 12,813,318
2021	$ 6,678,397	$ 6,174,638	$ 12,853,035
2022	$ 6,711,145	$ 6,312,792	$ 13,023,937
2023	$ 6,743,501	$ 6,442,810	$ 13,186,311
2024	$ 6,775,661	$ 10,376,025	$ 17,151,686
2025	$ 6,807,811	$ 6,563,579	$ 13,371,390
2026	$ 6,839,667	$ 6,554,276	$ 13,393,943
2027	$ 6,871,423	$ 6,634,843	$ 13,506,266
2028	$ 6,903,260	$ 13,461,204	$ 20,364,464
2029	$ 6,934,925	$ 6,856,389	$ 13,791,314
2030	$ 6,966,608	$ 13,149,944	$ 20,116,552
2031	$ 6,998,084	$ 6,820,528	$ 13,818,612
2032	$ 7,029,550	$ 30,775,701	$ 37,805,251
2033	$ 7,060,806	$ 7,066,548	$ 14,127,354
2034	$ 7,092,047	$ 7,162,665	$ 14,254,712
2035	$ 7,123,101	$ 7,260,244	$ 14,383,345
2036	$ 7,154,164	$ 7,359,729	$ 14,513,893
2037	$ 7,185,079	$ 7,460,662	$ 14,645,741
2038	$ 7,216,046	$ 7,562,984	$ 14,779,030
2039	$ 7,246,923	$ 7,672,849	$ 14,919,772
2040	$ 7,277,908	$ 7,789,825	$ 15,067,733

Calculated by ECONorthwest.

Exhibit 18 shows the same summary forecast of City revenues for transportation, but in nominal YOE dollars.

Exhibit 18. Summary of projected annual revenue sources available for transportation, City of Bend, FYE 2015 to 2040 (YOE $)

FYE	O&M and Administration	Capital Projects	Total
2015	$ 9,479,493	$ 5,743,773	$ 15,223,266
2016	$ 9,715,115	$ 5,951,958	$ 15,667,073
2017	$ 9,958,916	$ 11,294,970	$ 21,253,886
2018	$ 10,211,160	$ 6,619,470	$ 16,830,630
2019	$ 10,472,125	$ 6,962,810	$ 17,434,935
2020	$ 7,742,096	$ 7,185,420	$ 14,927,516
2021	$ 8,021,423	$ 7,416,358	$ 15,437,781
2022	$ 8,310,410	$ 7,817,129	$ 16,127,539
2023	$ 8,609,428	$ 8,225,535	$ 16,834,963
2024	$ 8,918,803	$ 13,657,962	$ 22,576,765
2025	$ 9,238,881	$ 8,907,434	$ 18,146,315
2026	$ 9,570,063	$ 9,170,742	$ 18,740,805
2027	$ 9,912,715	$ 9,571,424	$ 19,484,139
2028	$ 10,267,218	$ 20,020,848	$ 30,288,066
2029	$ 10,634,015	$ 10,513,586	$ 21,147,601
2030	$ 11,013,510	$ 20,788,745	$ 31,802,255
2031	$ 11,406,179	$ 11,116,780	$ 22,522,959
2032	$ 11,812,455	$ 51,715,489	$ 63,527,944
2033	$ 12,232,845	$ 12,242,793	$ 24,475,638
2034	$ 12,667,815	$ 12,793,952	$ 25,461,767
2035	$ 13,117,903	$ 13,370,464	$ 26,488,367
2036	$ 13,853,610	$ 13,973,918	$ 27,557,528
2037	$ 14,065,511	$ 14,604,994	$ 28,670,505
2038	$ 14,564,144	$ 15,264,371	$ 29,828,515
2039	$ 15,080,122	$ 15,966,433	$ 31,046,555
2040	$ 15,614,024	$ 16,712,292	$ 32,326,316

Source: Calculated by ECONorthwest.

Oregon Department of Transportation

The State of Oregon provides substantial funding for transportation through the Oregon Department of Transportation (ODOT). Much of the State funding for transportation is allocated to local jurisdictions to be spent by cities and counties on transportation projects. These allocations to local jurisdictions are captured under the subsections of this chapter for the City of Bend and Deschutes County, and we do not show these

pass-through revenues here, to avoid double counting. Instead, we only describe those State revenues that are spent directly by the State on transportation projects.

Exhibit 19 shows ODOT projections for total revenue available for highway projects, including both capital projects as well as operations, maintenance and administration. The projections in Exhibit 19 are net of any federal or State revenues that are passed through to local municipalities. Total revenues are projected to total $1.0 billion in FYE 2015, and grow to $1.8 billion in FYE 2040 (YOE $). In constant 2015 dollars, however, this forecast shows a decline in total funding, as revenue growth is not projected to keep pace with inflation.

Exhibit 19. Projected statewide annual revenue available for highway projects, ODOT, FYE 2015 to 2040 (millions)

FYE	YOE $			Constant 2015 $		
	State Share of SHF	Federal Hwy Funds Available to State	Total Hwy Funds Available to State	State Share of SHF	Federal Hwy Funds Available to State	Total Hwy Funds Available to State
2015	$ 653	$ 359	$ 1,012	$ 653	$ 359	$ 1,012
2016	$ 672	$ 352	$ 1,024	$ 651	$ 342	$ 993
2017	$ 691	$ 357	$ 1,048	$ 650	$ 336	$ 986
2018	$ 710	$ 362	$ 1,072	$ 648	$ 331	$ 978
2019	$ 730	$ 367	$ 1,098	$ 646	$ 325	$ 971
2020	$ 751	$ 433	$ 1,183	$ 645	$ 371	$ 1,016
2021	$ 772	$ 378	$ 1,150	$ 643	$ 314	$ 957
2022	$ 794	$ 379	$ 1,173	$ 641	$ 306	$ 947
2023	$ 817	$ 384	$ 1,201	$ 640	$ 301	$ 941
2024	$ 840	$ 390	$ 1,230	$ 638	$ 296	$ 934
2025	$ 864	$ 395	$ 1,259	$ 637	$ 291	$ 928
2026	$ 889	$ 473	$ 1,362	$ 635	$ 338	$ 973
2027	$ 914	$ 406	$ 1,320	$ 634	$ 282	$ 915
2028	$ 940	$ 412	$ 1,352	$ 632	$ 277	$ 909
2029	$ 967	$ 418	$ 1,385	$ 631	$ 272	$ 903
2030	$ 995	$ 424	$ 1,419	$ 630	$ 268	$ 897
2031	$ 1,024	$ 429	$ 1,453	$ 628	$ 263	$ 892
2032	$ 1,053	$ 522	$ 1,575	$ 627	$ 311	$ 938
2033	$ 1,084	$ 442	$ 1,525	$ 626	$ 255	$ 880
2034	$ 1,115	$ 448	$ 1,563	$ 624	$ 251	$ 875
2035	$ 1,147	$ 454	$ 1,601	$ 623	$ 247	$ 869
2036	$ 1,180	$ 460	$ 1,641	$ 622	$ 242	$ 864
2037	$ 1,215	$ 467	$ 1,681	$ 620	$ 238	$ 859
2038	$ 1,250	$ 577	$ 1,827	$ 619	$ 286	$ 905
2039	$ 1,286	$ 480	$ 1,766	$ 618	$ 231	$ 849
2040	$ 1,323	$ 487	$ 1,810	$ 617	$ 227	$ 844

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

Operations and maintenance and administration

The State of Oregon is responsible for operations and maintenance of state highways. Exhibit 20 shows the State forecast for these costs through FYE 2040. In addition to preservation, maintenance, traditional operations, and central services (i.e.,

administration), Exhibit 20 also includes a column for other non-modernization highway programs. This "other" category includes the State's Safety, ITS, and Bridge programs, as well as non-modernization related debt service, and a few other smaller programs. In total, the State forecasts $1.08 billion in annual operating costs for FYE 2015, with an average annual growth rate of 2.6% per year.

Exhibit 20. Projected annual costs for ODOT non-modernization highway uses, FYE 2015 to 2040, millions (YOE $)

FYE	Preservation	Maintenance	Traditional Operations	Central Services	Other	Total Non-Mod Hwy Programs
2015	$ 220	$ 225	$ 32	$ 62	$ 540	$ 1,079
2016	$ 226	$ 232	$ 33	$ 64	$ 553	$ 1,109
2017	$ 233	$ 240	$ 34	$ 66	$ 566	$ 1,139
2018	$ 241	$ 247	$ 35	$ 68	$ 579	$ 1,170
2019	$ 248	$ 255	$ 36	$ 70	$ 593	$ 1,202
2020	$ 256	$ 263	$ 37	$ 72	$ 607	$ 1,235
2021	$ 264	$ 271	$ 39	$ 75	$ 621	$ 1,269
2022	$ 272	$ 279	$ 40	$ 77	$ 636	$ 1,304
2023	$ 280	$ 288	$ 41	$ 79	$ 652	$ 1,340
2024	$ 289	$ 297	$ 42	$ 82	$ 668	$ 1,378
2025	$ 298	$ 306	$ 44	$ 84	$ 684	$ 1,416
2026	$ 307	$ 315	$ 45	$ 87	$ 701	$ 1,456
2027	$ 317	$ 325	$ 46	$ 90	$ 719	$ 1,497
2028	$ 327	$ 335	$ 48	$ 92	$ 737	$ 1,539
2029	$ 337	$ 346	$ 49	$ 95	$ 755	$ 1,582
2030	$ 347	$ 356	$ 51	$ 98	$ 769	$ 1,622
2031	$ 358	$ 367	$ 52	$ 101	$ 789	$ 1,668
2032	$ 369	$ 379	$ 54	$ 104	$ 809	$ 1,716
2033	$ 387	$ 391	$ 56	$ 108	$ 830	$ 1,765
2034	$ 392	$ 403	$ 57	$ 111	$ 852	$ 1,815
2035	$ 404	$ 415	$ 59	$ 114	$ 874	$ 1,868
2036	$ 417	$ 428	$ 61	$ 118	$ 797	$ 1,821
2037	$ 430	$ 441	$ 63	$ 122	$ 821	$ 1,876
2038	$ 443	$ 455	$ 65	$ 125	$ 845	$ 1,934
2039	$ 457	$ 469	$ 67	$ 129	$ 871	$ 1,993
2040	$ 471	$ 484	$ 69	$ 133	$ 897	$ 2,054

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

Exhibit 21 shows the same long-term State forecast for operating costs, but is presented in constant 2015 dollars. This table shows that total costs for non-modernization highway programs (i.e., ODOT expenditures on everything other than capital projects) are expected to increase at a rate that is less than the anticipated rate of inflation. However, this is somewhat misleading as virtually all of the State's categories of operating expenses (Preservation, maintenance, traditional operations, central services, etc.) are expected to remain flat in constant 2015 dollars, growing at a rate equal to assumed inflation. However, one specific line-item that is not called out separately in Exhibit 21 is debt service for non-modernization projects, and these debt service expenditures are forecast to decrease over time as old debt is repaid.

Exhibit 21. Projected annual costs for ODOT non-modernization highway uses, FYE 2015 to 2040, millions (Constant 2015 $)

FYE	Preservation	Maintenance	Traditional Operations	Central Services	Other	Total Non-Mod Hwy Programs
2015	$ 220	$ 225	$ 32	$ 62	$ 540	$ 1,079
2016	$ 220	$ 225	$ 32	$ 62	$ 536	$ 1,109
2017	$ 220	$ 225	$ 32	$ 62	$ 532	$ 1,139
2018	$ 220	$ 225	$ 32	$ 62	$ 528	$ 1,170
2019	$ 220	$ 225	$ 32	$ 62	$ 524	$ 1,202
2020	$ 220	$ 225	$ 32	$ 62	$ 521	$ 1,235
2021	$ 220	$ 225	$ 32	$ 62	$ 517	$ 1,269
2022	$ 220	$ 225	$ 32	$ 62	$ 514	$ 1,304
2023	$ 220	$ 225	$ 32	$ 62	$ 511	$ 1,340
2024	$ 220	$ 225	$ 32	$ 62	$ 507	$ 1,378
2025	$ 220	$ 225	$ 32	$ 62	$ 504	$ 1,416
2026	$ 220	$ 225	$ 32	$ 62	$ 501	$ 1,456
2027	$ 220	$ 225	$ 32	$ 62	$ 498	$ 1,497
2028	$ 220	$ 225	$ 32	$ 62	$ 495	$ 1,539
2029	$ 220	$ 225	$ 32	$ 62	$ 493	$ 1,582
2030	$ 220	$ 225	$ 32	$ 62	$ 487	$ 1,622
2031	$ 220	$ 225	$ 32	$ 62	$ 484	$ 1,668
2032	$ 220	$ 225	$ 32	$ 62	$ 482	$ 1,716
2033	$ 220	$ 225	$ 32	$ 62	$ 479	$ 1,765
2034	$ 220	$ 225	$ 32	$ 62	$ 477	$ 1,815
2035	$ 220	$ 225	$ 32	$ 62	$ 475	$ 1,868
2036	$ 220	$ 225	$ 32	$ 62	$ 420	$ 1,821
2037	$ 220	$ 225	$ 32	$ 62	$ 419	$ 1,876
2038	$ 220	$ 225	$ 32	$ 62	$ 419	$ 1,934
2039	$ 220	$ 225	$ 32	$ 62	$ 418	$ 1,993
2040	$ 220	$ 225	$ 32	$ 62	$ 418	$ 2,054

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

Exhibit 22 compares projected ODOT costs for non-modernization highway uses (i.e., operations, maintenance, and administration) with projected ODOT revenues available for those uses. State policy generally requires operations and maintenance to be fully funded, before spending resources on capital projects. However, given the high costs for operations and maintenance and the relatively low level of revenues, this policy would result in virtually no resources available for capital projects statewide. Thus, ORS 366.507 requires that a certain portion of revenues be set aside to fund debt service and modernization projects, regardless of whether State highway funds are sufficient to cover all operations and maintenance needs. This results in a gap for non-modernization highway uses. For FYE 2015, this gap is projected to be $175 million, which means that State highway operations and maintenance efforts are about 84% funded. Over the forecast period, this gap as a percentage of annual non-modernization needs is expected to remain fairly constant.

Exhibit 22. Projected annual ODOT funding deficit for non-modernization highway uses, FYE 2015 to 2040, millions (YOE $)

FYE	Total Hwy Revenue Available for State	Hwy Revenue Reserved for D/S and Modernization	Remaining Hwy Revenue Available for State Needs	Non-Modernization State Needs	Non-Modernization Gap	Percent Funded
2015	$ 1,012	$ 108	$ 905	$ 1,079	$ (175)	84 %
2016	$ 1,024	$ 109	$ 915	$ 1.109	$ (194)	83 %
2017	$ 1,048	$ 110	$ 938	$ 1,139	$ (201)	82 %
2018	$ 1,072	$ 111	$ 961	$ 1,170	$ (209)	82 %
2019	$ 1,098	$ 112	$ 985	$ 1,202	$ (217)	82 %
2020	$ 1,183	$ 113	$ 1,070	$ 1,235	$ (165)	87 %
2021	$ 1,150	$ 114	$ 1,035	$ 1,269	$ (234)	82 %
2022	$ 1,173	$ 116	$ 1,058	$ 1,304	$ (247)	81 %
2023	$ 1,201	$ 117	$ 1,084	$ 1,340	$ (256)	81 %
2024	$ 1,230	$ 118	$ 1,112	$ 1,378	$ (266)	81 %
2025	$ 1,259	$ 119	$ 1,140	$ 1,416	$ (276)	81 %
2026	$ 1,352	$ 120	$ 1,241	$ 1,456	$ (215)	85 %
2027	$ 1,320	$ 122	$ 1,199	$ 1,497	$ (298)	80 %
2028	$ 1,352	$ 110	$ 1,242	$ 1,539	$ (297)	81 %
2029	$ 1,385	$ 99	$ 1,286	$ 1,582	$ (296)	81 %
2030	$ 1,419	$ 100	$ 1,319	$ 1,622	$ (303)	81 %
2031	$ 1,453	$ 102	$ 1,352	$ 1,668	$ (316)	81 %
2032	$ 1,575	$ 103	$ 1,473	$ 1,716	$ (243)	86 %
2033	$ 1,525	$ 104	$ 1,421	$ 1,765	$ (344)	81 %
2034	$ 1,563	$ 106	$ 1,457	$ 1,815	$ (358)	80 %
2035	$ 1,601	$ 107	$ 1,494	$ 1,868	$ (373)	80 %
2036	$ 1,641	$ 108	$ 1,532	$ 1,821	$ (288)	84 %
2037	$ 1,681	$ 110	$ 1,572	$ 1,876	$ (305)	84 %
2038	$ 1,827	$ 111	$ 1,716	$ 1,934	$ (218)	89 %
2039	$ 1,766	$ 113	$ 1,653	$ 1,993	$ (339)	83 %
2040	$ 1,810	$ 114	$ 1,696	$ 2,054	$ (357)	83 %

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

Exhibit 23 shows the same information as Exhibit 22, but in constant 2015 dollars. Although there are annual fluctuations over the 25-year forecast period, the annual funding gap is forecast to remain relatively stable, when measured in constant 2015 dollars.

Exhibit 23. Projected annual ODOT funding deficit for non-modernization highway uses, FYE 2015 to 2040, millions (Constant 2015 $)

FYE	Total Hwy Revenue Available for State	Hwy Revenue Reserved for D/S and Modernization	Remaining Hwy Revenue Available for Non-Modernization	Non-Modernization State Needs	Non-Modernization Gap	Percent Funded
2015	$ 1,012	$ 108	$ 904	$ 1,079	$ (175)	84 %
2016	$ 993	$ 106	$ 887	$ 1,075	$ (188)	82 %
2017	$ 986	$ 103	$ 883	$ 1,071	$ (188)	82 %
2018	$ 978	$ 101	$ 877	$ 1,067	$ (190)	82 %
2019	$ 971	$ 99	$ 872	$ 1,064	$ (192)	82 %
2020	$ 1,016	$ 97	$ 919	$ 1,060	$ (141)	87 %
2021	$ 957	$ 95	$ 862	$ 1,057	$ (195)	82 %
2022	$ 947	$ 93	$ 854	$ 1,053	$ (199)	81 %
2023	$ 941	$ 91	$ 850	$ 1,050	$ (200)	81 %
2024	$ 934	$ 90	$ 844	$ 1,047	$ (203(	81 %
2025	$ 928	$ 88	$ 840	$ 1,044	$ (204)	80 %
2026	$ 973	$ 86	$ 887	$ 1,041	$ (154)	85 %
2027	$ 915	$ 84	$ 831	$ 1,038	$ (207)	80 %
2028	$ 909	$ 74	$ 835	$ 1,035	$ (200)	81 %
2029	$ 903	$ 65	$ 838	$ 1,032	$ (194)	81 %
2030	$ 897	$ 63	$ 834	$ 1,026	$ (192)	81 %
2031	$ 864	$ 57	$ 807	$ 959	$ (193)	81 %
2032	$ 938	$ 61	$ 877	$ 1,021	$ (144)	86 %
2033	$ 880	$ 60	$ 820	$ 1,019	$ (199)	81 %
2034	$ 875	$ 59	$ 816	$ 1,016	$ (200)	80 %
2035	$ 869	$ 58	$ 811	$ 1,014	$ (203)	80 %
2036	$ 864	$ 57	$ 807	$ 959	$ (152)	84 %
2037	$ 859	$ 56	$ 803	$ 959	$ (156)	84 %
2038	$ 905	$ 55	$ 850	$ 958	$ (108)	89 %
2039	$ 849	$ 54	$ 795	$ 958	$ (163)	83 %
2040	$ 844	$ 53	$ 791	$ 957	$ (166)	83 %

Capital Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

ODOT does not track state expenditures on operations and maintenance at the local level, and therefore we have no forecast for the amount of State expenditures for operations and maintenance of state highways within the BMPO. Based on the Statewide analysis shown in Exhibit 22 and Exhibit 23, it is reasonable to assume that the State will have funding to cover approximately 82% of the need for highway operations and maintenance in the BMPO, and that annual funding for operations and maintenance should remain stable (in constant 2015 dollars) over the forecast period.

Capital projects

Exhibit 24 shows ODOT's projected revenues for modernization under ORS 366.507. In FYE 2015, 31% of State revenue for modernization is dedicated to pay debt service on previous bonds for transportation projects. These debt service payments continue through FYE 2028. In FYE 2015, ODOT forecasts $56.4 million in revenue for modernization projects net of debt service and federal match (i.e., revenue that ODOT can spend on new capital projects). This level of funding is forecast to fluctuate some over time, but will generally remain at today's funding level in constant 2015 dollars.

Exhibit 24. Projected statewide annual revenue available for transportation modernization projects, ODOT, FYE 2015 to 2040 (millions)

FYE	YOE $				Constant 2015 $			
	Funds for Hwy Modernization ORS 366.507	Funds Reserved for Debt Service	Funds for Fed Modernization Projects	Funds Net of Debt Service & Federal Match	Funds for Hwy Modernization ORS366.507	Funds Reserved for Debt Service	Funds for Fed Modernizations Projects	Funds Net of Debt Service & Federal Match
2015	$ 82.6	$ 25.2	$ 1.0	$ 56.4	$ 82.6	$ 25.2	$ 1.0	$ 56.4
2016	$ 83.7	$ 25.2	$ 1.0	$ 57.5	$ 81.2	$ 24.4	$ 1.0	$ 55.7
2017	$ 84.8	$ 25.2	$ 1.0	$ 58.5	$ 79.7	$ 23.7	$ 1.0	$ 55.1
2018	$ 85.9	$ 25.2	$ 1.0	$ 59.6	$ 78.3	$ 23.0	$ 0.9	$ 54.4
2019	$ 87.0	$ 25.2	$ 1.1	$ 60.7	$ 77.0	$ 22.3	$ 0.9	$ 53.7
2020	$ 88.1	$ 25.2	$ 8.5	$ 54.4	$ 75.6	$ 21.6	$ 7.3	$ 46.7
2021	$ 89.3	$ 25.2	$ 1.1	$ 63.0	$ 74.3	$ 21.0	$ 0.9	$ 52.4
2022	$ 90.4	$ 25.2	$ 1.1	$ 64.1	$ 73.0	$ 20.4	$ 0.9	$ 51.8
2023	$ 91.6	$ 25.2	$ 1.1	$ 66.3	$ 71.7	$ 19.7	$ 0.9	$ 51.1
2024	$ 92.8	$ 25.2	$ 1.1	$ 66.5	$ 70.5	$ 19.1	$ 0.9	$ 50.5
2025	$ 94.0	$ 25.2	$ 1.1	$ 67.6	$ 69.3	$ 18.6	$ 0.8	$ 49.8
2026	$ 95.2	$ 25.2	$ 10.1	$ 59.9	$ 68.0	$ 18.0	$ 7.2	$ 42.8
2027	$ 96.4	$ 25.2	$ 1.2	$ 70.1	$ 66.9	$ 17.5	$ 0.8	$ 48.6
2028	$ 97.7	$ 12.6	$ 1.2	$ 83.9	$ 65.7	$ 8.5	$ 0.8	$ 56.4
2029	$ 99.0	$ -	$ 1.2	$ 97.8	$ 64.5	$ -	$ 0.8	$ 63.8
2030	$ 100.3	$ -	$ 1.2	$ 99.0	$ 63.4	$ -	$ 0.8	$ 62.6
2031	$ 101.6	$ -	$ 1.2	$ 100.3	$ 62.3	$ -	$ 0.8	$ 61.5
2032	$ 102.9	$ -	$ 12.0	$ 90.9	$ 61.2	$ -	$ 7.1	$ 54.1
2033	$ 104.2	$ -	$ 1.3	$ 102.9	$ 60.2	$ -	$ 0.7	$ 59.4
2034	$ 105.6	$ -	$ 1.3	$ 104.3	$ 59.1	$ -	$ 0.7	$ 58.4
2035	$ 106.9	$ -	$ 1.3	$ 105.6	$ 58.1	$ -	$ 0.7	$ 57.4
2036	$ 108.3	$ -	$ 1.3	$ 107.0	$ 57.1	$ -	$ 0.7	$ 56.4
2037	$ 109.7	$ -	$ 1.4	$ 108.4	$ 56.1	$ -	$ 0.7	$ 55.4
2038	$ 111.2	$ -	$ 14.2	$ 96.9	$ 55.1	$ -	$ 7.1	$ 48.0
2039	$ 112.6	$ -	$ 1.4	$ 111.2	$ 54.1	$ -	$ 0.7	$ 53.5
2040	$ 114.1	$ -	$ 1.4	$ 112.7	$ 53.2	$ -	$ 0.7	$ 52.5

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

ODOT uses an agreed upon formula to allocate modernization revenues to each of the five ODOT regions across the State. The formula is based on population, vehicle miles traveled (VMT), ton miles traveled, vehicle registrations, and revenue estimates from the 1999-2001 biennium. The BMPO is located in Region 4. Exhibit 25 shows the ODOT calculation of Region 4's share of total ODOT revenue for modernization projects, resulting in Region 4 receiving 9.9% of the State's revenues.

Exhibit 25. ODOT Region 4 share of State revenue for transportation modernization projects

County	Population (2011)	VMT (2011)	Ton Miles Traveled(2011)	Vehicle Registration (2011)	Projected Revenue (1999-2011)	Modernization Needs (1999)
Crook	20,855	90,031,740	302,815,362	31,946	15,016,000	
Deschutes	158,875	627,627,967	3,683,820,392	198,008	81,945,000	
Gilliam	1,880	146,396,755	1,795,009,114	3,678	21,211,000	
Jefferson	21,845	185,522,456	1,152,991,696	26,304	24,980,000	
Klamath	66,580	423,596,334	3,144,659,132	84,857	71,971,000	
Lake	7,885	67,348,669	387,085,234	13,113	14,863,000	
Sherman	1,765	111,043,950	1,227,350,708	3,725	16,956,000	
Wasco	25,300	325,122,035	2,667,279,490	31,775	44,629,000	
Wheeler	1,435	20,055,692	136,589,258	2,431	5,921,000	
Region 4 Total	306,420	1,996,745,598	14,497,870,386	395,837	297,492,000	
Statewide Total	3,857,625	19,426,126,596	109,029,809,309	4,062,873	2,698,465,000	
Region 4 % of State	7.94%	10.28%	13.30%	9.74%	11.02%	9.90%

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

There is no agreed upon formula for how Region 4 allocates ODOT revenue for modernization projects in different municipalities within the Region. Instead, it is a political process, where local representatives meet with ODOT Region 4 staff to discuss modernization needs and agree on a fair share of revenue. For the purposes of this analysis, we met with staff of ODOT Region 4 and the BMPO to discuss appropriate assumptions for future years. We decided that the same formula (population, VMT, etc.) could be used to estimate the likely allocation of funds between Region 4 counties. We assumed that 50% of funding for projects in Deschutes County would likely be allocated to projects in the BMPO, as the BMPO area has a little more than 50% of the total County population. Based on these assumptions, we calculated the BMPO would receive a 1.93% share of future State revenue for modernization. Exhibit 26 shows these revenue forecasts, which result in roughly $1 million per year in constant 2015 dollars.

Exhibit 26. Projected annual allocation of revenue to the BMPO for transportation modernization projects, FYE 2015 to 2040

FYE	YOE $			Constant 2015 $		
	Funds Net of Debt Service & Federal Match	BMPO Share	State Modernization Funds for BMPO	Funds for Fed Modernization Projects	BMPO Share	State Modernization Funds for BMPO
2015	$ 56,402,673	1.93 %	$ 1,088,829	$ 56,402,700	1.93 %	$ 1,088,829
2016	$ 57,462,510	1.93 %	$ 1,109,289	$ 55,734,700	1.93 %	$ 1,075,934
2017	$ 58,536,112	1.93 %	$ 1,130,014	$ 55,066,900	1.93 %	$ 1,063,042
2018	$ 59,623,656	1.93 %	$ 1,151,009	$ 54,401,100	1.93 %	$ 1,050,089
2019	$ 60,725,323	1.93 %	$ 1,172,276	$ 53,739,200	1.93 %	$ 1,037,412
2020	$ 54,419,235	1.93 %	$ 1,050,540	$ 46,711,800	1.93 %	$ 901,751
2021	$ 62,971,766	1.93 %	$ 1,215,642	$ 52,428,400	1.93 %	$ 1,012,107
2022	$ 64,116,915	1.93 %	$ 1,237,749	$ 51,778,200	1.93 %	$ 999,556
2023	$ 65,276,936	1.93 %	$ 1,260,143	$ 51,129,400	1.93 %	$ 987,031
2024	$ 66,452,021	1.93 %	$ 1,282,827	$ 50,483,900	1.93 %	$ 974,570
2025	$ 67,642,367	1.93 %	$ 1,305,806	$ 49,843,300	1.93 %	$ 962,203
2026	$ 59,934,089	1.93 %	$ 1,157,001	$ 42,834,500	1.93 %	$ 826,901
2027	$ 70,069,636	1.93 %	$ 1,352,664	$ 48,571,800	1.93 %	$ 937,657
2028	$ 83,906,963	1.93 %	$ 1,619,787	$ 56,415,600	1.93 %	$ 1,089,079
2029	$ 97,760,358	1.93 %	$ 1,887,221	$ 63,754,000	1.93 %	$ 1,230,743
2030	$ 99,030,031	1.93 %	$ 1,911,731	$ 62,641,600	1.93 %	$ 1,209,269
2031	$ 100,316,193	1.93 %	$ 1,936,560	$ 61,547,500	1.93 %	$ 1,188,148
2032	$ 90,913,023	1.93 %	$ 1,755,036	$ 54,102,000	1.93 %	$ 1,044,415
2033	$ 102,938,842	1.93 %	$ 1,987,189	$ 59,416,400	1.93 %	$ 1,147,008
2034	$ 104,275,766	1.93 %	$ 2,012,998	$ 58,378,600	1.93 %	$ 1,126,973
2035	$ 105,630,053	1.93 %	$ 2,039,142	$ 57,357,800	1.93 %	$ 1,107,267
2036	$ 107,001,926	1.93 %	$ 2,065,625	$ 56,355,400	1.93 %	$ 1,087,916
2037	$ 108,391,616	1.93 %	$ 2,092,453	$ 55,369,600	1.93 %	$ 1,068,886
2038	$ 96,941,139	1.93 %	$ 1,871,406	$ 48,031,100	1.93 %	$ 927,219
2039	$ 111,225,371	1.93 %	$ 2,147,157	$ 53,450,600	1.93 %	$ 1,031,840
2040	$ 112,669,909	1.93 %	$ 2,175,043	$ 52,517,000	1.93 %	$ 1,013,818

Source: ODOT Long-Range Revenue Tables 2013 v3. Summarized by ECONorthwest.

These long-term projections of State funds for modernization in the BMPO are consistent with short-term planned projects in the Statewide Transportation Improvement Program (STIP). Exhibit 27 shows all projects in the current STIP (FYE 2015 to 2018) that are located in the BMPO. These projects combine for a total cost of $18.6 million, with $8.7 million in funding coming from the State, and the remaining funding from "other" local sources. The revenue amounts in Exhibit 27, however, include funding from previous years for projects that spanned multiple STIP programming cycles. Accounting for those prior year revenues, the current STIP shows roughly $4.6 million in ODOT spending on capital projects in the BMPO over the next four years, or $1.1 million per year.

Exhibit 27. Projected State funding for STIP projects in BMPO, FYE 2015 to 2018

Route	Description	Funding by source				
		STP-FLX	Interstate Maintenance	State	Other	Total
US-97	Corridor planning & development		$ 4,780,685		$ 8,703,315	**$ 13,484,000**
South 3rd Street	Bike and ped improvements from Franklin To Murphy Road	$ 2,510,645			$ 833,355	**$ 3,344,000**
US-20	Traffic signal replacement	$ 744,759		$ 30,000	$ 285,241	**$ 1,060,000**
OB Riley Road	Communication infrastructure for signals to ODOT facility	$ 108,574			$ 27,426	**$ 136,000**
Empire Avenue	Communication infrastructure for signals to ODOT facility	$ 117,547			$ 57,453	**$ 175,000**
US-97	Install cameras	$ 354,434		$ 5,000	$ 40,566	**$ 400,000**
Total		**$ 3,835,959**	**$ 4,780,685**	**$ 35,000**	**$ 9,947,356**	**$ 18,599,000**

Source: ODOT Statewide Transportation Improvement Plan 2015-2018; http://www.oregon.gov/ODOT/TD/STIP/Pages/STIPDocs.aspx#2015_-_2018_STIP. Summarized by ECONorthwest.

In addition to the projected State revenue sources shown in Exhibit 26 and Exhibit 27, there are a few short-term funding commitments from the State for capital projects. The State has pledged $1 million in funding from the Highway Safety Improvement Program (HSIP). The State has also committed $5 million in funding for US-97/Cooley Road intersection improvements through agreements with the City of Bend. Exhibit 28 shows the forecast of total ODOT spending on transportation capital projects in the BMPO from FYE 2015 to 2040.

Exhibit 28. Projected State funding for capital projects in BMPO, FYE 2015 to 2040

FYE	Annual Funding YOE $	Annual Funding Constant 2015$
2015	$ 1,088,829	$ 1,088,829
2016	$ 7,109,289	$ 6,895,527
2017	$ 1,130,014	$ 1,063,042
2018	$ 1,151,009	$ 1,050,189
2019	$ 1,172,276	$ 1,037,412
2020	$ 1,050,540	$ 901,751
2021	$ 1,215,642	$ 1,012,107
2022	$ 1,237,749	$ 999,556
2023	$ 1,260,143	$ 987,031
2024	$ 1,282,827	$ 974,570
2025	$ 1,305,806	$ 962,203
2026	$ 1,157,001	$ 826,901
2027	$ 1,352,664	$ 937,657
2028	$ 1,619,787	$ 1,089,079
2029	$ 1,887,221	$ 1,230,743
2030	$ 1,911,731	$ 1,209,269
2031	$ 1,936,560	$ 1,188,148
2032	$ 1,755,036	$ 1,044,415
2033	$ 1,987,189	$ 1,147,008
2034	$ 2,012,998	$ 1,126,973
2035	$ 2,039,142	$ 1,107,267
2036	$ 2,065,625	$ 1,087,916
2037	$ 2,092,453	$ 1,068,886
2038	$ 1,871,406	$ 927,219
2039	$ 2,147,157	$ 1,031,840
2040	$ 2,175,043	$ 1,013,818
Total	**$ 47,015,137**	**$ 33,009,356**
Average	**$ 1,808,275**	**$ 1,269,591**

Calculated by ECONorthwest based on ODOT Long-Range Revenue Tables 2013 v3, adjusted to reflect additional State revenues in FYE 2016.

Deschutes County

Deschutes County is responsible for building and maintaining an extensive roadway network. The vast majority of the County road network is in unincorporated areas of the County. Only a small portion of the BMPO is in unincorporated Deschutes County, with the bulk of the BMPO located within the city limits of Bend. Thus, only a small fraction of the County's transportation expenditures occur within the BMPO, and those expenditures are focused on the unincorporated areas of the BMPO, which are generally located east and south of the City of the Bend.

The Deschutes County budget does not show a distinction between expenditures in the BMPO and expenditures elsewhere in the County. Therefore, our analysis needed to estimate the portion of the County's transportation expenditures occurring in the BMPO. For operations and maintenance, we based this estimate off of the number of lane miles of County-owned roads in the BMPO, shown in Exhibit 29. In total, the County owns 58.1 lane miles within the BMPO.

Exhibit 29. Summary of Deschutes County-owned roadway lane miles, 2014

Road Type	Lane Miles
Arterials	10.4
Collectors	10.0
Local Roads	36.8
Forest Highway	1.0
Total	**58.1**

Source: Deschutes County, 2014

Operations, maintenance and administration

Exhibit 30 shows historical budget information for Deschutes County on revenues for transportation operations, maintenance and administration. Annual average revenues (excluding beginning working capital) were $15.8 million over this six-year period, with most revenue sources experiencing little to no growth until the FYE 2015 proposed budget, which shows a significant increase in federal funding and interfund charges and transfers.

Exhibit 30. Historical transportation revenues for operations, maintenance and administration, Deschutes County, FYE 2010 to 2015 (YOE dollars)

	FYE 2010 Actual	FYE 2011 Actual	FYE 2012 Actual	FYE 2013 Actual	FYE 2014 Budgeted	FYE 2015 Proposed
Resources						
Beginning working capital	$4,891,649	$3,419,603	$3,417,158	$4,723,852	$6,014,368	$8,954,332
Federal payments	$2,633,352	$2,390,545	$2,086,374	$1,413,204	$496,270	$2,300,950
State payments	$7,782,520	$9,043,510	$11,760,863	$11,040,333	$11,327,952	$11,822,629
Local payments	$654,792	$809,788	$354,425	$372,871	$700,000	$804,200
Interfund charges/transfers	$1,951,629	$1,603,373	$2,331,329	$1,867,886	$2,120,148	$3,821,856
Sale of assets, land, or equipment	$276,838	$216,215	$309,049	$287,313	$270,000	$271,000
Other	$674,018	$644,582	$67,760	$64,743	$40,200	$57,500
Total Revenues	*$18,864,798*	*$18,127,616*	*$20,326,958*	*$19,770,202*	*$20,958,938*	*$28,032,467*

Sources:
Deschutes County, Oregon Proposed Budget Fiscal Year 2015, Pages 152-156
Deschutes County, Oregon Adopted Budget Fiscal Year 2013, Pages 144-151

To estimate the annual cost for operations, maintenance and administration of County roads within the BMPO, the County estimated the average annual cost per lane mile to be $10,000 to $15,000. Using the mid-range estimate of $12,500 per lane mile, and the total 58.1 lane miles within the BMPO, we calculate the annual cost to be about $725,000 per year, or roughly 5% of the County's recent historical expenditures on operations, maintenance, and administration. We assume that annual funding for County operations, maintenance, and administration will remain flat in constant 2015 dollars, increasing over time at a rate equal to inflation.

Capital projects

Exhibit 31 shows historical annual revenues for Deschutes County transportation capital projects. Excluding beginning working capital, annual revenues have averaged $1.1 million over the six-year period. Interfund transfers are the largest revenue source, accounting for 60% of total revenue over this period of time.

Exhibit 31. Historical transportation revenues for capital projects, Deschutes County, FYE 2010 to 2015 (YOE dollars)

	FYE 2010 Actual	FYE 2011 Actual	FYE 2012 Actual	FYE 2013 Actual	FYE 2014 Budgeted	FYE 2015 Proposed
Resources						
Beginning working capital	$1,614,941	$1,781,748	$2,176,054	$2,197,577	$2,525,909	$3,198,221
Licenses & Permits	$199,977	$291,982	$390,349	$523,614	$325,000	$425,000
Interfund Transfers	$408,346	$639,073	$816,000	$451,400	$607,380	$835,060
Other	$253,244	$40,047	$76,081	$33,516	$12,850	$8,100
Total Resources	*$2,476,508*	*$2,752,580*	*$3,458,484*	*$3,206,107*	*$3,471,139*	*$4,466,381*

Sources:
Deschutes County, Oregon Proposed Budget Fiscal Year 2015, Pages 152-156
Deschutes County, Oregon Adopted Budget Fiscal Year 2013, Pages 144-151

The County CIP shows planned funding for capital projects for the next five years. None of the transportation projects in the County's CIP are located within the BMPO. Although it is possible the County may have some future capital expenditures in the area, any such projects would be speculative at this time, and are unlikely to result in a significant amount of funding. Therefore, our analysis assumes no future funding from Deschutes County for capital projects in the BMPO.

Cascades East Transit (CET)

Cascades East Transit (CET) – CET is the public transportation service administered by the Central Oregon Intergovernmental Council (COIC). CET provides transportation services for people across the three Central Oregon counties of Deschutes, Jefferson, and Crook.

2007 was the first year in which fixed-route transit service operated in the City of Bend. This initial transit service was operated by the City of Bend, but in 2010, responsibility for public transit was turned over to CET. In addition to serving the City of Bend, CET provides regional transit services, connecting Bend with neighboring cities like Madras, Sisters, Redmond, Prineville, and LaPine, as well as destinations like Mt. Bachelor Ski Resort. In addition, Dial-a-Ride (curb-to-burb) service is available to persons with disabilities and low-income seniors in Bend city limits.

CET's budget is divided into two geographies: The "urban" service area includes transit service within the BMPO, and the "rural" service area includes transit service elsewhere

in CET's tri-county service area. Throughout this report, we refer to the urban service portion of CET's budget, unless otherwise stated.

The 2013 Bend Transit Plan recommends strategies to coordinate future transit investments with transit-supportive land uses. The Plan identified four sets of service options, outlining different improvements that could be made to CET service to achieve different levels of transit ridership. Input from staff at the BMPO and CET indicate that the most likely scenario that will be implemented going forward is the "mid-term" scenario, which calls for increasing total annual fixed-route vehicle revenue hours from 20,700 in 2011 to 32,900, and increasing the number of buses operating during peak hours from seven to nine.

Exhibit 32 shows the historical annual revenues and expenditures for CET urban service area, including actual revenues for FYE 2012 to 2013. Note that we were unable to obtain budget information for more recent years. Also note that CET historical budget documents do not separate operating, maintenance and administration from capital expenditures, as reflected in Exhibit 32.

Exhibit 32. Historical annual transit revenues and expenditures, Cascade East Transit - urban service area, FYE 2012 to 2013 (YOE $)

		FYE 2012	FYE 2013
Resources			
Federal Funds	$	705,913	707,376
ODOT Funds	$	379,817	257,404
City of Bend	$	1,205,218	962,743
Deschutes County	$	114,947	139,582
Bus Fares	$	293,938	275,988
Advertising	$	20,000	20,000
Other	$	34,334	62,995
Total Revenue	$	2,754,167	2,426,087
Expenditures			
Administration	$	60,306	84,246
Personal Service	$	259,442	327,270
Materials and Services	$	2,171,457	1,999,518
Capital Expenditures	$	265,244	-
Total Expenditures	$	2,756,450	2,411,035
Annual Surplus (Deficit)	$	(2,282)	15,053

Source: COIC Income Statements, 485-Bend Area Transit Admin, and 486-Bend Area Transit Program, for 12 Periods Ended 6/20/12 and 6/30/13.

Revenue sources for CET

Funding for operations, maintenance, and administration of CET comes from federal, state, and local sources, as well as revenue derived from CET operations (i.e., fares, public-private partnerships, and other sources). Federal sources include: FTA Section 5307 – Urbanized Area Formula Program, and FTA Section 5310 – Enhanced Mobility for Seniors and Individuals with Disabilities Program. State funding sources include the Special Transportation Fund, and Oregon Lottery. The largest single source of revenue

for CET operations is an allocation from the City of Bend, agreed upon in a multi-year agreement with COIC that runs through September 1, 2015, with the potential to be extended for additional years.

Exhibit 33 shows projected annual revenues for transit operations, maintenance and administration, and capital projects for CET. Projections for FYE 2015 to FYE 2022 were provided by the BMPO in the Bend Transit Plan. Projections for future years were calculated by ECONorthwest.

Total revenue is projected to grow from just over three million to more than seven million in 2040 (Exhibit 33). Federal funds are the largest source of revenue, with funds from the City of Bend being the second largest source of revenue.

Exhibit 33. Projected annual revenues for transit operations, maintenance and administration, and capital projects, Cascades East Transit – urban service area, FYE 2015 to 2040 (YOE $)

FYE	Fare Revenue	Intergovernmental Revenue			Other Revenue	Total Revenue
		Federal	State	City		
2015	$ 453,389	$ 1,454,069	$ 126,368	$ 1,079,675	$ 38,463	$ 3,151,964
2016	$ 512,937	$ 1,497,690	$ 130,159	$ 1,106,667	$ 42,076	$ 3,289,529
2017	$ 557,539	$ 1,542,621	$ 134,063	$ 1,134,333	$ 43,155	$ 3,411,711
2018	$ 694,809	$ 1,588,900	$ 138,085	$ 1,162,692	$ 55,299	$ 3,639,785
2019	$ 755,956	$ 1,636,566	$ 142,228	$ 1,191,759	$ 56,710	$ 3,783,219
2020	$ 822,361	$ 1,685,664	$ 146,495	$ 1,221,553	$ 58,156	$ 3,934,229
2021	$ 892,099	$ 1,736,234	$ 150,890	$ 1,252,092	$ 59,640	$ 4,090,955
2022	$ 967,591	$ 1,788,321	$ 155,416	$ 1,283,394	$ 61,162	$ 4,255,884
2023	$ 997,586	$ 1,843,759	$ 160,234	$ 1,323,179	$ 63,058	$ 4,387,816
2024	$ 1,028,511	$ 1,900,915	$ 165,201	$ 1,364,198	$ 65,013	$ 4,523,839
2025	$ 1,060,395	$ 1,959,844	$ 170,322	$ 1,406,488	$ 67,028	$ 4,664,078
2026	$ 1,093,268	$ 2,020,599	$ 175,602	$ 1,450,089	$ 69,106	$ 4,808,664
2027	$ 1,127,159	$ 2,083,238	$ 181,046	$ 1,495,042	$ 71,248	$ 4,957,733
2028	$ 1,162,101	$ 2,147,818	$ 186,658	$ 1,541,388	$ 73,457	$ 5,111,422
2029	$ 1,198,126	$ 2,214,400	$ 192,445	$ 1,589,171	$ 75,734	$ 5,269,877
2030	$ 1,235,268	$ 2,283,047	$ 198,411	$ 1,638,435	$ 78,082	$ 5,433,243
2031	$ 1,273,561	$ 2,353,821	$ 204,561	$ 1,689,227	$ 80,503	$ 5,601,673
2032	$ 1,313,042	$ 2,426,790	$ 210,903	$ 1,741,593	$ 82,998	$ 5,775,325
2033	$ 1,353,746	$ 2,502,020	$ 217,441	$ 1,795,582	$ 85,571	$ 5,954,360
2034	$ 1,395,712	$ 2,579,583	$ 224,181	$ 1,851,245	$ 88,224	$ 6,138,945
2035	$ 1,438,979	$ 2,659,550	$ 231,131	$ 1,908,634	$ 90,959	$ 6,329,253
2036	$ 1,483,587	$ 2,741,996	$ 238,296	$ 1,967,802	$ 93,778	$ 6,525,459
2037	$ 1,529,579	$ 2,826,998	$ 245,683	$ 2,028,803	$ 96,686	$ 6,727,749
2038	$ 1,576,996	$ 2,914,635	$ 253,300	$ 2,091,696	$ 99,683	$ 6,936,309
2039	$ 1,352,882	$ 3,004,988	$ 261,152	$ 2,156,539	$ 102,773	$ 7,151,334
2040	$ 1,676,285	$ 3,098,143	$ 269,248	$ 2,223,392	$ 105,959	$ 7,373,026

Source: Calculated by ECONorthwest, based on 2013 City of Bend Transportation System Plan

Exhibit 34 shows the same financial projections as Exhibit 33, but adjusted for inflation and presented in constant 2015 dollars.

Exhibit 34. Projected annual revenues for transit operations, maintenance and administration, and capital projects, Cascades East Transit – urban service area, FYE 2015 to 2040 (Constant 2015 $)

FYE	Fare Revenue	Intergovernmental Revenue			Other Revenue	Total Revenue
		Federal	State	City		
2015	$ 453,389	$ 1,454,389	$ 126,368	$ 1,079,675	$ 38,463	$ 3,151,964
2016	$ 497,514	$ 1,452,658	$ 126,245	$ 1,073,392	$ 40,811	$ 3,190,620
2017	$ 524,496	$ 1,451,196	$ 126,118	$ 40,597	$ 40,597	$ 3,209,512
2018	$ 633,950	$ 1,449,726	$ 125,990	$ 1,060,850	$ 50,455	$ 3,320,972
2019	$ 668,988	$ 1,448,288	$ 125,865	$ 1,054,654	$ 50,186	$ 3,347,981
2020	$ 705,889	$ 1,446,922	$ 125,747	$ 1,048,543	$ 49,919	$ 3,377,021
2021	$ 742,735	$ 1,445,537	$ 125,627	$ 1,042,454	$ 49,654	$ 3,406,007
2022	$ 781,387	$ 1,444,174	$ 125,508	$ 1,036,416	$ 49,392	$ 3,436,876
2023	$ 781,379	$ 1,444,160	$ 125,506	$ 1,036,406	$ 49,391	$ 3,436,842
2024	$ 781,366	$ 1,444,135	$ 125,504	$ 1,036,388	$ 49,391	$ 3,436,784
2025	$ 781,369	$ 1,444,141	$ 125,505	$ 1,036,392	$ 49,391	$ 3,436,797
2026	$ 781,352	$ 1,444,110	$ 125,502	$ 1,036,370	$ 49,390	$ 3,436,724
2027	$ 781,338	$ 1,444,085	$ 125,500	$ 1,036,352	$ 49,389	$ 3,436,665
2028	$ 781,349	$ 1,444,105	$ 125,502	$ 1,036,367	$ 49,390	$ 3,436,712
2029	$ 781,353	$ 1,444,111	$ 125,502	$ 1,036,371	$ 49,390	$ 3,436,727
2030	$ 781,370	$ 1,444,144	$ 125,505	$ 1,036,394	$ 49,391	$ 3,436,804
2031	$ 781,374	$ 1,444,151	$ 125,505	$ 1,036,399	$ 49,391	$ 3,436,820
2032	$ 781,386	$ 1,444,174	$ 125,508	$ 1,036,416	$ 49,392	$ 3,436,875
2033	$ 781,383	$ 1,444,167	$ 125,507	$ 1,036,411	$ 49,392	$ 3,436,860
2034	$ 781,386	$ 1,444,174	$ 125,507	$ 1,036,416	$ 49,392	$ 3,436,875
2035	$ 781,374	$ 1,444,152	$ 125,506	$ 1,036,400	$ 49,391	$ 3,436,823
2036	$ 781,370	$ 1,444,144	$ 125,505	$ 1,036,394	$ 49,391	$ 3,436,804
2037	$ 781,354	$ 1,444,114	$ 125,502	$ 1,036,373	$ 49,390	$ 3,436,733
2038	$ 781,348	$ 1,444,104	$ 125,501	$ 1,036,365	$ 49,389	$ 3,436,709
2039	$ 781,336	$ 1,444,081	$ 125,499	$ 1,036,349	$ 49,389	$ 3,436,655
2040	$ 781,339	$ 1,444,086	$ 125,499	$ 1,036,353	$ 49,389	$ 3,436,667

Source: Calculated by ECONorthwest, based on 2013 City of Bend Transportation System Plan

The proposed transit-service improvements in the mid-term scenario identified in the Bend Transit Plan are projected to increase annual operating expenses for fixed-route operating costs from approximately $1.5 million per year to $2.4 million per year (constant dollars, unadjusted for inflation), an increase of $880,000. Additionally, this increased level of service is estimated to increase the cost of Dial-a-Ride service by 10%, from $1.0 million to $1.1 million per year.

Exhibit 35 shows projected annual expenditures for transit operations, maintenance and administration, and capital projects for CET, as well as the projected revenue streams to fund these operations and capital projects. Projections for FYE 2015 to FYE 2022 were provided by the BMPO in the Bend Transit Plan. Projections for future years were calculated by ECONorthwest, assuming FYE 2022 levels of expenditures are maintained through FYE 2040, increasing annually at a pace equal to the rate of inflation.

Total expenditures for CET are projected to grow from just under three million dollars in 2015 to more than eight million dollars in 2040. Beginning in 2016, CET is expected to

experience an operating deficit that will be sustained for the remainder of the forecast period. This annual deficit is projected to grow to more than $850,000 in 2040 (YOE $).

Exhibit 35. Projected total annual revenues and expenditures for transit operations, maintenance and administration, and capital projects, Cascades East Transit – urban service area, FYE 2015 to 2040 (YOE $)

FYE	Total Revenue	Expenditures			Funding Gap
		Operations	Capital	Total Expenditures	
2015	$ 3,151,964	$ 2,519,615	$ 344,412	$ 2,864,027	$ 287,937
2016	$ 3,289,529	$ 2,851,570	$ 495,658	$ 3,347,228	$ (57,699)
2017	$ 3,411,711	$ 2,935,700	$ 623,673	$ 3,559,373	$ (147,662)
2018	$ 3,639,785	$ 3,768,913	$ 773,848	$ 4,542,761	$ (902,976)
2019	$ 3,783,219	$ 3,884,252	$ 461,023	$ 4,345,275	$ (562,056)
2020	$ 3,934,229	$ 4,003,297	$ 468,266	$ 4,471,563	$ (537,334)
2021	$ 4,090,955	$ 4,126,170	$ 475,790	$ 4,601,960	$ (511,005)
2022	$ 4,255,884	$ 4,252,998	$ 496,784	$ 4,749,782	$ (493,898)
2023	$ 4,387,816	$ 4,384,841	$ 512,184	$ 4,897,025	$ (509,209)
2024	$ 4,523,839	$ 4,520,771	$ 528,062	$ 5,048,833	$ (524,994)
2025	$ 4,664,078	$ 4,660,915	$ 544,432	$ 5,205,347	$ (541,269)
2026	$ 4,808,664	$ 4,805,403	$ 561,309	$ 5,366,713	$ (558,048)
2027	$ 4,957,733	$ 4,954,371	$ 578,710	$ 5,533,081	$ (575,348)
2028	$ 5,111,422	$ 5,107,956	$ 596,650	$ 5,704,606	$ (593,184)
2029	$ 5,269,877	$ 5,266,303	$ 615,146	$ 5,881,449	$ (611,572)
2030	$ 5,433,243	$ 5,429,558	$ 634,216	$ 6,063,774	$ (630,531)
2031	$ 5,601,673	$ 5,597,875	$ 653,876	$ 6,251,751	$ (650,078)
2032	$ 5,775,325	$ 5,771,409	$ 674,146	$ 6,445,555	$ (670,230)
2033	$ 5,954,360	$ 5,950,322	$ 695,045	$ 6,645,367	$ (691,007)
2034	$ 6,138,945	$ 6,134,782	$ 716,591	$ 6,851,374	$ (712,428)
2035	$ 6,329,253	$ 6,324,961	$ 738,806	$ 7,063,766	$ (734,514)
2036	$ 6,525,459	$ 6,521,034	$ 761,709	$ 7,282,743	$ (757,284)
2037	$ 6,727,749	$ 6,723,186	$ 785,322	$ 7,508,508	$ (780,759)
2038	$ 6,936,309	$ 6,931,605	$ 809,667	$ 7,741,272	$ (804,963)
2039	$ 7,151,334	$ 7,146,485	$ 834,766	$ 7,981,251	$ (829,917)
2040	$ 7,373,026	$ 7,368,026	$ 860,644	$ 8,228,670	$ (855,644)

Source: Calculated by ECONorthwest, based on 2013 City of Bend Transportation System Plan

Exhibit 36 shows the same financial projections as Exhibit 35, but adjusted for inflation and presented in constant 2015 dollars. Note that the annual funding deficit is expected to stabilize at approximately $400,000 per year beginning in FYE 2022.

Exhibit 36. Projected annual revenues and expenditures for transit operations, maintenance and administration, and capital projects, Cascades East Transit – urban service area, FYE 2015 to 2040 (Constant 2015 $)

FYE	Total Revenue	Expenditures			Funding Gap
		Operations	Capital	Total Expenditures	
2015	$ 3,151,964	$ 2,519,615	$ 344,412	$ 2,864,027	$ 287,937
2016	$ 3,190,620	$ 2,765,829	$ 480,755	$ 3,246,584	$ (55,964)
2017	$ 3,209,512	$ 2,761,712	$ 586,710	$ 3,348,422	$ (138,910)
2018	$ 3,320,972	$ 3,438,789	$ 706,066	$ 4,144,855	$ (823,883)
2019	$ 3,347,981	$ 3,437,391	$ 407,985	$ 3,845,376	$ (497,395)
2020	$ 3,377,021	$ 3,436,306	$ 401,945	$ 3,838,252	$ (461,231)
2021	$ 3,406,007	$ 3,435,326	$ 396,129	$ 3,831,455	$ (425,448)
2022	$ 3,436,876	$ 3,434,546	$ 401,182	$ 3,835,728	$ (398,852)
2023	$ 3,436,842	$ 3,434,512	$ 401,178	$ 3,835,690	$ (398,848)
2024	$ 3,436,784	$ 3,434,453	$ 401,171	$ 3,835,561	$ (398,841)
2025	$ 3,436,797	$ 3,434,467	$ 401,173	$ 3,835,640	$ (398,843)
2026	$ 3,436,724	$ 3,434,393	$ 401,176	$ 3,835,558	$ (398,834)
2027	$ 3,436,665	$ 3,434,334	$ 401,158	$ 3,835,492	$ (398,827)
2028	$ 3,436,860	$ 3,434,382	$ 401,163	$ 3,835,545	$ (398,833)
2029	$ 3,436,727	$ 3,434,396	$ 401,165	$ 3,835,561	$ (398,834)
2030	$ 3,436,804	$ 3,434,473	$ 401,174	$ 3,835,647	$ (398,843)
2031	$ 3,436,820	$ 3,434,490	$ 401,176	$ 3,835,665	$ (398.845)
2032	$ 3,436,875	$ 3,434,545	$ 401,182	$ 3,835,727	$ (398,852)
2033	$ 3,436,860	$ 3,434,530	$ 401,180	$ 3,835,710	$ (398,850)
2034	$ 3,436,875	$ 3,434,544	$ 401,182	$ 3,835,726	$ (398,851)
2035	$ 3,436,823	$ 3,434,492	$ 401,176	$ 3,835,668	$ (398,845)
2036	$ 3,436,804	$ 3,434,473	$ 401,174	$ 3,835,647	$ (398,843)
2037	$ 3,436,733	$ 3,434,406	$ 401,166	$ 3,835,480	$ (398,835)
2038	$ 3,436,709	$ 3,434,378	$ 401,163	$ 3,835,541	$ (398,832)
2039	$ 3,436,655	$ 3,434,324	$ 401,156	$ 3,835,480	$ (398,825)
2040	$ 3,436,997	$ 3,434,337	$ 401,158	$ 3,835,495	$ (398,828)

Source: Calculated by ECONorthwest, based on 2013 City of Bend Transportation System Plan

The projections of revenue and expenditures for CET reflect the relatively short operating history for this public agency, as well as the uncertainty regarding future level of service and future funding sources. CET only began providing public transit service for the BMPO in 2010. Development in the CET service area has been rapid in recent years, making demand for transit service difficult to predict. Future projections for population growth indicate that demand may increase significantly over time, requiring significant changes for the level of service provided by CET.

Funding for CET has always relied on local contributions from cities and counties to provide the local match for State and Federal grants. But these local contributions are impermanent and unpredictable, creating uncertainty regarding future funding levels. For those reasons, COIC and CET have been exploring potential long-term, stable, local funding sources.

In January 2014, a CET Local Dedicated Public Funding Subcommittee, appointed by the COIC Board, made recommendations on local public funding options for CET. These recommendations included a two-phased approach, where CET would continue to rely on agreements with cities and counties to provide funding for a base level of

service in the short-term (0-3 years). In phase 2 (3-5 years), CET should develop a dedicated, local, publicly-funded tool to achieve sustainable and convenient service levels across the region. The preferred funding tool would be a region-wide property tax, but that other tools may ultimately prove more feasible or desirable. This proposed, new, dedicated funding source would either replace existing contributions from local jurisdictions, or would enhance the level of service in jurisdictions that choose to continue providing additional funding.

Ultimately, the long-term projections of revenues and expenditures for CET will depend on the level of service that CET chooses to provide, and the amount of permanent local funding that CET is able to obtain.

Conclusions

Unfunded maintenance

It is typical for all types of infrastructure and all levels of government to have insufficient funding to address 100% of their maintenance needs. This is certainly the case in the BMPO as well. As shown earlier in Exhibit 22, the State of Oregon only has sufficient revenues to address 84% of their estimated needs for maintenance and preservation.

The City and County do not quantify their long-term maintenance needs in the same way as the State, but conversations with staff at both jurisdictions indicates that there is a long-term challenge in securing sufficient revenues to fully fund maintenance of the transportation system. As an example, the 2013 City of Bend Pavement Management Program Budget Options Report evaluated the City's street network as being in "Fair" condition. The report concluded that maintaining the City's current funding level for pavement management ($2.2 million per year) would result in further deterioration of the street network, and that short-term, five-year funding levels would need to increase to $3.7 million per year to maintain the current level of quality, and would need to increase to $16 million per year to achieve an "Optimal" condition.

Currently, the City has not identified additional funding sources that could be used for increased funding for maintenance of the existing transportation system. This issue will become more serious in future years if the City discontinues their practice of providing an annual general fund subsidy for operations, maintenance, and administration. This general fund revenue accounts for nearly one-third of the City's annual budget for transportation operations and is not forecast to continue beyond FYE 2019. The City is aware of this issue and is exploring potential options to create a long-term funding solution for transportation maintenance.

Summary of revenue for roadway capital projects

Exhibit 37 shows the total forecast revenues for transportation capital projects from each jurisdiction. Revenues are expected to increase from $6.8 million in FYE 2015 to $18.9 million in FYE 2040. Total revenues are expected to be $384.6 million over the forecast period, with average annual revenues equal to $14.8 million.

Exhibit 37. Projected revenue available for transportation capital projects in BMPO, FYE 2015 to 2040 (YOE $)

FYE	City	ODOT	County	Total
2015	$ 5,743,773	$ 1,088,829	$ -	$ 6,832,602
2016	$ 5,951,958	$ 2,209,289	$ -	$ 8,161,247
2017	$ 11,294,970	$ 2,230,014	$ -	$ 13,524,984
2018	$ 6,619,470	$ 2,251,009	$ -	$ 8,870,479
2019	$ 6,962,810	$ 2,272,276	$ -	$ 9,235,086
2020	$ 7,185,420	$ 2,150,540	$ -	$ 9,335,960
FYE	**City**	**ODOT**	**County**	**Total**
2021	$ 7,416,358	$ 1,215,642	$ -	$ 8,632,000
2022	$ 7,817,129	$ 1,337,749	$ -	$ 9,154,878
2023	$ 8,225,535	$ 1,360,143	$ -	$ 9,585,678
2024	$ 13,657,962	$ 1,382,827	$ -	$ 15,040,789
2025	$ 8,907,434	$ 1,405,806	$ -	$ 10,313,240
2026	$ 9,170,742	$ 1,257,001	$ -	$ 10,427,743
2027	$ 9,571,424	$ 1,352,664	$ -	$ 10,924,088
2028	$ 20,020,484	$ 1,619,787	$ -	$ 21,640,635
2029	$ 10,513,586	$ 1,887,221	$ -	$ 12,400,807
2030	$ 20,788,745	$ 1,215,1,911,731	$ -	$ 22,700,476
2031	$ 11,116,780	$ 1,936,560	$ -	$ 13,053,340
2032	$ 51,715,489	$ 1,755,036	$ -	$ 53,470,525
2033	$ 12,242,793	$ 1,987,189	$ -	$ 14,229,982
2034	$ 12,793,952	$ 2,012,998	$ -	$ 14,806,950
2035	$ 13,370,464	$ 12,039,142	$ -	$ 15,409,606
2036	$ 13,973,918	$ 2,065,625	$ -	$ 16,039,546
2037	$ 14,604,994	$ 2,092,453,	$ -	$ 16,697,447
2038	$ 15,264,371	$ 1,871,406	$ -	$ 17,135,777
2039	$ 15,955,433	$ 2,147,157	$ -	$ 18,113,590
2040	$ 16,712,292	$ 2,175,043	$ -	$ 18,887,335
Total	**$ 337,609,648**	**$ 47,015,137**	**$ -**	**$ 384,624,785**
Average	**$ 12,984,986**	**$ 1,808,275**	**$ -**	**$ 14,793,261**

Calculated by ECONorthwest, 2014

Because the timing of future capital improvements is uncertain, it is difficult to take current cost estimates and adjust them for inflation in the future to show them in YOE dollars. Thus, when comparing future project costs with available revenues, it is helpful to focus on the revenue projections in constant 2015 dollars.

Exhibit 38 shows the same forecast of revenues for capital projects in the BMPO, but in constant 2015 dollars. County and State revenues are expected to remain relatively constant over the forecast period, keeping pace with inflation. City revenues, however, are forecast to increase faster than the rate of inflation, due mostly to growth in SDC revenue fueled by new development. In total, we forecast $252.6 million in revenue (constant 2015 $) will be available for capital projects between FYE 2015 and 2040.

Exhibit 38. Projected revenue available for transportation capital projects in BMPO, FYE 2015 to 2040 (Constant 2015 $)

FYE	City	ODOT	County	Total
2015	$ 5,743,773	$ 1,088,829	$ -	$ 6,832,602
2016	$ 5,772,995	$ 2,142,859	$ -	$ 7,915,854
2017	$ 20,625,559	$ 2,097,849	$ -	$ 12,723,408
2018	$ 6,039,663	$ 2,053,839	$ -	$ 8,093,502
2019	$ 6,161,799	$ 2,010,863	$ -	$ 9,172,642
2020	$ 6,167,742	$ 1,845,857	$ -	$ 8,013,699
2021	$ 6,174,638	$ 1,012,107	$ -	$ 7,186,745
2022	$ 6,312,792	$ 1,080,312	$ -	$ 7,393,104
2023	$ 6,442,810	$ 1,065,358	$ -	$ 7,508,168
2024	$ 10,376,025	$ 1,050,541	$ -	$ 11,426,566
2025	$ 6,563,579	$ 1,035,890	$ -	$ 7,599,469
2026	$ 6,554,276	$ 898,370	$ -	$ 7,452,646
2027	$ 6,634,843	$ 927,657	$ -	$ 7,572,500
2028	$ 13,461,204	$ 1,089,079	$ -	$ 14,550,283
2029	$ 6,856,389	$ 1,230,743	$ -	$ 8,087,132
2030	$ 13,154,944	$ 1,209,269	$ -	$ 14,359,213
2031	$ 6,820,528	$ 1,188,148	$ -	$ 8,008,676
2032	$ 30,775,701	$ 1,044,415	$ -	$ 31,820,116
2033	$ 7,066,548	$ 1,147,008	$ -	$ 8,213,556
2034	$ 7,162,665	$ 1,126,973	$ -	$ 8,289,638
2035	$ 7,260,244	$ 1,107,267	$ -	$ 8,367,511
2036	$ 7,359,729	$ 1,087,916	$ -	$ 8,447,645
2037	$ 7,460,662	$ 1,068,886	$ -	$ 8,529,548
2038	$ 7,562,984	$ 927,219	$ -	$ 8,40,203
2039	$ 7,672,849	$ 1,031,840	$ -	$ 8,704,689,
2040	$ 7,789,925	$ 1,013,818	$ -	$ 8,803,643
Total	**$ 219,969,746**	**$ 32,593,012**	**$ -**	**$ 252,562,758**
Average	**$ 8,460,375**	**$ 1,253,577**	**$ -**	**$ 9,713,952**

Calculated by ECONorthwest, 2014

Note that not all of the revenues presented in Exhibit 38 will be available for capital projects on the MTP preferred projects list. There are other projects in the region that are eligible to receive funding from these sources, including local improvements not in the MTP, Intelligent Transportation Systems (ITS) projects, safety improvements, and bicycle and pedestrian projects. The City's Transportation System Development Charges Final Methodology Report identifies $65 million in SDC funding that is needed for local projects that are not included in the MTP, as well as another $15 million in SDC funding for bicycle and pedestrian improvement projects. Deschutes County's ITS Plan identifies $12 million in high and medium priority projects that would need to be funded by the City and ODOT. Safety projects totaling $4 million are identified in the ODOT Federal Highway Safety Improvement Program (HSIP) Transition Program and the City of Bend Multimodal Traffic Safety Program 2012-2014, and would require City and ODOT funding.

Exhibit 39 shows how the projected revenues for capital projects in the BMPO align with various needs, and the remaining revenue available for capital projects on the preferred

project list in the MTP. We forecast there will be $156.6 million in revenue available for roadway capital projects in the BMPO between FYE 2015 and 2040, and $15.0 million for bicycle and pedestrian projects (constant 2015 dollars).

Exhibit 39. Projected use of funds for capital projects in BMPO, FYE 2015 to 2040

	City of Bend	ODOT	Deschutes County	Total
Total Resources	$ 219,969,746	$32,593,012	-	$ 252,562,758
Projects not in MTP				
SDC local improvements	$ 65,000,000	-	-	$ 65,000,000
Projects in the MTP				
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	$ 154,970,000	$ 32,593,000	$ -	$ 187,563,000

Calculated by ECONorthwest based on the following sources:
SDC local improvements: City of Bend Transportation SDC Final Methodology Report
ITS: Deschutes County ITS Plan (high and medium priority projects)
Safety: ODOT Federal HSIP Transition Program and City of Bend Multimodal Traffic Safety Program (2012-2014)
Bike/Ped: City of Bend Transportation SDC Final Methodology Report
Roadway: Calculated by ECONorthwest

Note that not all funding can be spent on all projects, and there might be a mismatch between funding sources and capital needs. In particular, our forecast shows substantial funding from SDCs, $116.2 million out of the total $252.6 million in revenues for capital projects. These SDC revenues can only be applied to City projects that add capacity to address new development. Conversely, our forecast does not include a lot of funding for State or County-owned roads, or to address existing system deficiencies.

Transit service

There is significant uncertainty regarding long-term projections for transit funding and expenditures, given the relatively short operating history of CET, and the different options under consideration for future service improvements.

In January 2014, a CET Local Dedicated Public Funding Subcommittee, appointed by the COIC Board, made recommendations on local public funding options for CET. These recommendations included a two-phased approach, where CET would continue to rely on agreements with cities and counties to provide funding for a base level of service in the short-term (0-3 years). In phase 2 (3-5 years), CET should develop a dedicated, local, publicly-funded tool to achieve sustainable and convenient service levels across the region. The preferred funding tool would be a region-wide property tax, but that other tools may ultimately prove more feasible or desirable. This proposed, new, dedicated funding source would either replace existing contributions from local jurisdictions, or would enhance the level of service in jurisdictions that choose to continue providing additional funding.

Ultimately, the long-term projections of revenues and expenditures for CET will depend on the level of service that CET chooses to provide, and the amount of permanent local funding that CET is able to obtain.