13 Funding and Implementation Plan

The purpose of this chapter is to describe the funding framework for considering City of Milwaukie transportation improvements between ~~2008 and 2030~~2013 and 2035. This chapter outlines the foreseeable funding sources—and their restrictions—for both capital improvements and transportation maintenance projects. This chapter also provides a brief overview of additional funding sources.

CURRENT FUNDING SOURCES

The City of Milwaukie relies on a variety of funding sources for maintaining and improving its transportation infrastructure. Most of these sources are constrained, meaning that they can only be used for a specific function like expanding the system's capacity, paving the streets, or building bicycle facilities. The funds also flow into Milwaukie from a variety of sources, most of which are tax-based and administered through different levels of government and through different mechanisms.

Types of Transportation Funding Sources

The City has identified ~~11~~10 transportation funding sources that are currently ~~and potentially~~ available:[1]

Grant/Competitive Programs

- **Metropolitan Transportation Improvement Program (MTIP)** identifies how all federal transportation money is to be spent in the region in two-year increments. Each time the MTIP is developed, Milwaukie competes with other jurisdictions in the region for federal "regional flexible funds" that can be used for most aspects of the local transportation system.
- ~~**Congressional Appropriations** make federal funds available to Milwaukie through the sponsorship of a U.S. congressperson. Such appropriations are highly sought after and are not easily secured. However, Milwaukie has had some success in receiving appropriations.~~
- **Statewide Transportation Improvement Program (STIP)** is ODOT's project funding and scheduling document. The STIP makes funds available to cities, through a highly competitive process, for expansion, preservation, safety, and other system enhancements.

[1] This list includes federal funds that are not part of the City's regular revenue stream for transportation improvements.

The STIP ~~programs~~ makes expenditures from both State revenues and some federal programs.

City Share of State Highway Trust Fund

A portion of the taxes and fees assessed on Oregon motorists and freight haulers is paid to the City annually on a per capita basis. The primary sources are the State motor vehicle fuel tax, a weight-mile charge on heavy trucks, and vehicle registration fees. ODOT requires that cities set aside 1.0% of ~~of~~ the local share of Highway Trust Fund proceeds for the construction and maintenance of bicycle facilities.

Local Funds—Fees and Taxes

- **Franchise Fees** are paid by each of the City-owned facilities—water, wastewater, and stormwater—to the City's Street Fund for their use of the public right-of-way. The utilities are able to pay the franchise fee with some of the revenue they collect from Milwaukie utility rate-payers.
- **PGE Privilege Tax** is similar to the franchise fees, in that Portland General Electric pays the City for its use of the public right-of-way. As part of the City's Street Surface Maintenance Program, a portion of this fee is dedicated to surface maintenance for the city's most important streets.
- **Local Gas Tax** is separate and apart from the State gasoline tax. Milwaukie gas stations pay a tax on fuel sold in Milwaukie, which is sent to the City for street maintenance use only.
- **Street Surface Maintenance Fee** is similar to a utility bill, in that all Milwaukie properties are charged a monthly fee for use of the street system. These fees are dedicated for street maintenance use only.
- **Local Improvement Districts (LIDs)** are special assessment districts in which property owners benefiting from a transportation improvement pay for that improvement. These have not been frequently used by the City, but are available to interested property owners.

Local Funds—Development Contributions

- **System Development Charges** are collected from developers when new construction is expected to place heightened demand on the transportation system. The vast majority of these monies can only be used by the City for adding capacity to the system.
- **Fee In Lieu of Construction** is collected when required street frontage improvements, typically associated with residential construction, are impractical to build. These funds are limited in both how and where they can be spent.

Details About Specific Funding Sources

The following section provides additional detail about most of these sources, particularly those that the City can rely on regularly. The regular revenue stream projection provides the baseline for the Funding and Implementation Plan in this TSP.

Most of these funding sources can be (and have been) used by the City to leverage one another and additional sources. As transportation improvements are expensive and the competition for transportation dollars is fierce, the City must utilize the funds it regularly receives as "match" for larger awards, which are typically available through federal grant programs. The complete transportation funding picture for the City therefore requires that regular revenues cover maintenance, operations, small projects, and matches for larger capital projects that the City

cannot accomplish without an infusion of funds for the specified project. The Funding and Implementation Plan follows this premise throughout.

~~Table 13-1 summarizes the current, anticipated, and approved funding sources and the estimated revenue available to the City of Milwaukie for transportation-related projects over the next 22 years. Total projected revenues over the next 22 years are approximately $3.75 million for capital projects, $22.9 million for maintenance projects, and $33.4 million for either capital or maintenance projects.~~

System Development Charges and Fee in Lieu of Construction

A transportation System Development Charge (SDC) is collected from developers when new construction or redevelopment is expected to place new demands on the transportation system. The SDC charge is based on a study-based rate and the number of new vehicle trips the development is expected to generate. The City's current SDC rate is ~~$1,596.52~~1,676 per new p.m.-peak-hour trip. The transportation SDC consists of a reimbursement charge and an improvement charge. The improvement charge portion is roughly 95% of the total SDC and can only be used to construct transportation projects that add capacity.

Fee in Lieu of Construction (FILOC) is collected from developers in lieu of construction when required frontage improvements would not be practical, efficient, or beneficial to construct. For example, constructing an isolated sidewalk in the middle of a residential block where no sidewalks currently exist has minimal impact. However, pooling fees collected in lieu of required frontage construction enables the City to build improvements where they are most needed in the neighborhood in which they were collected, such as along identified bikeways, walkways, or school routes.

SDC and FILOC revenue varies based on the level of new development, so it is difficult to accurately forecast the amount of money that will be available from these sources. For example, ~~O~~over the past ~~five~~three fiscal years, SDC and FILOC revenue has been lower than in previous periods, averag~~ed~~ing only approximately ~~$170,000~~11,100 per year (in ~~2007~~2012 dollars). Based on an assumption that the easing of the recent national recession and the opening of the new light rail line in 2015 will result in at least a slight increase in development activity in the future, ~~T~~the projected revenue from ~~these sources~~ SDCs and FILOC over the next 22 years is estimated to be ~~$3.75 million~~745,600, with $444,500 already in hand from past FILOC collections, for a total of nearly $1.2 million.

Franchise Fees

Each of the three City-owned public utilities—water, wastewater, and stormwater—pays 8% of its net revenue to the Street Fund for the use of the public right-of-way. For the fiscal year ~~2006/2007~~2011/2012, the Street Fund received ~~$546,650~~448,000 from such franchise fees. Franchise Fee projected revenue is expected to provide ~~$12~~23.7 million over the next 22 years and is not restricted to either capital or maintenance projects.

State Gas Tax and Vehicle License Fees

The State of Oregon collects taxes and fees on motor vehicle fuel, licenses, and permits and then deposits the proceeds into the Highway Trust Fund. A portion of this fund is paid to cities annually on a per capita basis. By statute, the money may be used only for road-related purposes. Like most Oregon cities, Milwaukie uses its share primarily for street department operations and associated maintenance activities. Road maintenance includes a variety of activities such as striping, signage, sweeping, and shoulder maintenance.

Oregon motor vehicle fuel taxes are collected as a fixed amount per gallon of gasoline sold. The Oregon gas tax is currently 30 cents per gallon, increased from 24 cents per gallon on January 1, 2011~~and has not increased since 1993~~. Because it is levied on a per gallon basis, the revenue does not vary with changes in gasoline prices. Since ~~there has been no~~ increases do not keep up with inflation ~~since 1993~~, the value of this revenue has eroded over time as maintenance materials and repair costs have increased. Additionally, increased fuel efficiency in new vehicles has further reduced the total dollars collected relative to total miles driven.

Oregon vehicle registration fees are collected as a fixed amount at the time a vehicle is registered with the Department of Motor Vehicles. Vehicle registration fees in Oregon have recently increased to about $43 per year per vehicle~~from $15 per vehicle per year to $27 per vehicle per year for passenger cars, with similar increases for other vehicle types~~. Vehicle registration fees are not adjusted for inflation.

In fiscal year ~~2006/2007~~2011/2012, the City received roughly $~~961,000~~1,110,000 from the Oregon Highway Trust Fund. The City's projected share of this fund is approximately $~~21~~27.1 million over the next 22 years.

These funds are flexible and are available for either capital or maintenance projects.

Bike Path Fund

One percent (1.0%) of the payments from the Highway Trust Fund must be reserved for the maintenance and construction of bicycle facilities. In fiscal year ~~2006/2007~~2011/2012, the City received $~~9,711~~11,110 from this revenue source and expects to receive $~~215,000~~271,600 over the next 22 years. Although these monies may only be spent on bicycle facilities, they are classified as unrestricted because they can contribute to capital or maintenance projects.

Street Surface Maintenance Fee

The street maintenance fee is paid by all City of Milwaukie utility customers (residents, businesses, government units, etc.) through their utility bill and is based on an estimate of daily trips generated by each customer. In fiscal year 2011/2012, revenues were approximately $609,000, and the fee is expected to generate $13.4 million over the next 22 years. Monies collected from this fee are dedicated to the Street Surface Maintenance Program (SSMP) for roadway surface preservation, including maintenance, rehabilitation, and reconstruction. They cannot be used to construct capital projects.

Portland General Electric (PGE) Privilege Tax

Similar to franchise fees, the PGE Privilege Tax is paid by a utility (in this case PGE) in exchange for the use of the public right-of-way. The rate approved by the Milwaukie City Council is 1.5% of Milwaukie customers' bills. ~~Because PGE payments to the City are based on a calendar year, the City will receive one-half of~~In fiscal year 2011/2012, the ~~estimated annual~~ City received revenue of $~~300,000~~324,400 from this source ~~in the first program year~~. Revenues for the next 22 years are projected to total nearly $~~6.8~~7.7 million. Monies collected from this tax are dedicated to the Street Surface Maintenance Program (SSMP) for roadway surface preservation, including maintenance, rehabilitation, and reconstruction. They cannot be used to construct capital projects.

~~Street Surface Maintenance Fee~~

~~The street maintenance fee is paid by all City of Milwaukie utility customers (residents, businesses, government units, etc.) through their utility bill and is based on an estimate of daily trips generated by each customer. Fiscal year 2007/2008 revenues are expected to be~~

~~$600,000, and the fee is expected to generate $13.4 million over the next 22 years. Monies collected from this fee are dedicated to roadway surface preservation, including maintenance, rehabilitation, and reconstruction. They cannot be used to construct capital projects.~~

Local ~~Motor Vehicle Fuel~~ Gas Tax

The City of Milwaukie local gas tax of two cents per gallon went into effect in April 2007. Revenue generated in fiscal year ~~2007/2008~~2011/2012 was ~~is expected to be~~ approximately ~~$125,000~~179,000. Over the next 22 years, the total revenue from this source ~~will~~ is expected to be approximately $~~2.8~~4.4 million. Monies collected from this tax are dedicated to the Street Surface Maintenance Program (SSMP) for roadway surface preservation, including maintenance, rehabilitation, and reconstruction. They cannot be used to construct capital projects.

Projected Transportation Revenue

Table 13-1 summarizes the current, anticipated, and approved funding sources and the estimated revenue available to the City of Milwaukie for transportation-related projects over the next 22 years. Total projected revenues over the next 22 years are approximately $1.2 million restricted for capital projects, $25.5 million restricted for maintenance projects, and $50.9 million for either capital or maintenance projects (unrestricted).

Table 13-1 Projected Transportation Revenue for the 22-Year Planning Period (in ~~2007~~2012 dollars)

Funding Source	Capital	Unrestricted	Maintenance	TOTAL
SDC and FILOC[2]	~~$3,756,273~~ 1,190,100			**$ ~~3,756,273~~ 1,190,100**
Franchise Fees		~~$ 12,026,300~~ 23,716,000		**~~12,026,300~~ 23,716,000**
State Gas Tax		~~21,151,174~~ 26,887,000		**~~21,151,174~~ 26,887,000**
Bike Path Fund		~~213,642~~ 271,600		**~~213,642~~ 271,600**
Street Maintenance Fee			~~$13,412,781~~ 13,420,000	**~~13,412,781~~ 13,420,000**
PGE Privilege Tax			~~6,765,000~~ 7,744,000	**~~6,765,000~~ 7,744,000**
Local Gas Tax			~~2,750,000~~ 4,356,000	**~~2,750,000~~ 4,356,000**
Other Revenue		$60,000		**$60,000**
Projected Revenue (~~2008~~2014 to ~~2030~~2035)[3]	**~~$3,756,273~~ 1,190,100**	**~~$33,391,116~~ 50,934,600**	**~~$22,927,781~~ 25,520,000**	**~~$60,075,170~~ 77,644,700**

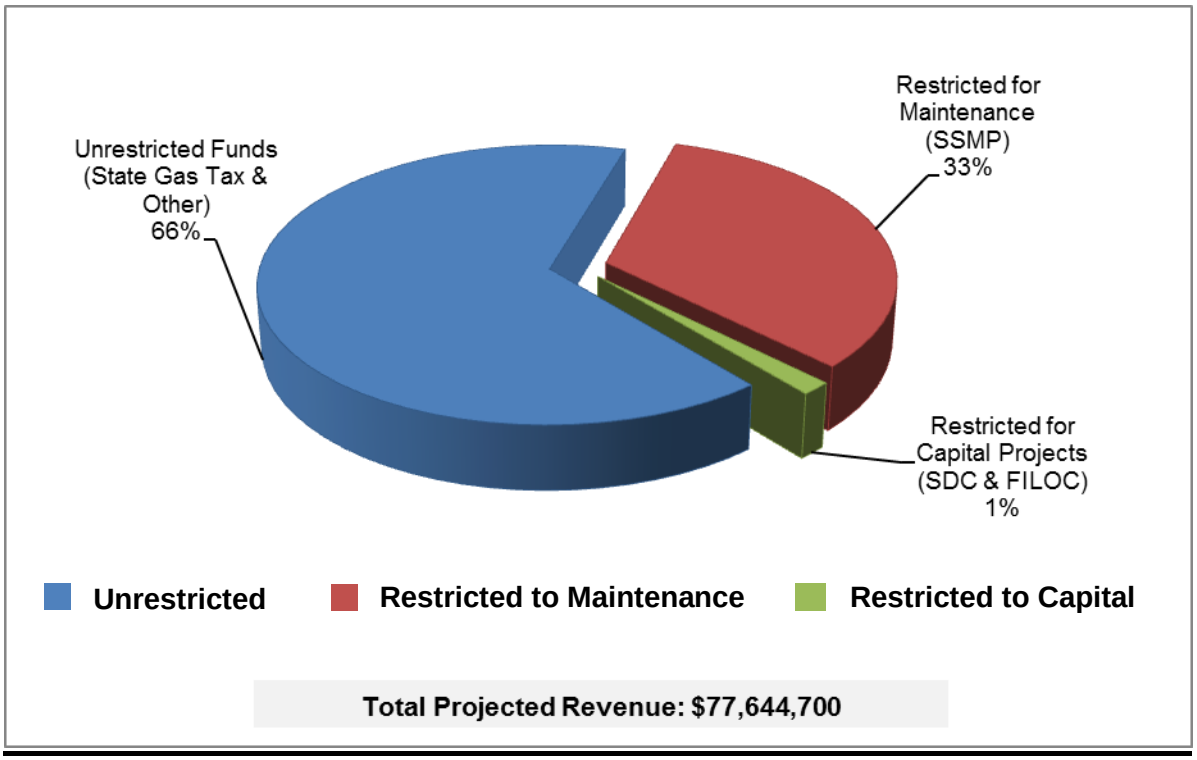
The three line items in Table 13-1 that are specifically restricted to funding maintenance projects (street maintenance fee, PGE privilege tax, and local gas tax) have been designated by City Council as the exclusive funding sources for the City's Street Surface Maintenance Program (SSMP). Projects eligible for SSMP funding include major rehabilitation and reconstruction of roadways. Routine street maintenance (e.g., filling potholes or patching asphalt) must be funded from the "unrestricted" sources in Table 13-1.

[2] Figure includes $444,500 of FILOC money currently in City coffers (unspent to date) in addition to $280,000 of projected FILOC revenue as estimated over the 22-year planning period.

[3] Projections for these funding sources were made based on the most recent year, with the exception of FILOC and SDC revenue. Because FILOC and SDC revenue is more variable, the projection is based on an average involving three years of actual revenues with an estimated small annual increase.

Figure 13-1 provides a graphic depiction of the information presented in Table 13-1, showing the makeup of anticipated revenue for the 22-year planning period.

Figure 13-1 Projected Transportation Revenue for the 22-Year Planning Period (in 2012 dollars)



CAPITAL AND MAINTENANCE PROJECTS

Based on current figures, projected costs for operations and maintenance over the 22-year planning period total approximately $77.2 million. Table 13-2 provides a detailed breakdown of these costs. As noted in Table 13-1, estimated revenues for the same time frame are approximately $77.6 million. However, some of those funds (approximately $1.2 million) are specifically restricted to capital projects, so there is some projected shortfall for operations and maintenance over the 22-year planning period. Not only does this mean that additional funds will be necessary simply to cover projected operational and maintenance costs, but also that the unrestricted revenues will be effectively unavailable for capital projects.

A minimum of approximately $272,000 must be spent on bicycle projects (capital or maintenance), or the City must forego expending the 1% of Highway Trust Fund revenues that must be devoted to bicycle facilities. But given that the regular sweeping of streets with bike lanes accounts for an annual Operations and Maintenance expenditure of approximately $50,000 (or $1.2 million over the 22-year planning period), this requirement is met 4 times over by that one operational project.

Table 13-2 Operations, Maintenance, and ~~Action Plan~~ Capital Costs for the 22-Year Planning Period (in ~~2007~~2012 dollars)

~~Projects~~	~~Capital Cost*~~	~~Operations Cost*~~	~~TOTAL Cost*~~
~~**Operations & Maintenance Projects**~~			
~~Traditional Maintenance Activities (sweeping, striping, signage, etc.)~~		~~$ 8,456,250~~	~~**$ 8,456,250**~~
~~Street Lighting~~		~~7,225,000~~	~~**7,225,000**~~
~~Overhead~~		~~4,510,000~~	~~**4,510,000**~~
~~Contributions to Support or Administration~~		~~9,809,250~~	~~**9,809,250**~~
~~Street Surface Maintenance Program~~		~~22,927,781~~	~~**22,927,781**~~
~~**Subtotal**~~		~~**$52,928,281**~~	~~**$52,928,281**~~
~~**Action Plan Projects**~~			
~~Motor Vehicle[4]/Freight~~	~~$2,668,000~~	~~$ 375,000~~	~~**$ 3,043,000**~~
~~Bicycle~~	~~640,000~~	~~1,100,000~~	~~**1,740,000**~~
~~Pedestrian~~	~~2,239,400~~		~~**2,239,400**~~
~~Transit~~	~~75,000~~		~~**75,000**~~
~~**Subtotal**~~	~~**$5,622,400**~~	~~**$ 1,475,000**~~	~~**$ 7,097,400**~~
~~**Total Approximate Costs (2008 to 2030)**~~	~~**$5,622,400**~~	~~**$54,403,281**~~	~~**$60,025,681**~~

Projects	**Cost***
Operations	
Indirect, Overhead, and Administrative Support Costs	$ 20,307,000
Street Lighting	7,956,000
Subtotal	**$ 28,263,000**
Maintenance	
Street Surface Maintenance Program	$ 25,520,000
Traditional Maintenance Activities (sweeping, striping, signage, etc.)	22,170,000
Other Maintenance (from Consolidated Action Plan)[5]	1,206,000
Subtotal	**$ 48,896,000**
Capital	
Capital Projects (from Consolidated Action Plan)[6]	$ 3,839,200
Subtotal	**$ 3,839,200**
Total Approximate Costs (2014 to 2035)	**$ 80,998,200**

*Approximate Costs

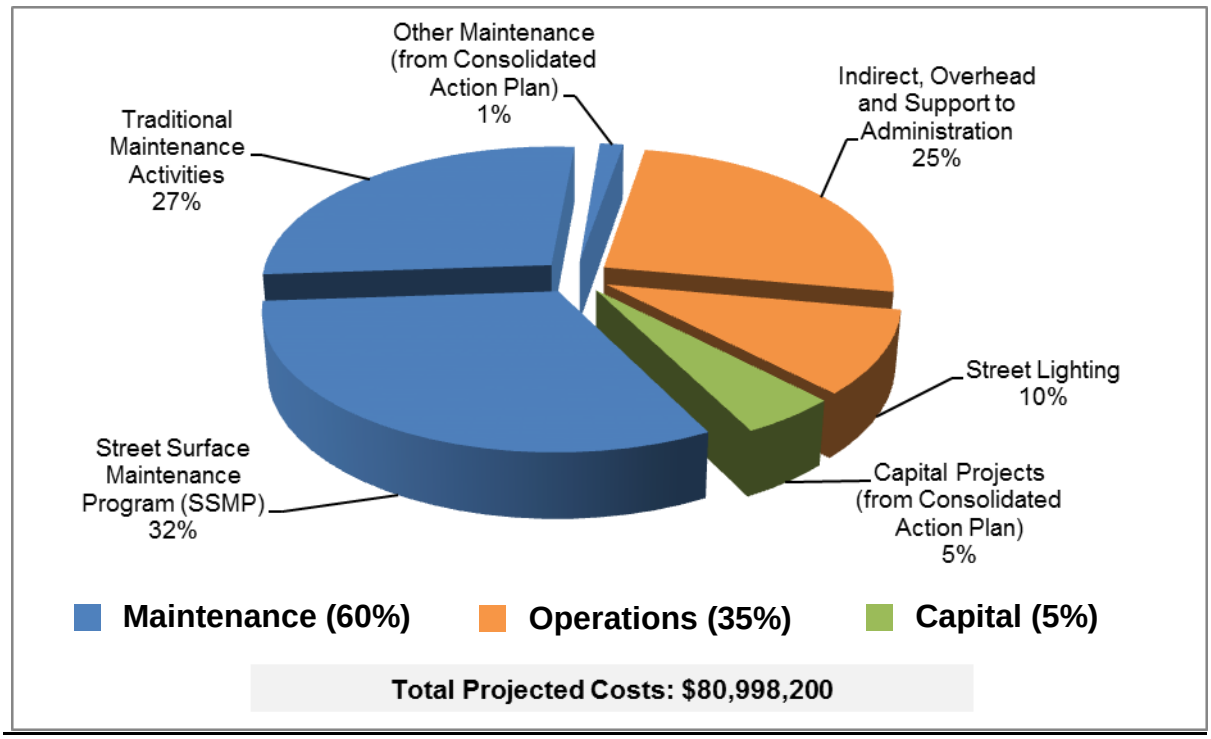
~~[4] Includes funding for Neighborhood Traffic Management Action Plan.~~

[5] Represents that portion of the cost of regular street sweeping that is spent on designated bike routes.

[6] Costs include all projects on the Consolidated Action Plan (Table 13-3). An 11% local match share was used for estimation purposes, except for directly funded projects

Table 13-2 demonstrates how the City can allocate available funds given their restrictions. Figure 13-2 provides a graphic depiction of the information presented in Table 13-2, showing the breakdown of anticipated costs for the 22-year planning period.

Figure 13-2 Projected Transportation Costs for the 22-Year Planning Period (in 2012 dollars)[7]



With limited local funding and many needs, the City will continually strive to allocate investments for projects that best meet the goals as outlined in Chapter 2. The action plans—in Chapters 5, 6, 7, 8, 9, 11, and 12—contain those projects that the City has prioritized most highly and intends to find funding for within the 22-year planning period.

~~Additionally~~ In the past 7 to 8 years, the City ~~will pursue a strategy that~~ has allocated transportation expenditures ~~those funds not earmarked for maintenance (as shown in Table 13-2)~~ in the following manner.

- ~~Approximately 20% to local system maintenance~~
- ~~Approximately 20% to capital and maintenance projects that can be completed with limited City funds~~
- ~~Approximately 60% to leverage receipt of regional, State, and federal grants~~

Maintenance-related expenses account for about 55% of spending and include:

- Approximately 35% to traditional maintenance (personnel, materials, and services for general operations and maintenance).
- Approximately 20% to the Street Surface Maintenance Program.

Operations-related expenses account for about 40% of spending and include:

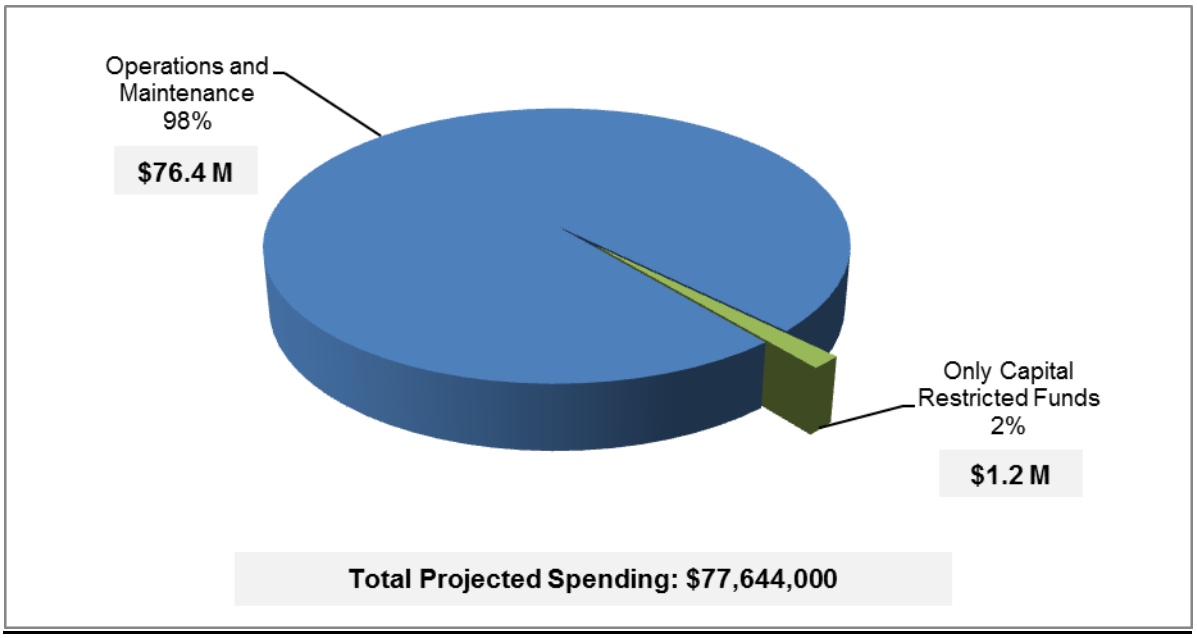
[7] Costs include all projects on the Consolidated Action Plan (Table 13-3). An 11% local match share was used for estimation purposes, except for directly funded projects

- Approximately 25% for indirect, overhead, and administrative support costs.
- Approximately 15% for street lighting.

Approximately 5% of annual spending has been directed to capital projects to improve the transportation system.

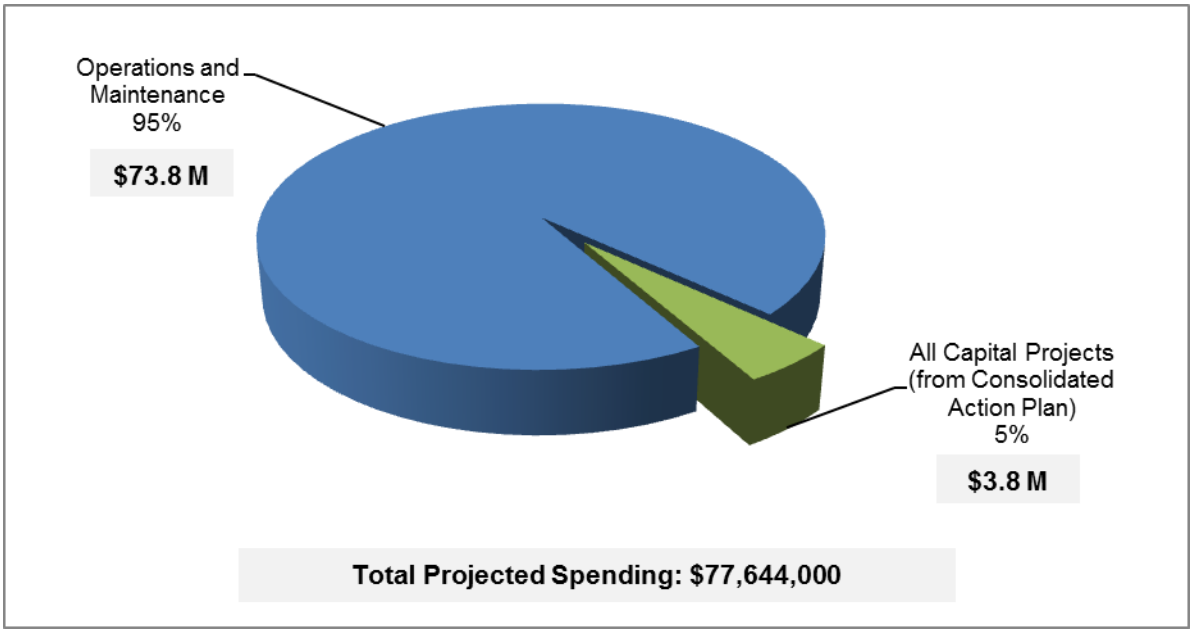
Projected costs over the 22-year planning period are greater than projected revenues by $3.5 million, or about 4%. If the City chooses not to reduce operations and maintenance expenses, and if no additional revenue sources are identified, the only revenues available for capital projects will be the SDC and FILOC funds. Over the 22-year planning period, these revenues are projected to be about $1.2 million and will cover only 31% of the approximately $3.8 million needed to fund all projects on the Consolidated Action Plan. This scenario represents spending approximately 2% of transportation revenues on capital projects and is depicted in Figure 13-3.

Figure 13-3 Spending Scenario 1: Funding Limited to Capital-Restricted Revenue over the 22-Year Planning Period (in 2012 dollars)



Alternately, in order to implement all the capital projects listed in the Consolidated Action Plan (Table 13-3), the City will need to reduce operations and maintenance expenses by about 6%, assuming no additional revenue sources are identified. This scenario represents spending approximately 5% of transportation revenues on capital projects and is depicted in Figure 13-4.

Figure 13-4 Spending Scenario 2: Funding All Capital Projects on Consolidated Action Plan over the 22-Year Planning Period (in 2012 dollars)



~~Leveraging limited local funds will allow the City to implement more projects sooner and to undertake larger projects than the City could otherwise afford.~~

~~The Prioritized Master Plan project list in Table 13-3 (at the end of this chapter) lists all of the proposed TSP projects that were generated through the TSP planning process. Additionally, it shows how well each project meets City goals and how the citizen working groups ranked them. The mode-specific Action Plans – in Chapters 5, 6, 7, 8, 9, 11, and 12 respectively – contain those projects that the City reasonably expects to fund that ranked high in the Prioritized Master Plan project list. The Action Plans include both capital projects and enhanced or new maintenance programs, such as increased bike lane sweeping.~~

~~Given current revenue sources and projections, the remaining projects identified in the mode-specific Master Plan project lists are not expected to be funded with local funds within this plan's 22-year planning horizon.~~

~~Existing operational and maintenance costs total approximately $53 million. See Table 13-2 for a detailed breakdown of these costs. The second half of this table summarizes how the City plans to spend the remaining $7 million of the projected $60 million of total revenue, broken down by mode. More detailed project descriptions and costs can be found in the mode-specific Action Plans.~~

[Table 13-2 originally appeared here. Moved up as shown on page 6 above.]

~~Table 13-2 demonstrates how the City can allocate available funds given their restrictions. The combined Action Plan project lists must include a minimum of $3.75 million in capital projects because SDC and FILOC revenue cannot be used to fund maintenance projects. Table 13-2 shows that approximately $5.6 million is earmarked for capital projects, which is almost $2 million more than the minimum requirement. Additionally, the Bicycle Action Plan must either include a minimum of $215,000 in bicycle projects (capital or maintenance), or forego expending the 1% of Highway Trust Fund revenues devoted to bicycle facilities. Nearly $1.75 million is~~

~~earmarked for bicycle facility improvements, which is over eight times the required minimum amount.~~

Project Cost Estimates

Order-of-magnitude cost estimates were developed for all projects identified in the modal master plans using general unit costs for transportation improvements. However, these estimates do not reflect unique project elements that can significantly add to project costs. More detailed project cost estimates will be developed as projects move closer to implementation, including detailed right-of-way requirements and costs associated with special designs. Because multiple modal improvements may occur on the same facility, costs were developed at a project level incorporating all modes, as appropriate. It may be desirable to break project mode elements out separately. However, in most cases, there are greater cost efficiencies in undertaking multiple modal improvements at the same time.

The Consolidated Action Plan project list (Table 13-3) presents the projects from all of the mode-specific action plans in a single table. The Prioritized Master Plan project list in Table 13-4 (at the end of this chapter) lists all of the proposed TSP projects that have been generated through the TSP planning process, grouping them by priority (High, Medium, Low).

Table 13-3 Consolidated Action Plan

On Action Plan List from TSP Chapter(s)	Project Name	Project Description	From	To	Project Cost ($1,000s)	Direct Funding or Grant Match
Pedestrian & Bicycle	17th Ave Improvements	Fill in sidewalk gaps on both sides of street, fill in gaps in existing bicycle network with bike lanes, and/or provide multiuse path. Improve intersection safety at Milport Rd, McBrod Ave, Hwy 224, Lava Dr, and Hwy 99E.	Ochoco St	McLoughlin Blvd	$1,000	Match
Pedestrian, Bicycle, Public Transit	Railroad Ave Capacity Improvements	Pedestrian aspect: Fill in sidewalk gaps on both sides of street or construct multiuse path on one side.	37th Ave	Harmony Rd	$1,800	Match
		Bicycle aspect: Fill in gaps in existing bicycle network with bike lanes, cycle track, multiuse path, or other facilities.	37th Ave	Linwood Ave	$4,800	Match
		Public transit aspect: Provide bus service to extend to Clackamas Town Center and points east.	Harrison St	Eastern city limits	TBD	Direct (TriMet)
Pedestrian & Bicycle	Monroe St Neighborhood Greenway	Pedestrian aspect: Fill in sidewalk gaps on both sides of street.	42nd Ave	City limits	$1,800	Match
		Bicycle aspect (downtown): Designate as a "neighborhood greenway" and install traffic-calming improvements.	21st Ave	Hwy 224	$85	Match
		Bicycle aspect (central): Designate as a "neighborhood greenway" and install traffic-calming improvements.	Hwy 224	42nd Ave	$80	Match
		Bicycle aspect (east): Designate as a "neighborhood greenway" and install traffic-calming improvements.	42nd Ave	Linwood Ave	$165	Match
Pedestrian & Bicycle	Kellogg Creek Dam Removal and Hwy 99E Underpass	Replace Hwy 99E bridge over Kellogg Creek, remove dam, restore habitat. Construct bike/ped undercrossing between downtown Milwaukie and Riverfront Park.	Location-specific	Location-specific	$9,900	Match
Pedestrian & Street	Intersection Improvements at McLoughlin Blvd and 22nd Ave	Improve safety of Trolley Trail crossing at 22nd Ave.	Location-specific	Location-specific	$200	Match

On Action Plan List from TSP Chapter(s)	Project Name	Project Description	From	To	Project Cost ($1,000s)	Direct Funding or Grant Match
Pedestrian & Bicycle	Stanley Ave Neighborhood Greenway (north)	Pedestrian aspect: Fill in sidewalk gaps on both sides of street. Bicycle aspect: Designate as a "neighborhood greenway" and install traffic-calming improvements.	Johnson Creek Blvd Springwater Trail	King Rd King Rd	$1,900 $135	Match Match
Pedestrian & Bicycle	Stanley Ave Neighborhood Greenway (south)	Pedestrian aspect: Fill in sidewalk gaps on both sides of street. Bicycle aspect: Designate as a "neighborhood greenway" and install traffic-calming improvements.	King Rd King Rd	Railroad Ave Railroad Ave	$2,800 $195	Match Match
Pedestrian & Bicycle	Kronberg Park Trail	Construct multiuse path to connect bike/ped bridge to safe crossing of Hwy 99E	Kellogg Creek Bridge	River Rd at Hwy 99E	$300	Match
Pedestrian & Bicycle	Kellogg Creek Bike/Ped Bridge	Construct bike/ped overpass over Kellogg Creek in conjunction with light rail bridge.	Lake Rd	Kronberg Park	$2,500	Match
Pedestrian & Street	Intersection Improvements at Hwy 224 Crossings	Pedestrian aspect: Improve pedestrian crossings at Freeman Way, 37th Ave, Oak St, Monroe St, and Harrison St Street aspect: Add left-turn lanes and protected signal phasing on Oak St approaches.	Location-specific Location-specific	Location-specific Location-specific	$100 ($20 each) $20	Match Match
Pedestrian	Study of Pedestrian Crossings on Hwy 224	Examine alternatives for improving pedestrian crossings at five intersections along Hwy 224 (Harrison St, Monroe St, Oak St, 37th Ave, Freeman Way)	Harrison St	Freeman Way	$50	Match
Pedestrian	Adams St Connector	Construct pedestrian- and bicycle-only facility on Adams St between 21st Ave and Main St	21st Ave	Main St	$450	Match
Pedestrian	Linwood Ave Sidewalks (south)	Fill in sidewalk gaps on both sides of street.	King Rd	Railroad Ave	$2,150	Match
Bicycle	29th/Harvey/40th Neighborhood Greenway	Designate as a "neighborhood greenway" and install traffic-calming improvements.	Springwater Trail	Monroe St	$220	Match
Public Transit	Downtown Transit Center Improvements	Construct new bus layover facility outside of the downtown core.	Location-specific	Location-specific	$1,250	Match
Public Transit	Downtown Loop Bus	Establish bus service from downtown to Tacoma and Park Ave stations.	Downtown	Tacoma station, Park Ave station	TBD	Direct (TriMet)
Public Transit	Neighborhood Loop Bus	Establish bus service between eastern neighborhoods and downtown.	Eastern city limits	Downtown	TBD	Direct (TriMet)

On Action Plan List from TSP Chapter(s)	Project Name	Project Description	From	To	Project Cost ($1,000s)	Direct Funding or Grant Match
Parking	Downtown Parking Management	Implement a downtown parking management system, including a dedicated parking manager.	Downtown	Downtown	$40	Direct
Parking	Downtown Parking Signage	Install wayfinding and identification signage at McLoughlin Blvd intersections and around public parking lots.	Downtown	Downtown	$10	Direct
Nhbrhd Traffic Mgmnt	Walk Safely Milwaukie Program	Complete a few small traffic-calming and pedestrian safety projects throughout the city each year.	Citywide	Citywide	$300 ($13 annually)[8]	Direct
Street & Freight	Hwy 224 & Hwy 99E Refinement Plan	Conduct refinement study to establish alternative mobility targets for Hwy 224 and McLoughlin Blvd for locations not meeting applicable state targets, and explore ways to minimize barrier effect and improve auto and freight mobility.	Hwy 99E Project Limits: Tacoma St to River Rd	Hwy 224 Project Limits: Hwy 99E to Lake Rd Interchange	$270	Match
Bicycle	Bike Lane Maintenance	Sweep bike lanes to remove debris.	Citywide	Citywide	$1,200	Direct

POTENTIAL NEW FUNDING SOURCES

The master plan project lists in Chapters 5-9, 11, and 12 include a large number of unfunded, but nonetheless high-priority, projects and programs. Absent an increase in funding, the City will be unable to address operational deficiencies identified in Chapter 4. The City may wish to consider new revenue sources to ensure that funding is available for proposed capital projects and other transportation programs.

In addition, the City ~~expects to contribute~~is contributing $5 million in match to the regional share of the Portland-Milwaukie Light Rail (PMLR) project. ~~While the exact allocation of the regional share is still to be determined, the City of Milwaukie's contribution is likely to be around $5 million.~~ The vast majority of the City's transportation revenues are restricted in ways that ~~would~~ do not allow the City to expend them on a light rail "match." SDC revenues, the only significant transportation revenue stream that could contribute to the project, are not projected to be adequate to cover the local match over the next 22 years~~, let alone in the next 5-8 years, the expected time-frame in which the City would contribute to the light rail project~~.

The ~~City's approach to planning for any local financial contribution to light rail parallels the region's: the draft financing plan of the Regional Transportation Plan (which is being updated simultaneously with this TSP) includes the sources of local match for upcoming major transit projects separately from the traditional revenue streams. These major capital projects are not included within the baseline funding commitments and are included as conditional upon the identification of additional revenues. Similarly, the~~ Milwaukie share of the PMLR project is not included on the Public Transit Action Plan list because it will require revenues above and beyond those included in the baseline revenue projection.

[8] Historically, the Neighborhood Pedestrian and Traffic Safety Program received $13,000 annually. In more recent years, the program name changed to Walk Safely Milwaukie and funding was raised to $100,000 annually. Future funding for the program will be evaluated on a biennial basis with the budget.

Many cities use some combination of the following funding sources to supplement their capital and/or maintenance budgets.

General Fund Revenues

At the discretion of the City Council, the City can contribute General Fund revenues to transportation projects and programs. ~~(~~General Fund revenues primarily include property taxes, use taxes, and other miscellaneous taxes and fees imposed by the City.~~)~~ Competing community priorities set by the City Council limit the funding potential of this approach. General Fund resources can fund any aspect of the system, from capital improvements to operations, maintenance, and administration. Additional revenues available from this source are only available to the extent that either General Fund revenues are increased or City Council diverts funding from other City programs.

Expanded SDC Rate for Transportation

The City's transportation SDC rate is ~~$1,596.52~~1,676 per p.m.-peak-hour trip generated. A more typical transportation SDC in the Portland metro area is approximately $2,000 per single-family residence (or p.m.-peak~~-~~hour trip generated). A regional examination of combined SDC and development fee costs conducted by the City of Portland found that the City of Milwaukie charges less than the majority of other jurisdictions (17th out of 21 overall) and has particularly low rates for residential uses.

Given that a large number of needs have been identified, a higher transportation SDC rate is warranted. The projects identified in this TSP will help the City maintain quality of life for its residents and businesses as the City experiences continued growth. It is appropriate to ensure that growth pays a fair and commensurate share of the costs of these new facilities.

In addition to reevaluating the SDC rate, the City may wish to consider tightening its policy on SDC credits. The City currently allows a credit against SDCs due for any privately funded transportation development that increases capacity. However, the City may wish to change this policy to allow SDC credits for only those privately funded projects that are identified in the City's adopted TSP, i.e., those improvements which have been identified as most important to the overall system. A modification of the City's municipal code would be required to implement this change.

Urban Renewal District

An Urban Renewal District (URD) is a mechanism by which the growth of tax revenues for a specific period of time is "captured" to pay for projects within the district. Typically, the sponsoring agency seeks bond financing of such projects and then repays those bonds with the "tax increment" generated in the area. The "tax increment" is the growth in tax revenue; the "frozen base," i.e., the property tax revenue already being generated, continues to flow to the appropriate taxing jurisdictions. All of the "tax increment" (the amount above the frozen base) goes towards retiring the urban renewal debt. This type of "tax increment" financing has been used in Oregon since 1960 to fund a wide variety of projects including transportation improvements. Recent public discussions about this funding mechanism have demonstrated some opposition to the concept; however, it remains in the TSP as an option to be revisited over the 22-year planning period.

Local Improvement District Assessment Revenue

The City may set up Local Improvement Districts (LIDs) to fund specific capital improvement projects within defined geographic areas, or zones of benefit. LIDs impose assessments on

properties within its boundaries. LIDs cannot fund ongoing maintenance costs. They require separate accounting processes, and the assessments collected can only be spent on capital projects within the geographic area. Citizens representing 67% of the assessment can terminate an LID and overturn the planned projects, except in cases of emergency or sidewalk projects.

Direct Appropriations

The City can seek direct appropriations from the State Legislature and/or U.S. Congress for transportation capital improvements. In 2006, ~~T~~the City ~~has~~ received this kind of funding for ~~SE~~ Lake Rd improvements ~~in 2006~~ and will likely continue to pursue these special, one-time appropriations for major City projects.

Special Assessments

Special assessments allow local jurisdictions, with the agreement of property owners, to put into place additional property taxes to pay for specific capital projects or ongoing costs. A variety of special assessments are available in Oregon to fund a ~~variety~~ range of improvements, including sidewalks, curbs, gutters, street lighting, parking structures, and downtown or commercial zone transportation improvements. For example, the local share of funding for TriMet's Westside light rail project was paid for by a special assessment with voter approval. These assessments are commonly counted as revenue towards the limitations established by Measure 50.

Debt Financing

While not a direct funding source, debt financing can be used to spread costs over the useful life of a project. Though interest costs are incurred, the use of debt financing can serve not only as a practical means of funding major improvements, but can also be a more equitable funding strategy, spreading the burden of repayment over existing and future customers who will benefit from the projects. The obvious caution in relying on debt service is that a funding source must be identified to fulfill annual repayment obligations.

Voter-Approved General Obligation Bonds ~~Proceeds~~

Subject to voter approval, the City can issue General Obligation (GO) bonds to debt finance capital improvement projects. GO bonds are backed by the "full faith and credit" of the jurisdiction and provide increased taxing authority with which the City can generate revenues to make principal and interest repayments. For critical projects, the electorate may be willing to accept increased taxation. Proceeds may not be used for ongoing maintenance.

Revenue Bonds

Revenue bonds are debt instruments secured by rate revenue. In order for the City to issue revenue bonds for transportation projects, it would need to identify a stable source of ongoing rate funding. Interest costs for revenue bonds are slightly higher than for general obligation bonds, due to the perceived stability offered by the "full faith and credit" of a jurisdiction.

Oregon Transportation Infrastructure Bank Loans

The Oregon Transportation Infrastructure Bank Loan program is a statewide revolving loan fund designed to promote innovative transportation funding solutions. The Financial Services Branch of ODOT provides State support for the program. In general, eligible projects include highway, transit, bikeway, and pedestrian access projects. Projects are rated on established criteria and recommended based on the rankings. Repayment of loans must begin within 5 years of project completion and must be complete within 30 years or at the end of the useful life of the project.

TSP IMPLEMENTATION AND UPDATE STEPS

The primary function of the TSP is to provide guidance for long-range policy and investment decisions about needed improvements to the transportation system over the next 22 years. The Consolidated Action Plan in Table 13-3 provides a list of the highest-priority projects for the community. This list is utilized to build the "Transportation Priority Project—Unfunded" section of the City's Capital Improvement Plan (CIP). The CIP is a list of projects for the City's water, wastewater, stormwater, and transportation systems that are scheduled to be funded in the short term. As funding becomes available, projects are moved from the unfunded section of the CIP to the section recommended for funding. Projects in the CIP section recommended for funding are reviewed for funding every 2 years through the City's budgeting process. In essence, the CIP is the primary implementation mechanism for TSP projects.

This document requires a series of implementing and on-going update steps to retain its usefulness over the next 22 years. Such steps include refining and updating the affected design standards for streets and trails, implementing the suggested development code and Comprehensive Plan text changes, and periodically updating and reviewing traffic forecasts and project priorities. The State suggests that cities should update local TSPs every 5 years to keep current on the latest land development trends, capital project funding conditions, and priorities of the community. These activities would typically be funded through a combination of grants, engineering funds, and planning funds, and are not, therefore, included in the financial projections for the modal action plans.

Table 13-~~3~~4 Prioritized Master Plan Project List

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
HIGH PRIORITY PROJECTS								
17th Ave ~~Sidewalks~~ Improvements	Pedestrian & Bicycle	Fill in sidewalk gaps on both sides of street, fill in gaps in existing bicycle network with bike lanes, and/or provide multiuse path. ~~and i~~Improve intersection~~s~~ safety at Milport Rd, McBrod Ave, Hwy 224, Lava Dr, and Hwy 99E.	Ochoco St	McLoughlin Blvd	~~$920~~ 1,000	High	Yes	Capital
~~17th Avenue Bikeway and Intersection Safety Improvements~~	~~Bicycle~~	~~Fill in gaps in existing bicycle network with bike lanes or multiuse path. Improve intersection safety and eastbound connection at 17th Ave/Hwy 99E. Improve intersection safety at 17th Ave/Hwy 224.~~	~~Waverly Dr~~	~~Harrison St~~	~~$135~~	~~High~~	~~Yes~~	~~Capital~~
Railroad Ave Capacity Improvements ~~Sidewalks~~	Pedestrian ~~& Transit~~	Pedestrian aspect: Fill in sidewalk gaps on both sides of street or construct multiuse path on one side.	37th Ave	Harmony Rd	~~$1,625~~ 1,800	High	Yes	Capital
~~Railroad Avenue Bike Lanes~~	Bicycle	Bicycle aspect: Fill in gaps in existing bicycle network with bike lanes, cycle track, multiuse path, or other facilities.	37th Ave	Linwood Ave	~~$4,364~~ 4,800	High	~~No~~Yes	Capital
	Transit	Transit aspect: Provide bus service to extend to Clackamas Town Center and points east.	Harrison St	Eastern city limits	TBD	High	Yes	Service Enhance-ments
Monroe St ~~Bicycle Boulevard~~Neighborhood Greenway (downtown)	Bicycle	Designate as a ~~Bicycle Boulevard~~ "neighborhood greenway" and install ~~bicycle boulevard~~ traffic-calming improvements.	21st Ave	~~Linwood Ave~~ Hwy 224	~~$300~~ $85	High	Yes	Capital
Monroe St Neighborhood Greenway (central)	Bicycle	Designate as a "neighborhood greenway" and install traffic-calming improvements.	Hwy 224	42nd Ave	$80	High	Yes	Capital
Monroe St Neighborhood Greenway (east)	Bicycle	Designate as a "neighborhood greenway" and install traffic-calming improvements.	42nd Ave	Linwood Ave	$165	High	Yes	Capital
~~Monroe Street Sidewalks~~	Pedestrian	Fill in sidewalk gaps on both sides of street.	42nd Ave	City limits	~~$1,631~~ 1,800	High	Yes	Capital
Stanley Ave ~~Bicycle Boulevard~~ Neighborhood Greenway (north)	Bicycle & Pedestrian	Bicycle aspect: Designate as ~~a Bicycle Boulevard~~ "neighborhood greenway" and install traffic-calming improvements. Pedestrian aspect: Fill in sidewalk gaps on both sides of street	Springwater Trail Johnson Creek Blvd	~~Railroad Ave~~ King Rd King Rd	~~$300~~ $135 $1,900	~~Medium~~High High	~~No~~Yes Yes	Capital Capital
Stanley Ave Neighborhood Greenway (south)	Bicycle & Pedestrian	Bicycle aspect: Designate as a "neighborhood greenway" and install traffic-calming improvements. Pedestrian aspect: Fill in sidewalk gaps on both sides of street	King Rd King Rd	Railroad Ave Railroad Ave	$195 $2,800	High High	Yes Yes	Capital Capital
~~Stanley Avenue Sidewalks~~	Pedestrian	Fill in sidewalk gaps on both sides of street.	Johnson Creek Blvd	Railroad Ave	~~$4,304~~ 4,700	High	~~No~~Yes	Capital

[9] Project costs are order-of-magnitude estimates and are in 2012 dollars. Future costs may be more due to inflation. In the case of operational projects, estimated costs are for the entire 22-year planning period.

[10] Projects are ranked as either high, medium, or low. They are in no particular order within their ranking.

[11] ~~Funded projects are listed on one of the mode-specific Action Plans in the TSP and are expected to be funded within the 22-year planning period through either direct or leveraged City funding.~~

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
Downtown Transit Center Improvements	Transit	Construct new bus layover facility outside of the downtown core. ~~Improve downtown bus stops and shelters consistent with level 3 features and including ample bike parking.~~	Location-specific	Location-specific	$1,250	High	Yes	Capital
Kellogg Creek Dam Removal and Hwy 99E Underpass	Pedestrian & Bicycle	Replace Hwy 99E bridge over Kellogg Creek, remove dam, restore habitat. Construct bike/pedestrian undercrossing between downtown Milwaukie and Riverfront Park.	~~Site~~ Location-Specific	~~Site~~ Location-Specific	~~$9,000~~ 9,900	High	Yes	Capital
29th/Harvey/40th ~~Bicycle Boulevard~~ Neighborhood Greenway	Bicycle	Designate as a ~~Bicycle Boulevard~~ "neighborhood greenway" and install traffic-calming improvements.	Springwater Trail	Monroe St	~~$200~~ 220	High	Yes	Capital
Bike Lane Maintenance	Bicycle	Sweep bike lanes to remove debris.	Citywide	Citywide	~~$1,100~~ 1,200	High	Yes	Operational
~~Bike Route Signage~~	~~Bicycle~~	~~Install neighborhood bike route signage.~~	~~Citywide~~	~~Citywide~~	~~$150~~	~~High~~	~~Yes~~	~~Operational~~
Study of Pedestrian Crossings on Hwy 224	Pedestrian	Examine alternatives for improving pedestrian crossings at five intersections along Hwy 224 (Harrison St, Monroe St, Oak St, 37th Ave, Freeman Way)	Harrison St	Freeman Way	$50	High	Yes	Policy
~~Hwy 224~~ Intersection Improvements at Hwy 224 and Oak St	~~Automobile~~ Street	Add left-turn lanes and protected signal phasing on Oak St approaches.	Location-specific	Location-specific	$20	High	Yes	Capital
~~Neighborhood Pedestrian and Traffic Safety Program~~ Walk Safely Milwaukie Program	Nbrhd Traffic Manage-ment	Complete a few small traffic-calming and pedestrian safety projects throughout the city each year.	Citywide	Citywide	$300 ($13 annually)	High	Yes	Capital
Hwy 224 & Hwy 99E Refinement Plan	~~Automobile~~ Street & Freight	Conduct refinement study ~~that focuses on~~ to establish alternative mobility targets for Hwy 224 and McLoughlin Blvd for locations not meeting applicable state targets, and explore ways to minimize~~ing~~ barrier effect and improve~~ing~~ auto and freight mobility.	Hwy 99E Project Limits: Tacoma St to ~~17th Ave~~ River Rd	Hwy 224 Project Limits: Hwy 99E to Lake Rd Interchange	~~$250~~ 270	High	Yes	Capital
~~Railroad Crossing Safety and Quiet Zone Project~~	~~Automobile & Pedestrian~~	~~Construct railroad crossing safety improvements at Oak Street, Harrison Street, and 37th Avenue.~~	~~Location specific~~	~~Location specific~~	~~$285~~	~~High~~	~~Yes~~	~~Capital~~
Harrison St Railroad Crossing Separation	Freight	Upgrade Harrison crossing of Union Pacific Railroad tracks to grade-separated facility. Assess as part of Hwy 224 & Hwy 99E Refinement Plan.	Location-specific	Location-specific	~~$28,000~~ 30,700	High	No	Capital
~~Hwy 224~~ Intersection Improvements at Hwy 224 and 37th Ave	~~Automobile~~ Street & Freight	Consolidate the two northern legs of 37th Ave and International Way into one leg at Hwy 224.	Location-specific	Location-specific	~~$1,946~~ 2,100	High	No	Capital
Linwood Ave Capacity Improvements (north)	~~Automobile~~ Street	Widen to standard three lane cross section. Widen bridge over Johnson Creek.	Johnson Creek Blvd	King Rd	~~$8,500~~ 9,300	High	No	Capital
Linwood Ave Capacity Improvements (south)	~~Automobile~~ Street	Widen to standard three lane cross section.	King Rd	Harmony Rd	~~$11,400~~ 12,500	High	No	Capital

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
Hwy 224 Crossing Improvements at Oak and Washington Sts	Bicycle	Improve intersection crossing safety for bicyclists at Washington St and Oak St.	Location-specific	Location-specific	$10	High	No	Capital
Downtown Parking ~~Enforcement~~ Management	Parking	Implement a downtown parking management system, including a dedicated parking manager.	Downtown	Downtown	$40	High	~~No~~Yes	Operational
Kellogg Creek Bike/Ped Bridge	Pedestrian & Bicycle	Construct bike/ped overpass over Kellogg Creek in conjunction with light rail bridge.	Lake Rd	Kronberg Park	$2,500	High	Yes	Capital
Kronberg Park Trail	Pedestrian & Bicycle	~~Construct multimodal trail along Kellogg Creek connecting Kronberg Park to downtown Milwaukie.~~ Construct multiuse path to connect bike/ped bridge to safe crossing of Hwy 99E.	~~McLoughlin Blvd~~ Kellogg Creek Bridge	~~Downtown~~ River Rd	~~$1,200~~ 300	~~Low~~High	~~No~~Yes	Capital
Adams St Connector	Pedestrian	Construct pedestrian- and bicycle-only facility on Adams St between 21st Ave and Main St	21st Ave	Main St	$450	High	Yes	Capital
43rd Ave Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Howe St/ 42nd Ave	King Rd/ 43rd Ave	~~$550~~ 600	~~Low~~High	No	Capital
Harmony Rd Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Linwood Ave	City limits	~~$38~~ 40	~~Low~~High	No	Capital
International Way Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street	Criterion Ct	Lake Rd	~~$767~~ 840	~~Low~~High	No	Capital
River Rd Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	McLoughlin Blvd	City limits	~~$626~~ 690	~~Low~~High	No	Capital
Intersection Curb Ramp Improvements	Pedestrian	Install curb ramps at all intersections with sidewalks (approximately 700 intersections).	Citywide	Citywide	~~$5~~ 3,500	~~Low~~High	No	Capital
~~Hwy 224~~ Intersection Improvements at Hwy 224 and 37th Ave	Pedestrian	Improve pedestrian crossing.	Location-specific	Location-specific	$20	~~Low~~High	~~No~~Yes	Capital
~~Hwy 224~~ Intersection Improvements at Hwy 224 and Freeman Way	Pedestrian	Improve pedestrian crossing.	Location-specific	Location-specific	$20	~~Low~~High	~~No~~Yes	Capital
~~Hwy 224~~ Intersection Improvements at Hwy 224 and Harrison St	Pedestrian	Improve pedestrian crossing.	Location-specific	Location-specific	$20	~~Low~~High	~~No~~Yes	Capital
~~Hwy 224~~ Intersection Improvements at Hwy 224 and Monroe St	Pedestrian	Improve pedestrian crossing.	Location-specific	Location-specific	~~$15~~ 20	~~Low~~High	~~No~~Yes	Capital
~~Hwy 224~~ Intersection Improvements at Hwy 224 and Oak St	Pedestrian	Improve pedestrian crossing.	Location-specific	Location-specific	$20	~~Low~~High	~~No~~Yes	Capital
Linwood Ave Sidewalks (south)	Pedestrian	Fill in sidewalk gaps on both sides of street.	King Rd	Railroad Ave	$2,150	High	Yes	Capital
Bicycle-friendly Street Grates	Bicycle	Install bicycle-friendly street grates.	Citywide	Citywide	~~$50~~ 60	~~Low~~High	No	Operational

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
Intersection Improvements at Linwood Ave and Monroe St	Bicycle	Improve safety of crossing at intersection.	Location-specific	Location-specific	$10	~~Low~~High	No	Capital
Lake Rd Bike Lanes	Bicycle	Fill in gaps in existing bicycle network with bike lanes.	Main St	Guilford Dr	~~$3,142~~ 3,400	~~Low~~High	No	Capital
Stanley Ave Connectivity at King Rd	~~Automobile~~ Street	Enhance connection along Stanley Ave at King Rd.	Location-specific	Location-specific	~~$53~~ 60	~~Low~~High	No	Capital
Stanley Ave Connectivity at Monroe St	~~Automobile~~ Street	Enhance connection along Stanley Ave at Monroe St.	Location-specific	Location-specific	~~$53~~ 60	~~Low~~High	No	Capital
Intersection Improvements at McLoughlin Blvd and 22nd Ave	Pedestrian, Bicycle, & Street	Improve safety of Trolley Trail crossing at 22nd Ave.	Location-specific	Location-specific	$200	High	Yes	Capital
Improved Connection to Springwater Trail at 29th Ave and Sherrett St	Pedestrian & Bicycle	Pave the connection to Springwater Trail at 29th Ave and Sherrett St. (TSAP)	Location-specific	Location-specific	$20	High	No	Capital
Downtown Loop Bus	Transit	Establish bus service from downtown to Tacoma and Park Ave stations.	Downtown	Tacoma station, Park Ave station	TBD	High	Yes	Service Enhancement
Neighborhood Loop Bus	Transit	Establish bus service between eastern neighborhoods and downtown.	Eastern city limits	Downtown	TBD	High	Yes	Service Enhancement
Milwaukie Transportation Management Association Program	Transit	Implement a transportation management association for downtown employers.	Milwaukie Town Center	Milwaukie Town Center	$200	~~Low~~High	No	Operational
Improved Connection from Springwater Trail to Pendleton Site (Ramps)	Pedestrian & Bicycle	Construct ramps to improve existing connection of Springwater Trail to Pendleton site at Clatsop St. (TSAP)	Location-specific	Location-specific	$630	High	No	Capital
Improved Connection from Springwater Trail to Pendleton Site (Widened Undercrossing)	Pedestrian & Bicycle	Widen existing undercrossing to improve connection of Springwater Trail to Pendleton site at Clatsop St. (TSAP)	Location-specific	Location-specific	$100	High	No	Capital
Improved Connection from Springwater Trail to Tacoma Station	Pedestrian	Construct stairs to connect Springwater Trail to Tacoma station. (TSAP)	Location-specific	Location-specific	$80	High	No	Capital
Signage and Intersection Improvements at McLoughlin Blvd and Ochoco St	Freight	Establish signage for trucks and improve intersection. (TSAP)	Location-specific	Location-specific	$1,600	High	No	Capital
Downtown Parking Signage	Parking	Install wayfinding and identification signage at McLoughlin Blvd intersections and around public parking lots.	Downtown	Downtown	$10	~~Medium~~ High	~~No~~ Yes	Capital
Public Parking Structure	Parking	Construct 3- to 4-story public parking structure with retail at ground floor for visitor/employee parking.	Location-specific	Location-specific	~~$10,000~~ 11,000	~~Medium~~ High	No	Capital

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
MEDIUM PRIORITY PROJECTS								
Lake Rd Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	~~Kuehn Rd~~ Where Else Ln	Hwy 224	~~$2,049~~ 2,200	Medium	No	Capital
19th Ave and Sparrow St ~~Bicycle Boulevard~~ Neighborhood Greenway	Bicycle	Designate as a ~~Bicycle Boulevard~~"neighborhood greenway" and install ~~bicycle boulevard~~ traffic-calming improvements. This would connect the south end of Kellogg Creek Trail to River Rd.	Eagle St	River Rd	~~$737~~ 800	Medium	No	Capital
Intersection Improvements at Main St and Mailwell Dr	Freight	Upgrade intersection turning radii to better accommodate freight movements.	Location-specific	Location-specific	~~$50~~ 60	Medium	No	Capital
McLoughlin Blvd Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Washington St	Southern city limits	~~$596~~ 650	Medium	No	Capital
~~Railroad Crossing Improvements at Harrison~~	~~Freight~~	~~Upgrade paving materials to concrete or rubberized material to improve longevity and enhance for alternative modes.~~	~~Location specific~~	~~Location specific~~	~~$50~~	~~Medium~~	~~No~~	~~Capital~~
~~Railroad Crossing Improvements at 21st and Adams~~	~~Freight~~	~~Upgrade paving materials to concrete or rubberized material to improve longevity and enhance for alternative modes.~~	~~Location specific~~	~~Location specific~~	~~$50~~	~~Medium~~	~~No~~	~~Capital~~
~~Railroad Crossing Improvements at Monroe~~	~~Freight~~	~~Upgrade paving materials to concrete or rubberized material to improve longevity and enhance for alternative modes.~~	~~Location specific~~	~~Location specific~~	~~$50~~	~~Medium~~	~~No~~	~~Capital~~
~~Railroad Crossing Improvements at Washington~~	~~Freight~~	~~Upgrade paving materials to concrete or rubberized material to improve longevity and enhance for alternative modes.~~	~~Location specific~~	~~Location specific~~	~~$50~~	~~Medium~~	~~No~~	~~Capital~~
~~Railroad Crossing Improvements at Oak~~	~~Freight~~	~~Upgrade paving materials to concrete or rubberized material to improve longevity and enhance for alternative modes.~~	~~Location specific~~	~~Location specific~~	~~$50~~	~~Medium~~	~~No~~	~~Capital~~
~~Railroad Crossing Improvements at 37th~~	~~Freight~~	~~Upgrade paving materials to concrete or rubberized material to improve longevity and enhance for alternative modes.~~	~~Location specific~~	~~Location specific~~	~~$50~~	~~Medium~~	~~No~~	~~Capital~~
Pedestrian Walkway Amenities	Pedestrian	Install amenities, such as benches, along key walking routes.	Citywide	Citywide	~~$50~~ 60	Medium	No	Capital
~~Main Street Bike Lanes~~	~~Bicycle~~	~~Fill in gaps in existing bicycle network with bike lanes.~~	~~Harrison St~~	~~Moores St~~	~~$2,131~~	~~Medium~~	~~No~~	~~Capital~~
~~McLoughlin Blvd~~ Intersection Improvements at McLoughlin Blvd and 17th Ave	~~Automobile~~ Street	Prohibit left-turn movement from 17th Ave to northbound McLoughlin Blvd and include in Hwy 224 & Hwy 99E Refinement Plan.	Location-specific	Location-specific	~~$15~~ 20	Medium	No	Capital
~~McLoughlin Blvd~~ Intersection Improvements at McLoughlin Blvd and River Rd	~~Automobile~~ Street	Consolidate a single access point for the area at Bluebird St with full intersection treatment and signalization or add second northbound left-turn lane at River Rd.	Location-specific	Location-specific	~~$898~~ 980	Medium	No	Capital
Harrison St and King Rd Connection	~~Automobile~~ Street	Enhance connection between King Rd and Harrison St at 42nd Ave.	Location-specific	Location-specific	~~$53~~ 60	Medium	No	Capital
37th Ave Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Lake Rd	Harrison St	~~$794~~ 870	Medium	No	Capital
Intersection Improvements at 42nd Ave and King Rd	Pedestrian	Enhance intersection function.	Location-specific	Location-specific	~~$15~~ 20	Medium	No	Capital

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
Downtown Public Parking Lot Improvements	Parking	Upgrade and maintain off-street public parking facilities with improved landscaping and lighting.	Downtown	Downtown	~~$50~~ 60	Medium	No	Capital
Community Bicycle Rides	Bicycle	~~Coordinate~~ Support community bike rides to encourage bike use.	Citywide	Citywide	$5	Medium	No	Operational
Intersection Improvements at Harrison St and Hwy 224	~~Automobile~~ Street	Add left-turn lanes and protected signal phasing on Harrison St approaches.	Location-specific	Location-specific	$20	Medium	No	Capital
Cyclist Education	Bicycle	Promote bicycling through bike use and route selection education.	Citywide	Citywide	$10	Medium	No	Operational
~~Railroad Crossing Pedestrian Improvements at Oak~~	~~Pedestrian~~	~~Improve intersection for pedestrians.~~	~~Location specific~~	~~Location specific~~	~~$15~~	~~Medium~~	~~No~~	~~Capital~~
Harrison St Bike Lanes	Bicycle	Fill in gaps in existing bicycle network with bike lanes (cost included with Harrison St road widening project).	Hwy 99E	21st Ave	~~$273~~ 300	Medium	No	Capital
Intersection Improvements at Linwood Ave and King Rd	~~Automobile~~ Street	Implement protected/permissive left-turn phasing for northbound and southbound approaches.	Location-specific	Location-specific	~~$16~~ 20	Medium	No	Capital
Brookside Dr Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Johnson Creek Blvd	Regents Dr	~~$15~~ 20	Medium	No	Capital
~~Springwater Trail Paving Project~~	~~Bicycle~~	~~Improve corridor through repaving existing trail.~~	~~29th Ave~~	~~Linwood Ave~~	~~$500~~	~~Medium~~	~~No~~	~~Capital~~
Harrison St Capacity Improvements	~~Automobile~~ Street	Widen to standard three lane cross section.	32nd ~~St~~Ave	42nd ~~St~~Ave	~~$2,565~~ 2,800	Medium	No	Capital
~~Johnson Creek Blvd~~ Intersection Improvements at Johnson Creek Blvd and Linwood Ave	~~Automobile~~ Street	Add eastbound right-turn lanes and westbound right-turn lanes.	Location-specific	Location-specific	~~$803~~ 880	Medium	No	Capital
~~Harrison Street Intersection Improvements at Main~~	~~Automobile~~	~~Add westbound shared through/right turn lane or eastbound right turn lane.~~	~~Location specific~~	~~Location specific~~	~~$34~~	~~Medium~~	~~No~~	~~Capital~~
Logus Rd Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	43rd Ave	49th Ave	~~$771~~ 850	~~High~~Medium	~~Yes~~No	Capital
Springwater Trail Completion	~~Bicycle &~~ Pedestrian & Bicycle	Contribute to regional project to complete Springwater Trail ("Sellwood Gap") along Ochoco St.	17th Ave	19th Ave	~~$80~~ 90	~~High~~Medium	~~Yes~~No	Capital
Downtown Streetscape Improvements	Parking & Pedestrian	Install sidewalk bulbouts, lighting, and pedestrian amenities.	Downtown	Downtown	~~$6,700~~ 7,300	~~High~~Medium	~~Yes~~No	Capital
King Rd Boulevard Treatments	Pedestrian	Install street boulevard treatments: widen sidewalks and improve crossings.	43rd Ave	Linwood	~~$500~~ 550	~~High~~Medium	~~Yes~~No	Capital
Bicycle and Pedestrian Overpass over Railroad Ave	Pedestrian & Bicycle	Establish a dedicated bicycle and pedestrian connection across Railroad Ave and the railroad tracks.	Railroad Ave	International Way	~~$2,025~~ 2,200	~~Low~~Medium	No	Capital
Oatfield Rd Bike Lanes	Bicycle	Fill in gaps in existing bicycle network with bike lanes.	Guilford Ct	Lake Rd	~~$348~~ 380	~~Low~~Medium	No	Capital
International Way Bicycle Facilities	Bicycle	Construct bike lanes or other bike facilities.	37th Ave	Lake Rd	$400	Medium	No	Capital

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
Traffic-Calming Improvements on River Rd at Lark St	Nbrhd Traffic Manage-ment	Install traffic-calming measures such as a permanent speed-warning sign and/or roundabout.	Location-specific	Location-specific	$310	Medium	No	Capital
Bicycle/ Pedestrian Improvements to Main St	Pedestrian & Bicycle	Construct multiuse path or other improved bike/ped facilities on Main St to provide safer connection between downtown and Tacoma station. (TSAP)	Hanna Harvester Dr	Tacoma station	$2,900	Medium	No	Capital
Bicycle/ Pedestrian Connection from Eastern Neighborhoods to Tacoma Station Area	Pedestrian & Bicycle	Establish bike/ped connection over existing railroad tracks and light rail to Tacoma station area. (TSAP)	Olsen St & Kelvin St	Mailwell Dr	$4,000	Medium	No	Capital
Improved Connection from Springwater Trail to McLoughlin Blvd	Pedestrian & Bicycle	Construct stairs or other facility to connect Springwater Trail to west side of McLoughlin Blvd. (TSAP)	Location-specific	Location-specific	$500	Medium	No	Capital
Bicycle/ Pedestrian Connection over Johnson Creek	Pedestrian & Bicycle	Construct bike/ped bridge over Johnson Creek along Clatsop St at 23rd Ave to connect Tacoma station area with adjacent neighborhood. (TSAP)	Location-specific	Location-specific	$400	Medium	No	Capital
Improved Bicycle/ Pedestrian Connections on West Side of Tacoma Station Area	Pedestrian & Bicycle	Improve bike/ped connections to adjacent neighborhood to west of Tacoma station area at Ochoco St and Milport Rd. (TSAP)	Location-specific	Location-specific	$500	Medium	No	Capital
LOW PRIORITY PROJECTS								
Railroad Ave Capacity Improvements	~~Automobile~~ Street ~~& Transit~~	Widen ~~SE~~ Railroad Ave to standard three lane cross section. ~~Accommodate future bus service.~~	37th Ave	Linwood Ave	~~$12,990~~ 14,200	~~High~~Low	~~Yes~~No	Capital
Ochoco St Sidewalks	Pedestrian	Construct sidewalks on Ochoco St to connect bus stops to Goodwill.	19th Ave	McLoughlin Blvd	~~$$$~~ $1,300	Low	No	Capital
Springwater ~~Corridor~~ Trail Intersection Improvements at 45th Ave	Bicycle	Improve safety of crossing at intersection.	Location-specific	Location-specific	$10	Low	No	Capital
Johnson Creek Blvd and 42nd Ave Signalization	~~Automobile~~ Street	Replace 3-way stop with signal when warranted.	Location-specific	Location-specific	~~$250~~ 270	Low	No	Capital
~~Springwater Trail Ramp Improvement~~	~~Bicycle & Pedestrian~~	~~Improve ramp at Springwater Trail and McLoughlin Blvd.~~	~~Location specific~~	~~Location specific~~	~~$15~~	~~Low~~	~~Yes~~	~~Capital~~
~~Springwater Trail Ramp Improvement at McLoughlin~~	~~Pedestrian~~	~~Improve ramp at Springwater Trail and McLoughlin Blvd.~~	~~Location specific~~	~~Location specific~~	~~$15~~	~~Low~~	~~No~~	~~Capital~~
19th Ave Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Kellogg Creek Trail	Sparrow St	~~$305~~ 330	Low	No	Capital
22nd Ave Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	McLoughlin Blvd	Sparrow St	~~$325~~ 360	Low	No	Capital
Edison St Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	35th Ave	37th Ave	~~$116~~ 130	Low	No	Capital
Harvey St Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	32nd Ave	42nd Ave	~~$534~~ 590	Low	No	Capital
Home Ave Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Railroad Ave	King Rd	~~$756~~ 830	Low	No	Capital

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
Johnson Creek Blvd Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Harney ~~Dr~~St	City limits	~~$378~~ 410	Low	No	Capital
Linwood Ave Sidewalks (north)	Pedestrian	Fill in sidewalk gaps on both sides of street.	Johnson Creek Blvd	~~Railroad Ave~~ King Rd	~~$2,960~~ 1,050	Low	No	Capital
Mason Lane Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	42nd Ave	Regents Dr	~~$671~~ 740	Low	No	Capital
Oatfield Rd Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Guilford Ct	City limits	~~$132~~ 150	Low	No	Capital
Regents Dr Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Brookside Dr	Winsor Dr	~~$494~~ 540	Low	No	Capital
Roswell St Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	32nd Ave	36th Ave	~~$192~~ 210	Low	No	Capital
Rusk Rd Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Lake Rd	North Clackamas Park	~~$662~~ 730	Low	No	Capital
Olsen St Sidewalks	Pedestrian	Fill in sidewalk gaps on north side of street.	32nd Ave	~~43rd~~42nd Ave	~~$432~~ 470	Low	No	Capital
49th Ave Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Logus Rd	King Rd	~~$250~~ 270	Low	No	Capital
Hwy 224 Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	Oak St	37th Ave	~~$420~~ 460	Low	No	Capital
Intersection Improvements at Olsen St and 42nd Ave	Pedestrian	Improve pedestrian crossing.	Location-specific	Location-specific	$20	Low	No	Capital
~~Intersection Improvements at Harmony and Lake~~	~~Pedestrian~~	~~Improve pedestrian crossing.~~	~~Location specific~~	~~Location specific~~	~~$15~~	~~Low~~	~~No~~	~~Capital~~
Intersection Improvements at Railroad and 37th Aves	Pedestrian	Improve pedestrian crossing.	Location-specific	Location-specific	$10	Low	No	Capital
Intersection Improvements at Stanley Ave and Logus Rd	Pedestrian	Improve pedestrian crossing.	Location-specific	Location-specific	~~$15~~ 20	Low	No	Capital
Pedestrian Connection to North Clackamas Park	Pedestrian	Create pedestrian connection between the school and the park.	Rowe Middle School	North Clackamas Park	~~$1,284~~ 1,400	Low	No	Capital
~~Hwy 224~~ Intersection Improvements at Hwy 224 and 17th Ave	Freight	Upgrade intersection turning radii to better accommodate freight movements.	Location-specific	Location-specific	~~$50~~ 60	Low	No	Capital
Intersection Improvements at Mailwell and Omark Drs	Freight	Upgrade intersection turning radii to better accommodate freight movements.	Location-specific	Location-specific	~~$50~~ 60	Low	No	Capital
Milwaukie Bike Map	Bicycle	Produce a Milwaukie Bike Map.	Citywide	Citywide	~~$50~~ 60	Low	No	Operational
~~Trolley Trail Signage~~	~~Bicycle~~	~~Design and install Trolley Trail signage.~~	~~Milwaukie Riverfront~~	~~Southern city limits~~	~~$54~~	~~Low~~	~~No~~	~~Capital~~
Springwater Trail Signage	Bicycle	Install wayfinding signage for Springwater Trail.	Citywide	Citywide	~~$15~~ 20	Low	No	~~Operational~~ Capital

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
Intersection Improvements at Johnson Creek Blvd and Linwood Ave	Bicycle	Improve safety of crossing at intersection.	Location-specific	Location-specific	$10	Low	No	Capital
Intersection Improvements at Linwood Ave and King Rd	Bicycle	Improve safety of crossing at intersection.	Location-specific	Location-specific	$10	Low	No	Capital
~~Intersection Improvements at Linwood and Harmony~~	~~Bicycle~~	~~Improve safety of crossing at intersection.~~	~~Location specific~~	~~Location specific~~	~~$10~~	~~Low~~	~~No~~	~~Capital~~
Intersection Improvements at International Way and Lake Rd	Bicycle	Improve safety of crossing at intersection.	Location-specific	Location-specific	$10	Low	No	Capital
~~Intersection Improvements at Adams and 21st~~	~~Bicycle~~	~~Improve safety of crossing at intersection.~~	~~Location specific~~	~~Location specific~~	~~$10~~	~~Low~~	~~No~~	~~Capital~~
Harrison St Bike Lanes	Bicycle	Fill in gaps in existing bicycle network with bike lanes.	Hwy 224	42nd Ave	~~$13~~ 10	Low	No	Capital
37th Ave Bike Lanes	Bicycle	Fill in gaps in existing bicycle network with bike lanes.	Harrison St	Hwy 224	~~$2,900~~ 3,200	Low	No	Capital
43rd Ave Bike Lanes	Bicycle	Fill in gaps in existing bicycle network with bike lanes.	King Rd	Filbert St	~~$1,014~~ 1,100	Low	No	Capital
Linwood Ave Bike Lanes (north)	Bicycle	Fill in gaps in existing bicycle network with bike lanes.	Queen Rd	Johnson Creek Blvd	~~$1,692~~ 1,900	Low	No	Capital
Linwood Ave Bike Lanes (south)	Bicycle	Fill in gaps in existing bicycle network with bike lanes.	Juniper St	Harmony Rd	~~$296~~ 320	Low	No	Capital
Rusk Rd Bike Lanes	Bicycle	Fill in gaps in existing bicycle network with bike lanes.	Lake Rd	North Clackamas Park	~~$936~~ 1,000	Low	No	Capital
~~21st Avenue Bike Lanes~~	~~Bicycle~~	~~Fill in gaps in existing bicycle network with bike lanes.~~	~~Harrison St~~	~~Lake Rd~~	~~$50~~	~~Low~~	~~No~~	~~Capital~~
Police Enforcement on Drivers	Bicycle	Enforce laws related to bike lanes and bicycle safety.	Citywide	Citywide	$10	Low	No	Operational
Bike Lane Striping	Bicycle & Transit	Restripe existing bike lanes and stripe bike lanes on streets where buses and bicyclists share the road.	Citywide	Citywide	$20	Low	No	Operational
Kellogg Creek Trail Improvements	Bicycle	Resurface trail and provide wayfinding signage to/from trail.	Milwaukie Riverfront	Treatment Plant	~~$623~~ 680	Low	No	Capital
Hwy 224 Access Modifications at Freeman Way	~~Automobile~~ Street	Modify access at Freeman Way to improve intersection functioning.	Location-specific	Location-specific	~~$1,313~~ 1,400	Low	No	Capital
~~Harmony Road Grade Separation and Realignment at Linwood~~	~~Freight & Automobile~~	~~Grade separate Harmony Road from Union Pacific Railroad and align as a through east-west movement. Outcome of alignment and geometry is dependant upon the Harmony Road Environmental Assessment project (scheduled for completion Fall 2008).~~	~~Location specific~~	~~Location specific~~	~~$28,000~~	~~Low~~	~~No~~	~~Capital~~
Washington St Sidewalks	Pedestrian	Fill in sidewalk gaps on both sides of street.	~~35th~~32nd Ave	~~37th~~35th Ave	$130	Low	No	Capital
Franklin St Sidewalks	Pedestrian	Install sidewalks on both sides of street to connect to ~~Hector~~ Campbell Elementary School.	42nd Ave	45th Ave	~~$200~~ 220	~~Medium~~ Low	No	Capital

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
Intersection Improvements at 42nd Ave and Harrison St	~~Automobile~~ Street	Signalize intersection to facilitate dominant traffic flow.	Location-specific	Location-specific	~~$252~~280	~~Medium~~ Low	No	Capital
Pedestrian Walkway Signage	Pedestrian	Provide maps and wayfinding signage on streets that identify ways to get around the city.	Citywide	Citywide	$10	~~Medium~~ Low	No	Operational
Lake Rd Capacity Improvements	~~Automobile~~ Street	Widen to standard three lane cross section.	21st Ave	Oatfield Rd	~~$7,392~~ 8,100	~~Medium~~ Low	No	Capital
Intersection Improvements at all Crossings of McLoughlin Blvd	Pedestrian	Improve all existing crossings of McLoughlin Blvd (e.g., extended time for crossing, signage). (ODOT to do.)	Location-specific	Location-specific	—	Low	No	Capital
Bike/Ped Path on Sparrow St	Pedestrian & Bicycle	Establish a dedicated bicycle and pedestrian connection on Sparrow St, connecting River Rd to Trolley Trail	River Rd	Trolley Trail	$350	Low	No	Capital
Bike/Ped Overpass over McLoughlin Blvd at River Rd	Pedestrian & Bicycle	Establish a dedicated bicycle and pedestrian connection across McLoughlin Blvd.	Kronberg Park	River Rd	$2,500	Low	No	Capital
Intersection Improvements at 42nd Ave and King Rd	Street	Realignment of intersection to improve traffic movements between 42nd Ave and King Rd east of 42nd Ave.	Location-specific	Location-specific	$200	Low	No	Capital
Traffic-Calming on lower King Rd	Nbrhd Traffic Manage-ment	Install traffic-calming measures on King Rd.	36th Ave	42nd Ave	$300	Low	No	Capital
Improved Connection from Springwater Trail to Pendleton Site (Tunnel)	Pedestrian & Bicycle	Construct tunnel under Springwater Trail to improve connection to Pendleton site at Clatsop St. (TSAP)	Location-specific	Location-specific	$1,200	Low	No	Capital
Crossing Improvements for McLoughlin Blvd at Ochoco St and Milport Rd	Pedestrian & Bicycle	Construct improvements at Ochoco St and Milport Rd to improve bike/ped crossing of McLoughlin Blvd (per ODOT, this will require full intersection improvements). (TSAP)	Location-specific	Location-specific	$8,320	Low	No	Capital
Local Street Connections in Tacoma Station Area	Street	Connect local streets within Tacoma station area: 24th Ave between Ochoco St/Moores St & Clatsop St; Omark St between Mailwell Dr & Beta St (w/ midblock connection from Main St); and Mailwell Dr to Harrison St via 26th Ave. (TSAP)	Location-specific	Location-specific	$8,120	Low	No	Capital
Local Street Improvements in Tacoma Station Area	Street	Construct street improvements on Stubb St, Beta St, Ochoco St, Hanna Harvester Dr, and Mailwell Dr. (TSAP)	Location-specific	Location-specific	$5,280	Low	No	Capital
Bicycle/ Pedestrian Connection between McLoughlin Blvd and Stubb St	Pedestrian & Bicycle	Establish bike/ped connection to McLoughlin Blvd sidewalk at west end of Stubb St. (TSAP)	Location-specific	Location-specific	$20	Low	No	Capital

Project Name	TSP Chapter	Project Description	From	To	Estimated Cost ($1,000s)[9]	Priority Ranking [10]	Is Project ~~Funded~~ in Action Plan?[11]	Project Type
REGIONAL PROJECTS WITHIN OR THROUGH~~T~~ THE CITY OF MILWAUKIE[12]								
~~Milwaukie Light Rail Extension or High Capacity Transit Improvements~~	~~Transit~~	~~Construct light rail or high capacity transit improvements between Milwaukie and Portland.~~	~~Rose Quarter MAX Station~~	~~Milwaukie Town Center~~	~~$515,000~~	~~—~~	~~No~~	~~Capital~~
Oregon City Light Rail Extension or High Capacity Transit Improvements	—	Construct light rail or high capacity transit improvements between Milwaukie and Oregon City.	Milwaukie Town Center	Oregon City	$577,500	—	No	Capital
~~Milwaukie Transportation Management Association Program~~	~~Transit~~	~~Implement a transportation management association for employers.~~	~~Milwaukie Town Center~~	~~Milwaukie Town Center~~	~~$200~~	~~—~~	~~No~~	~~Operational~~
~~Portland Traction Company Multiuse Trail~~	~~—~~	~~Plan, engineer, and construct multiuse trail along Portland Traction Company right-of-way.~~	~~Milwaukie~~	~~Gladstone~~	~~$1,386~~	~~—~~	~~No~~	~~Capital~~
North Clackamas Greenway Corridor Study	—	Study feasibility of corridor for multiuse path construction (possibly along Kellogg Creek).	Milwaukie	Clackamas Regional Center	—	—	No	Capital
Linwood/Harmony /Lake Rd Intersection Improvements	—Freight & Street	Add northbound right-turn lane and eastbound right-turn lane. AND/OR Grade separate Harmony Rd from Union Pacific Railroad and align as a through east-west movement.	Location-specific	Location-specific	~~$28,000~~ 30,700	—	No	Capital
McLoughlin Blvd Improvements	—	Complete boulevard design improvements.	Scott St	Harrison St	$3,300	—	No	Capital
Tillamook Branch Trestle Trail Study	—	Study feasibility of east-west multiuse trail construction.	Milwaukie Town Center	Lake Oswego Town Center	—	—	No	Capital
Railroad Junction Improvements	—	Implement track and signal improvements to allow for increased track speeds between UP Willsburg Junction and UP Albina Yards.	Milwaukie	UP Railroad Albina Yards	$8,800	—	No	Capital
Railroad Track Extension	—	Extend two tracks from Willsburg Junction to Clackamas.	Milwaukie	I-205	$19,000	—	No	Capital
Tualatin-Portland Commuter Rail Extension Study	—	Study feasibility of adding peak-hour-only service on existing tracks.	Tualatin	Union Station via Lake Oswebo & Milwaukie	TBD	—	No	Operational
Pedestrian Overcrossing of McLoughlin Blvd at Umatilla St	—	Construct bike/ped overcrossing of McLoughlin Blvd at Umatilla St. (TSAP)	Location Specific	Location Specific	$2,200	—	No	Capital
Portland Bike-Share Station and Car Share Spaces at Tacoma Station	—	Establish a Portland Bike-Share station and car-share spaces at Tacoma station. (TSAP)	Location Specific	Location Specific	$70	—	No	Capital

Key:
NDA = Neighborhood District Association
NTMP = Neighborhood Traffic Management Program
CIP = Capital Improvement Program

[12] 2004 Regional Transportation Plan (RTP) projects in the Milwaukie area that may or may not be shown on mode-specific master plans or project lists.

STSP = Safe Trips to School Program
RTP = Regional Transportation Plan
TSAP = Tacoma Station Area Plan