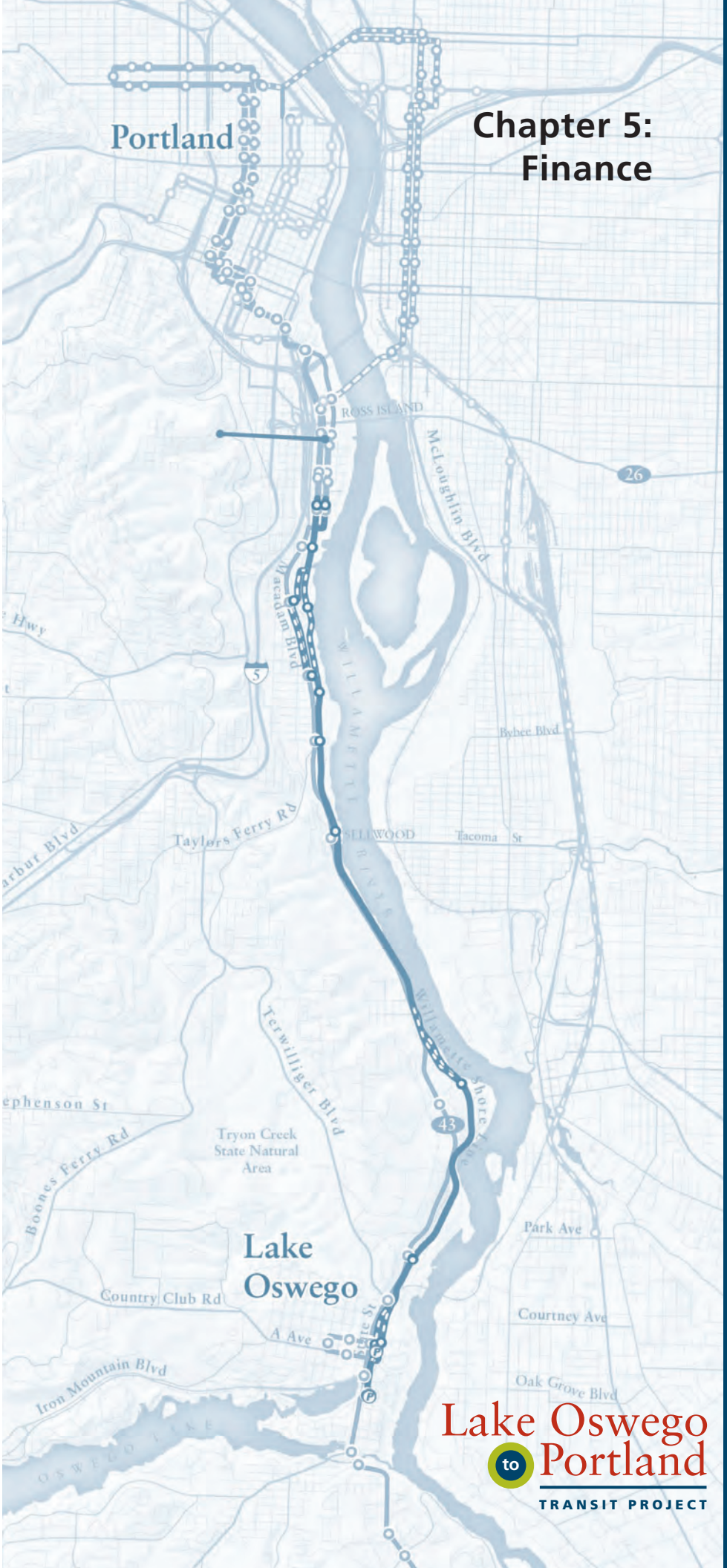
Chapter 5: Finance

CHAPTER 5



Lake Oswego to Portland TRANSIT PROJECT

This page intentionally left blank.

5. FINANCIAL ANALYSIS

This chapter presents the financial analysis of the Lake Oswego to Portland Transit Project's alternatives and design options. The analysis is conducted in two parts (i.e., a project capital funding analysis and a system funding analysis) to differentiate between one-time-only project capital cost requirements and ongoing system fiscal costs. Following is a description of the two elements of the financial analysis and the key factors underlying those analyses.

A. Project Capital Funding Analysis

The project's capital funding analysis focuses on the capital resources required to construct the Lake Oswego to Portland Transit Project alternatives. The capital costs addressed in this portion of the analysis are only those costs associated with constructing the project; other capital expenditures of TriMet are addressed in the system funding analysis.

The project's capital funding analysis is based on the following key factors:

- **Construction Schedule.** The estimates of capital costs are provided in 2010 dollars and year-of-expenditure (YOE) dollars. The YOE estimate is based on a project development schedule under which civil construction, vehicle and systems procurement, and right of way acquisition would occur between 2015 and 2017. Based on this schedule, revenue service would start in September 2017.

- **Construction Cost Inflation.** Construction costs are projected to inflate between 2010 (the date of the capital cost estimate in current year dollars) and September 2017, when project construction would be complete and revenue operations would begin. The inflation rate used in this analysis over the construction period is 4 percent per year.

B. System Funding Analysis

The system funding analysis focuses on whether there would be adequate resources to operate and maintain the entire transit system, including operations of the Lake Oswego to Portland Transit Project alternatives, over the 25-year planning period. System costs include all transit operating and maintenance costs and all transit capital expenditures through fiscal year (FY) 2035, except for Lake Oswego to Portland Transit Project alternative's capital costs. The system funding analysis is based on the following key factors:

- **Annual Transit Service Increase.** Bus service levels in FY 2010 and FY 2011 reflect the service cutbacks undertaken by TriMet in response to the recent economic slowdown. Bus service expansion (measured in revenue hours) is projected to resume in FY 2014, growing at an annual rate of 0.25 percent between FY 2014 and FY 2016 and 1.5 percent between FY 2017 and FY 2035. Beginning in FY 2018, five additional buses, on average, would be purchased every two years to support these bus service increases.

  Based on this analysis, existing light rail and commuter rail operations would expand on an ongoing basis in response to increasing demand. Specifically, rail vehicle hours would grow 1.2 percent per year and rail miles will grow 1.8 percent per year beginning in FY 2013, as the economy recovers from the recession. In addition, there would be a continuation of TriMet's payment of about one-half of the Portland Streetcar operations costs to Southwest Lowell Street and an additional $1.3 million (inflated) for Portland Streetcar operations on the east side

beginning in 2012. In addition, the transit network would include the planned light rail extension between Expo Center and Clark College in Vancouver, Washington, that is part of the locally preferred alternative for the Columbia River Crossing Project and the Portland to Milwaukie LRT Project. Furthermore, the transit network would include the specific streetcar and bus service increases associated with the applicable Lake Oswego to Portland Transit Project alternative.

- **Operations Cost Inflation.** The forecast assumes that management wages are flat in FY 2010 and FY 2011 and increase 4 percent per year thereafter, consistent with historic trends. Increases in union wage rates, which are tied to the Consumer Price Index with a 5 percent ceiling, are projected to increase 3 percent per year throughout the forecast period. Health benefit costs are projected to escalate in FY 2011 at 19 percent for union employees and 5 percent for management. Thereafter, all health benefits are anticipated to grow at 8.5 percent per year, with revisions to health benefits that produce continuous annual saving of $2 million beginning in FY 2011, an additional $7 million beginning in FY 2012, and an additional $1 million beginning in FY 2013.

  The financial analysis uses the Energy Information Agency forecast of diesel fuel cost. The annual escalation in fuel cost differs between FY 2011 and FY 2015, ranging between 4.8 percent and 10 percent. From FY 2016 and thereafter, fuel costs are anticipated to increase by 5 percent per year. Electricity costs are anticipated to escalate at 5 percent per year, and other materials and service costs are projected to escalate at 3 percent per year throughout the forecast period.

- **System Capital Cost Inflation.** Transit capital costs other than for the Lake Oswego to Portland Transit Project alternatives would inflate at 3 percent per year, with the exception of FY 2011 when a one-time-only reduction of $4 million is forecast.

- **Tax Revenue Increases.** The key factors underlying forecasts of payroll tax revenues, self-employment tax revenues and state in-lieu tax revenues are documented in Section 5.2.2.

- **Fares.** TriMet first implemented a policy of increasing fares with inflation in 1990. The forecast assumes a continuation of this policy, with a 3 percent inflation-adjusted fare increase each year between FY 2011 and FY 2035. TriMet has planned for a $0.05 fare increase in FY 2010.

Section 5.1 summarizes the project capital and system costs of the alternatives, followed by Section 5.2, which summarizes the available project resources that could fund the alternatives. Section 5.3 identifies existing revenue shortfalls and opportunities for additional revenues to cover those shortfalls are summarized in Section 5.4. Section 5.5 provides conclusions from the project's financial analysis.

5.1 Costs

This section examines both project capital costs and systems costs. Costs are shown in 2010 dollars and YOE dollars. YOE dollars were calculated by inflating 2010 dollar costs by the appropriate inflation index for that cost component.

5.1.1 Lake Oswego to Portland Transit Project Costs

This section addresses the capital costs and the operations and maintenance (O&M) costs of the Lake Oswego to Portland Transit Project.

A. Lake Oswego to Portland Transit Project Capital Costs

Table 5.1-1 shows the capital costs for the Enhanced Bus and Streetcar alternatives. A range reflecting the high and low cost alignment options is provided for the Streetcar Alternative. The capital costs include all facility and system improvements, right of way costs (including the value of the contributed Willamette Shore Line right of way), and vehicle purchases required by the project alternative in excess of the already-committed capital costs associated with the No-Build Alternative.

Table 5.1-1 Capital Costs for Lake Oswego to Portland Transit Project In Millions of 2010 and Year-of-Expenditure Dollars

		Streetcar	
Line Item	**Enhanced Bus**	**Low**[3]	**High**[3]
2010 Dollar Costs			
Guideway & Track Elements	$0.0	$48.7	$53.2
Stations, Stops, Terminals	$9.9	$14.4	$14.8
Support Facilities: Yards, Shops	$3.5	$6.0	$6.0
Sitework & Special Conditions	$2.1	$36.8	$41.7
Systems	$0.1	$19.0	$21.5
ROW, Land	$2.2	$76.4	$107.7
Vehicles[1]	$9.6	$48.4	$48.4
Professional Services	$8.6	$29.0	$41.2
Unallocated Contingency	$1.8	$10.2	$12.9
Total	***$37.8***	***$288.9***	***$347.4***
Year-of-Expenditure Dollar Costs			
Escalation to Year-of-Expenditure	$11.0	$81.6	$98.6
Finance Charges[2]	$2.3	$9.0	$12.4
Total	***$51.1***	***$379.6***	***$458.3***

Source for 2010 Cost Estimate: URS, 2010; numbers may not add due to rounding.

[1] Includes all eleven vehicles required to serve 2035 ridership.

[2] Includes interest payments for interim borrowing and net finance costs during the construction period on bonds issued to provide local match.

[3] The Streetcar Alternative "Low Cost" assumes the following options by segment: South Waterfront – Willamette Shore Line; Johns Landing – Willamette Shore Line; Sellwood Bridge – New Interchange; Dunthorpe/Riverdale – Riverwood In-Street; Lake Oswego – UPRR ROW. The Streetcar Alternative "High Cost" assumes the following options by segment: South Waterfront – South Portal; Johns Landing – Macadam In-Street; Sellwood Bridge – Willamette Shore Line; Dunthorpe/Riverdale – Willamette Shore Line; Lake Oswego – Foothills Realignment.

As shown in Table 5.1-1, Streetcar Alternative is estimated to cost between $379.6 to $458.3 million in YOE dollars, including finance costs and the value of the contributed Willamette Shore Line right of way, depending on the alignment options. The total cost of the Enhanced Bus Alternative is estimated to be about $51.1 million in YOE dollars.

B. Lake Oswego to Portland Transit Project O&M Costs

Table 5.1-2 shows year 2035 transit O&M costs in 2010 dollars for the No-Build Alternative, Enhanced Bus and Streetcar alternatives. These O&M costs include the cost of operating and maintaining the streetcar line between Lowell Street and Lake Oswego, where applicable, and the buses in the Lake Oswego to Portland transit corridor.

As shown, the year 2035 corridor O&M costs for the Streetcar Alternative would be $1.25 million (2010 dollars) higher than the No-Build Alternative, due to the increased service levels. The corridor O&M costs for the Enhanced Bus Alternative would be about $1.54 million (2010 dollars) higher than those for the Streetcar Alternative.

Table 5.1-2 Lake Oswego to Portland Transit Project Operating Costs for Year 2035 Service Levels In millions of 2010 dollars

	No-Build	Enhanced Bus	Streetcar
Corridor Streetcar O&M Costs[1]			$3.78
Corridor Bus O&M Costs[2]	$28.41	$31.20	$25.88
Total Corridor O&M Costs	$28.41	$31.20	$29.66
Difference from No-Build Alternative	NA	$2.79	$1.25

Source: TriMet and Metro 2010. Differences may not sum due to rounding.

[1] Streetcar O&M costs reflect service between Lowell Street in Portland (the current streetcar terminus) and Lake Oswego as well as increased service on the existing alignment to support greater passenger loads resulting from the extension to Lake Oswego.

[2] Corridor Bus O&M costs include all buses operating within a geographic travel shed between Portland and Lake Oswego, both in a north-south orientation and an east-west orientation.

5.1.2 System Costs

System costs include all capital and O&M expenditures by TriMet over the 25-year planning period, except the capital costs for building the Lake Oswego to Portland Transit Project. Total system cost is the aggregate of system operating costs and system capital costs. System operating costs are the annual O&M costs of the TriMet system including the Lake Oswego to Portland Transit Project. Total system costs includes: the cost of operating and maintaining the existing transit and demand responsive system; anticipated increases in transit service required to maintain headways and capacity; expanded demand-responsive service; expanded bus service; and operations of the planned light rail extensions to Clark College in Vancouver, Washington, as part of the Columbia River Crossing Project, and the Portland-to-Milwaukie LRT Project. System costs also include TriMet's contribution toward annual Portland Streetcar operating costs.

Table 5.1-3 shows the cumulative system operating costs for the light rail project alternatives compared to the No-Build Alternative, covering the period between FY 2010 and FY 2035. Table 5.1-3 also shows the cumulative system capital costs of the light rail project over the 25-year planning period in YOE dollars. System capital costs include all currently committed capital projects except the Lake Oswego to Portland Transit Project, a regular schedule of vehicle replacement purchases, and the purchase of additional vehicles required by anticipated service increases.

Table 5.1-3 Summary of Transit System Costs: Cumulative Total from FY 2010 to FY 2035 In Millions of Year-of-Expenditure Dollars

	No-Build	Enhanced Bus	Streetcar
System Operating Costs [1]	$20,047	$20,132	$20,093
System Capital Costs [2]	$1,781	$1,825	$1,805
Total	**$21,828**	**$21,957**	**$21,898**

Source: TriMet, 2010.
[1] All operating and maintenance costs between FY 2010 and FY 2035, including the Lake Oswego to Portland Transit Project.
[2] All capital replacement and improvement costs between FY 2010 and FY 2035, excluding planned New Starts projects.

The total system cost of an alternative is the sum of system capital costs and system operating costs. Table 5.1-3 shows that the total system costs for the No-Build Alternative in YOE dollars (over the period FY 2010 through FY 2035) would be about $70 million less than the total system costs for the Streetcar Alternative. The total system cost for the Enhanced Bus Alternative would be about $59 million more than the Streetcar Alternative.

5.2 Available Resources

Two categories of available revenue resources are examined within this section: revenue resources for Lake Oswego to Portland Transit Project capital costs; and revenue resources for its transit system costs.

5.2.1 Available Project Capital Revenues

Up to $97 million (year-of-expenditure dollars) of local matching funds is available to pay the capital costs of the Lake Oswego to Portland Transit Project, depending on the alternative, from in-kind contribution of right of way. Portions of the Willamette Shore Line right of way, owned by the Willamette Shore Line Consortium, would be used for project improvements and mitigation. This right of way would be donated to the project and its value would be used as in-kind matching funds. The value of the in-kind match would depend on the alignment options selected for the locally preferred alternative.

5.2.2 Available Transit System Revenues

Available transit system revenues are derived from a variety of sources. The major sources of available transit system revenues and the key factors used to forecast these revenues follow.

A. Payroll Tax Revenues

Payroll taxes are TriMet's largest source of operating revenue, accounting for approximately 48 percent (about $200 million) of FY 2009 operating revenues. As of January 2010, the payroll tax is currently levied at 0.6818 percent ($6.818 per $1,000) on the gross payrolls of private businesses and municipalities within the district. In August 2004, the TriMet Board authorized a one-hundredth of one percent per year increase in the payroll tax rate, which will ultimately reach 0.7218 percent on January 1, 2014.

In its 2009 session, the Oregon Legislature (Senate Bill 34) granted the TriMet Board the authority to further increase the payroll tax rate to 0.8218 percent. The legislation specifies that the tax rate increase cannot be implemented until the TriMet Board determines that the economy in the district

has sufficiently recovered to warrant the increase; that it must be phased in over ten years; and that no annual increase can exceed 0.02 percent. The forecast anticipates that TriMet would begin to implement Senate Bill 34 on January 1, 2013, increasing the rate an additional one-one hundredth of a percent for ten years and resulting in a payroll tax rate of 0.8218 percent beginning January 1, 2022.

In addition to the increases in the tax rate, payroll tax collections are forecast to grow as the number of jobs in the district and wages grow. This analysis is based on a 5.5 percent decline in underlying payroll tax receipts for FY 2010 (excluding any increase in the tax rate), a 3 percent increase in FY 2011 and a 5.7 percent per year increase in FY 2012 and subsequent years.

B. Self-Employment Tax Revenues

In addition to the payroll tax, TriMet currently levies a 0.6818 percent tax on the net income earned within its district by self-employed individuals. The self-employment tax rate will increase at the same rate as the payroll tax rate. The annual fluctuations for proceeds received from the self-employment tax are wider than for the payroll tax. After growth of 4 percent in FY 2004 and 5.0 percent in FY 2005, self-employment tax receipts increased 19.8 percent in FY 2006 and 21.3 percent in FY 2007. Because of the recent economic turndown, self-employment tax revenues decreased 2.7 percent in FY 2008 and 7.7 percent in FY 2009. The forecasts are based on a 10 percent decline in underlying self-employment tax receipts in FY 2010 (excluding any tax rate increase), a 3 percent increase in FY 2011 and a 4.5 percent increase in FY 2012 and annually thereafter.

C. State Payroll "In-Lieu" Revenues

State of Oregon government offices located within TriMet's district boundaries are not subject to the municipal payroll tax. Instead, they make "in lieu of" tax payments to TriMet based on 0.6218 percent of their gross payrolls within the TriMet district. State "in-lieu" revenues are forecast to decline 2 percent in FY 2010, grow 4 percent in FY 2011 and 5 percent in FY 2012 and annually thereafter, consistent with historic trends since OHSU was converted from a state agency to a private employer paying TriMet's payroll tax.

D. Grants and Capital Reimbursement

Currently TriMet receives about $45 million annually in federal transit formula funds, which are used for operations. In addition, TriMet receives about $11 million dollars annually in federal transportation funds from the Surface Transportation Program (STP) and Congestion Mitigation Air Quality (CMAQ) programs, which are used for the regional rail program, passenger amenity improvements and the Regional Transportation Options program. Federal funds in total constitute about 15 percent of TriMet's operating revenues.

Section 5307 Urbanized Area Formula Funds are TriMet's primary federal formula grant funds. The forecast is based on the expectation that Section 5307 Urbanized Area Formula Funds would remain flat in FY 2010 and FY 2011 and would grow 3 percent per year in subsequent years during the project's planning period.

Fixed Guideway Modernization Funds ("Rail Mod Funds") represent TriMet's second largest source of federal formula funds. TriMet's share of Rail Mod Funds is based, in part, on the number of light rail and streetcar vehicle miles operated within its district for at least seven years. TriMet's allocation of Rail Mod Funds is forecast to grow 6.5 percent in FY 2010, stay flat in FY 2011 and

grow 3 percent per year between FY 2012 and FY 2016. In FY 2017, when Westside Express Service (WES) Commuter Rail enters its eighth year of operation, Rail Mod Funds are anticipated to increase 14 percent. A 14 percent increase is anticipated in FY 2018, when the Green Line enters its eighth year of operation; and a 10 percent increase is projected for FY 2023, when the Portland-Milwaukie light rail line would enter its eighth year of operation.

In addition, the amounts of STP funds currently approved by Metro's Joint Policy Advisory Committee on Transportation (JPACT) and Metro for TriMet's preventive maintenance program are assumed to continue throughout the forecast period. The forecast also assumes the continuation of the regional allocation of the federal CMAQ funds for the Travel Demand Management Program.

E. Passenger Revenues

Revenues from passenger fares (from LIFT Paratransit Program, MAX Light Rail, WES Commuter Rail, demand-responsive transit and bus services) are TriMet's second largest revenue source, contributing about $90 million (over 21 percent) of operating revenue in FY 2009. In 1990, TriMet implemented a policy of regular fare increases, and the passenger revenue forecast is based on a continuation of this policy. The passenger revenue forecast assumes a 3 percent per year increase in fares.

Passenger revenue forecasts also reflect the forecast of bus and rail ridership. Due to year-over-year declines in gas prices and job losses in the region, bus ridership is projected to decline 8 percent in FY 2010. Bus ridership is projected to remain flat in FY 2011 due to service reductions on low-ridership bus lines planned for FY 2011, which are expected to offset anticipated bus ridership gains from an anticipated gradual increase in employment. Thereafter, bus ridership on existing services is forecast to grow 2 percent per year. With the newly opened Green Line, MAX (the aggregation of the Blue, Red, Yellow and Green lines) ridership is estimated to grow by 7.5 percent in FY 2010. Ridership on these lines is projected to grow 1.5 percent in FY 2011 and 3 percent each year thereafter, consistent with the underlying historic trend.

Table 5.1-4 shows, based on the factors described above, that existing available transit system O&M revenue sources are projected to provide between $20.50billion and $20.55 billion (YOE dollars) through FY 2035, depending on the alternative. The range primarily reflects differences in passenger revenues and interest earnings between the alternatives.

Table 5.1-4 Summary of Transit System Revenues: Cumulative Total from FY 2010 to FY 2035 In Millions of Year-of-Expenditure Dollars

	No Build	Enhanced Bus	Streetcar	
			WSL	Macadam
System O&M Revenues				
Passenger Revenue	$5,332	$5,342	$5,355	$5,358
Other Operating Revenue	$516	$516	$516	$516
Employer/Municipal Payroll Tax [1]	$10,825	$10,825	$10,825	$10,825
Self Employed Tax	$491	$491	$491	$491
State in Lieu	$125	$125	$125	$125
Grants and Capital Reimbursement	$2,128	$2,128	$2,128	$2,128
Interest	$168	$146	$177	$178
Accessible Transportation Revenues	$129	$129	$129	$129
One Time Only and DMAP Reimbursement	$799	$799	$799	$799
Total	**$20,513**	**$20,501**	**$20,545**	**$20,548**
System Capital Revenues [2]				
Grants: State or Federal	$141	$141	$141	$141
Bond Proceeds	$1,165	$1,165	$1,165	$1,165
Transfer from General Fund	$475	$519	$499	$499
Total	**$1,781**	**$1,825**	**$1,805**	**$1,805**

Source: TriMet, 2010.
[1] Includes implementation of payroll tax rate increase authorized by HB 3183 (2009 Legislative Session) beginning January 2013.
[2] System capital revenues exclude capital revenues for New Starts projects.

5.3 Existing Revenue Shortfalls

This section discusses the additional project and system revenues needed to make the project fiscally feasible. The project is fiscally feasible if:

- Project capital revenues are sufficient to meet the capital costs; and
- Ongoing revenues would be sufficient to meet ongoing total system costs, including the operations of the Lake Oswego to Portland Transit Project, plus maintain an ongoing beginning-year cash and cash equivalent (beginning cash) reserve of at least 12 percent of annual system operating costs.

5.3.1 Existing Project Capital Revenue Shortfalls

Table 5.1-5 summarizes the capital funding shortfalls (project capital cost minus currently available capital revenues) for the project alternatives in YOE dollars. Additional capital revenues are required to make the capital project fiscally feasible. Opportunities for eliminating the shortfall are discussed in Section 5.4.

Table 5.1-5 Summary of Capital Revenue Shortfalls In Millions of Year-of-Expenditure Dollars

		Streetcar[1]	
	Enhanced Bus	Low	High
Capital Cost	$51.1	$379.6	$458.3
Available Revenues	$0.0	$75.2	$77.1
Capital Revenue Shortfall	$51.1	$304.4	$381.2

Source: TriMet – May 2010.
[1]Low and high costs for the Streetcar Alternative are the result of variations in design options (see tables on the previous page). Operating costs are change from the No-Build Alternative.

5.3.2 Existing System Revenue Shortfalls

System costs and revenues were projected for each year of the 25-year planning period based on the financial assumptions described in previous sections. Table 5.1-6 shows for each alternative and each year the beginning-of-the-year unrestricted cash reserve expressed in YOE dollars and in percent of annual operations cost. As mentioned previously, the fiscal condition of transit system operations is considered adequate if the beginning cash reserve is maintained at 12 percent of annual operations costs each year.

As shown in Table 5.1-6, with the imposition of the payroll tax increase authorized by HB 3183 (2009 Legislative Session), the beginning year unrestricted cash reserve for all alternatives exceeds the 12 percent threshold in all years except for the Enhanced Bus alternative in FY 2023 and FY 2024. However, the deficit in the beginning cash reserve for the Enhanced Bus alternative in those years would be small and could be addressed by TriMet with standard management measures. Thus given the assumptions described above and the imposition of the payroll tax increase authorized by HB 3183 (2009 Legislative Session), all of the project alternatives are fiscally feasible from a total systems costs perspective.

5.4 Opportunities for Additional Revenues

This section discusses opportunities for additional revenues that TriMet may seek in order to eliminate revenue shortfalls.

5.4.1 Project Capital Revenue Options

All of the alternatives for the Lake Oswego to Portland Transit Project require additional capital revenues to cover the shortfalls shown in Table 5.1-5. A detailed plan to secure these additional capital revenues will be developed during Preliminary Engineering and reported in the Final Environmental Impact Statement. Currently, potential sources to eliminate these revenue shortfalls have been identified for further analysis. Following is a summary description of those potential sources of revenue to cover the capital shortfalls.

Table 5.1-6 System Fiscal Feasibility Analysis: Beginning Working Capital 2010-2035 In Millions of Year-of-Expenditure Dollars

	No Build		Enhanced Bus		Streetcar			
					WSL		Macadam	
Fiscal Year	Beginning Working Capital[1]	% Annual Operating Cost[2]	Beginning Working Capital[1]	% Annual Operating Cost[2]	Beginning Working Capital[1]	% Annual Operating Cost[2]	Beginning Working Capital[1]	% Annual Operating Cost[2]
2010	$57	16%	$57	16%	$57	16%	$57	16%
2011	$94	25%	$94	25%	$94	25%	$94	25%
2012	$80	22%	$80	22%	$80	22%	$80	22%
2013	$80	20%	$80	20%	$80	20%	$80	20%
2014	$74	18%	$74	18%	$74	18%	$74	18%
2015	$72	17%	$72	17%	$72	17%	$72	17%
2016	$71	15%	$71	15%	$71	15%	$71	15%
2017	$69	14%	$69	14%	$69	14%	$69	14%
2018	$72	14%	$72	14%	$72	14%	$72	14%
2019	$79	15%	$79	14%	$79	14%	$79	14%
2020	$83	14%	$80	14%	$82	14%	$82	14%
2021	$85	14%	$78	13%	$83	14%	$83	14%
2022	$84	13%	$74	12%	$82	13%	$82	13%
2023	$86	13%	$75	11%	$82	12%	$82	12%
2024	$90	13%	$79	11%	$86	12%	$85	12%
2025	$98	13%	$87	12%	$93	13%	$92	13%
2026	$110	14%	$94	12%	$103	14%	$102	13%
2027	$121	15%	$100	12%	$113	14%	$112	14%
2028	$145	17%	$118	14%	$135	16%	$134	16%
2029	$163	19%	$130	15%	$152	17%	$151	17%
2030	$190	21%	$150	16%	$177	19%	$175	19%
2031	$222	23%	$174	18%	$207	22%	$205	21%
2032	$262	26%	$206	21%	$245	24%	$243	24%
2033	$309	30%	$245	23%	$290	28%	$288	27%
2034	$363	33%	$289	26%	$341	31%	$339	31%
2035	$424	37%	$339	29%	$400	35%	$397	34%

A. Section 5309 New Starts Funds

FTA Section 5309 New Starts funds are discretionary federal grants available for new fixed-guideway transit systems and extensions to existing fixed-guideway systems that meet certain requirements. Congress establishes the year-to-year availability and amount of New Starts funds in each federal transportation authorization act. FTA disburses New Start funds through a Full Funding Grant Agreement (FFGA), which establishes the maximum funding available to the project and the terms and conditions of receiving the funds.

FTA also administers a rating system established by federal law to determine eligibility of the project for a New Starts grant. Among other factors, a project's overall rating is affected by its project justification and financial plan ratings. The feasibility of obtaining a New Starts grant will not be settled until the rating is complete and FTA determines the rating to be sufficient.

The amount of funds available to the Lake Oswego to Portland Transit Project depends on many factors beyond the project itself, including the overall amount authorized and appropriated by Congress and competing projects nationwide. While Federal statutes allow up to 80 percent of project costs to be paid by New Starts funds, the FTA financial rating system prioritizes projects that propose a New Starts share of 60 percent or less of project costs. The proposed funding plan for the Lake Oswego to Portland Transit Project alternatives is based on a 60 percent New Starts share. FTA has not yet rated the financial plan for this project and has not agreed to the Section 5309 New Starts share proposed in this FEIS. Projects with a New Starts share of less than 50 percent receive higher ratings for the non-New Starts share ratings factor, and New Starts shares less than 35 percent receive the highest rating for this factor. In deciding an acceptable New Starts share, FTA would also consider the demand for New Starts funding by other projects in the metropolitan area and elsewhere. FTA will review the financial plans and rate this project when it is requested that the locally preferred alternative be advanced into preliminary engineering.

Table 5.1-7 illustrates the potential amounts of Section 5309 New Starts funds that would be requested. As shown in Table 5.1-7, the Streetcar Alternative would require $197.0 to $244.3 million more in Section 5309 funds than the Enhanced Bus Alternative.

Table 5.1-7 Proposed Amounts of Section 5309 Small Starts/New Starts Funds In Millions of Year-of-Expenditure Dollars [1]

		Streetcar[2]	
	Enhanced Bus	**Low**	**High**
Section 5309 Small Start Funds	$30.7		
Section 5309 New Start Funds		$227.7	$275.0

Source: TriMet/Metro – May 2010.
[1]FTA has not yet rated the financial plan for this project and has not agreed to the Section 5309 New Starts share proposed in this Table 5.1-7. Projects with a New Starts share of less than 50 percent receive higher ratings for the non-New Starts share rating factor, and New Starts shares less than 35 percent receive the highest rating for this factor. In deciding an acceptable New Starts share, FTA would also consider the demand for New Starts funding by other projects in the metropolitan area and elsewhere. FTA will review the financial plans and rate this project when TriMet requests that its preferred alternative be advanced into preliminary engineering.
[2]Low and high costs for the Streetcar Alternative are the result of variations in design options (see tables on the previous page). Operating costs are change from the No-Build Alternative.

B. State Lottery Bond Proceeds

State lottery bond proceeds have been used to fund several high capacity transit projects in the Portland region. These include $125 million for the Westside LRT Project, about $35 million for the Wilsonville-to-Beaverton Commuter Rail Project, $25 million for Eastside Streetcar, and $250 million for the Portland to Milwaukie LRT Project. Legislative approval of the lottery bonds is required to secure lottery bonds for a project. In addition, TriMet and the Oregon Department of Transportation (ODOT) would need to execute an intergovernmental agreement setting forth the detailed terms and conditions for the use of such funds.

C. GARVEE Bonds Secured by MTIP Funds

A Grant Anticipation Revenue Vehicle (GARVEE) bond is a debt-financing instrument that pledges future federal funds to repay bondholders.[1] The Portland region has a long history of using GARVEE bonds secured by a stream of Metropolitan Transportation Improvement Program (MTIP) funds to help fund high capacity transit projects. GARVEE bonds have been used to provide about $24.0 million for the Interstate LRT Project, $23.5 million for the Wilsonville-to-Beaverton Commuter Rail Project, $48.5 million for the South Corridor (I-205/Mall) LRT Project, and $72.5 million for the Portland to Milwaukie LRT Project.

MTIP funds include federal Surface Transportation Program (STP) funds and Congestion Management Air Quality (CMAQ) Program funds, which are funds allocated to Metro as the Portland Metropolitan Planning Organization (MPO). Approval of STP and/or CMAQ funds by the Joint Policy Advisory Committee for Transportation (JPACT) and the Metro Council through the MTIP process would be required to make such funds available for the Lake Oswego to Portland Transit Project. In addition, TriMet and Metro would need to execute an intergovernmental agreement setting forth the detailed terms and conditions for the use of such funds. TriMet would likely be responsible for implementing the borrowing program that would provide funds to the Lake Oswego to Portland Transit Project and would structure debt service so that principal and interest could be paid with the flow of MTIP funds.

D. Local, Regional and State Agency Funds

The regional and local governmental entities participating in the project, including TriMet, the City of Lake Oswego, City of Portland, ODOT and Clackamas County could provide local matching funds for the project. The amounts to be provided by these governmental entities and the specific funding sources to be used to provide funding will be determined during Preliminary Engineering. Potential sources may include system development charge proceeds, local improvement districts, urban renewal funds, dedicated transportation funds, payroll tax revenues, formula federal funds and other funding sources. Approval of such funding would be required by the governing bodies of the local and regional governmental entities providing local matching funds. TriMet would enter into intergovernmental agreements with the contributing governmental entities wherein the local matching funds would be committed to the project.

E. Revenues Used to Pay Construction-Period Finance Costs on Bonds Used for Local Match

Under Federal Transit Administration (FTA) policy, the financing costs paid during the project development period on bonds issued to provide local match for a project, net of any interest earnings on the bond proceeds, constitute project costs The revenues used to pay such net finance costs constitute project revenues. The project development period begins when preliminary engineering is authorized and ends at the later of: 1) the start of revenue operations; or 2) receipt of the final federal funds committed to the project in the FFGA. The capital cost estimates shown in Table 5.1-1 assume that one-half of the local match contribution from local and regional governmental entities would be derived from bond proceeds, and that the project development period would be five years. The state and local revenues used to pay the net finance costs on these bonds would be project revenues.

---

[1] 23 USC 122(a) and (b).

5.4.2 System Revenue Options

As shown in Table 5.1-6 and discussed in Section 5.3.2, TriMet will have sufficient system revenues to operate the Lake Oswego to Portland Transit Project and maintain adequate beginning cash with implementation of the payroll tax increase authorized by HB 3183 enacted during the 2009 Legislative Session.

5.5 Conclusions

A 25-year cash flow analysis was prepared for each alternative, in which transit revenues (by source expenditures, transit expenditures and line item) were projected by year using key elements of the fiscal analysis described in previous sections. The following paragraphs summarize the analysis.

5.5.1 Project Capital Funding Conclusions

Table 5.1-8 illustrates the proposed capital funding plans for the Enhanced Bus and Streetcar alternatives. As shown, the Streetcar Alternative would require $33.8 to $59.9 million more in contributions from state, regional and local governments than the Enhanced Bus Alternative.

Table 5.1-8 Capital Funding Plan for Lake Oswego to Portland Transit Project In Millions of Year-of-Expenditure Dollars [1]

			Streetcar	
Source	**Availability[2]**	**Enhanced Bus**	**Low**	**High**
Capital Cost in Year-of-Expenditure Dollars		$51.1	$379.6	$458.3
Capital Revenues				
Section 5309 Small Start Funds	U	$30.7		
Section 5309 New Start Funds	U		$227.7	$275.0
Donated Right of Way: In-Kind Match	A		$94.5	$97.0
State, Regional and Local Funds	U	$18.4	$52.2	$78.3
Local Funds used for Construction-Period Finance Costs	U	$2.0	$5.1	$8.0
Total Revenues (Year-of-Expenditure Dollars)		***$51.1***	***$379.6***	***$458.3***

Source: TriMet – May 2010.

[1] FTA has not yet rated the financial plan for this project and has not agreed to the Section 5309 New Starts share proposed in this Table 5.1-7. Projects with a New Starts share of less than 50 percent receive higher ratings for the non-New Starts share rating factor, and New Starts shares less than 35 percent receive the highest rating for this factor. In deciding an acceptable New Starts share, FTA would also consider the demand for New Starts funding by other projects in the metropolitan area and elsewhere. FTA will review the financial plans and rate this project when TriMet requests that its preferred alternative be advanced into preliminary engineering

[2] U = Unavailable Currently (subject to future approvals); A = Available.

Even with a FFGA, a project must have New Starts funds appropriated to it by Congress on an annual basis to actually receive such funds. The appropriation is subject to budget limits, the demand for appropriations from other projects, and other congressional dynamics. The amount of New Starts funds appropriated to a project in a given year may be less than the Lake Oswego to Portland Transit Project requires that year.

In years when fewer New Starts funds are appropriated for the project than are needed by the project, the finance plan must use interim borrowing to maintain its optimum construction schedule. Interim-borrowed funds would be repaid with later-appropriated New Starts funds, but the Lake Oswego to Portland Transit Project would incur interest costs during that interim. The cost estimates shown in Table 5.1-1 include the finance costs associated with the interim-borrowing program.

5.5.2 System Fiscal Feasibility Conclusions

As explained in Section 5.3.2, the transit system cash flow analysis for the light rail project found that there were sufficient beginning cash amounts to meet transit system needs when the payroll tax increase authorized by HB 3183 (2009 Legislative Session) is levied (which is expected to occur in 2015).

5.6 Implementation of the Finance Plan

Implementation of the finance plan depends on successfully obtaining:

- Selection of the Locally Preferred Alternative;
- Completion of the Final Environmental Impact Statement;
- Issuance of the Record of Decision by FTA;
- Formal commitments of the remaining donations of right of way and construction staging areas, to be used as in-kind local match;
- Secure commitments of required local match from contributing public and private entities;
- A sufficient New Starts rating to be eligible for New Starts funding;
- FTA approval to begin Final Design; and
- FTA approval of an FFGA that provides Section 5309 New Starts funds in the amount required by the finance plan.