



City of Milwaukie  
**CAPITAL IMPROVEMENT  
PLAN**

Fiscal Years 2017-2022



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## Message from the City Manager

As we prepare our third biennial budget, we continue our efforts of improving the budget materials we provide our citizens. This year, we continue our focus is on improving the quality and content of our Capital Improvement Plan (CIP). The aim is to clearly communicate the City's future infrastructure, facilities, and equipment needs, and illustrate how the City is budgeting for the significant resources required to meet those needs. This effort is all the more important as we continue to strive to show our citizens how the City is successfully navigating the impacts of the trying financial times of the past several years.

Our Capital Improvement Program cannot fully keep up with the rate at which our capital assets are depreciating. Flat or declining revenue sources are being outpaced by demands for service and continually increasing needs. Recognizing this, our staff, City Council, citizen members of the Budget Committee, and Citizens Utility Advisory Board have taken a careful look at our needs and the revenue sources required to afford ongoing improvements. Our recent utility rate increases reflect the City Council's efforts to better protect our assets by more aggressively providing funds to protect and improve the quality of our infrastructure. The increases are not sufficient to fully compensate for Milwaukie's previous practice of maintaining low utility rates; however, it is a shift in the right direction. We must continue to identify and prioritize projects most critical to our community to make the greatest impact with the limited funding available.

This document not only identifies where capital funds are being spent, but it shows where funding deficiencies are. It notes those capital projects that must be delayed due to lack of sufficient available funding or sources. Over the past three years, the City has worked hard to improve its financial outreach and reporting. The Finance Department's efforts have been rewarded as the budget document and reporting materials have received awards for compliance with the highest professional standards. This CIP document has been prepared to attain the same level of professionalism and to educate citizens about capital planning within the framework of the City's financial forecasting. I would like to commend our Engineering and Finance Departments for their outstanding efforts to prepare this CIP. I am pleased to submit it to you as an example of the excellent work undertaken by your City staff to address the ongoing needs of the community.

If you have any questions about this document, I encourage you to contact Engineering Director Charles Eaton at [eatonc@milwaukieoregon.gov](mailto:eatonc@milwaukieoregon.gov), or our Finance Director, Casey Camors at [camorsc@milwaukieoregon.gov](mailto:camorsc@milwaukieoregon.gov).

Sincerely,

Bill Monahan  
Milwaukie City Manager





# How to Use This Document

This Capital Improvement Plan document provides detailed descriptions about projects organized by fund. Each fund section begins with a summary overview of the function of the fund followed by funding and project information. Summary tables and graphs highlight the capital projects within each fund. Following the summary sections are detailed breakdowns of each project, along with project schedules, cost estimates, and operating budget impacts.

Summary information of all capital projects sorted by fund, funding source, and funding status are included as appendices to this document.

The project title and description explains the details and need for each project.



## Kellogg Creek Dam Removal

This project will remove the Kellogg Dam, address contaminated sediments, re-establish fish passage, and restore riparian habitat for endangered salmon and native wildlife. The Stormwater Fund contributes minimal funding to fund necessary environmental studies as the waterway is an important stormwater feature.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	50,000	50,000	-	-	-	100,000
Unfunded		-	-	-	-	-	-	9,900,000
TOTAL		-	50,000	50,000	-	-	-	10,000

Operating Budget Impact  
Unknown at this time.

The outcome of the project on the operating budget of each fund is described in this area.

This section indicates whether the project is funded or unfunded, the funding source, and the cost for each scheduled project year.



## Capital Improvement Plan Overview

The Capital Improvement Plan (CIP) establishes guidance and planning for the City of Milwaukie's capital investments in facilities and infrastructure. At the foundation of the CIP are the City's Master Plan documents (Water, Sewer, Storm, Transportation, and Parks), which are an extension of the City's Comprehensive Plan. These master plans illustrate the long-term needs and goals of each department as defined by community input, advisory groups, expert consultants, and City Staff. Planning Commission and City Council goals, operational (i.e. service delivery) needs, and regulatory requirements further refine and shape the CIP.

Projects within the CIP are prioritized and matched with projections of future revenues. Inclusion of a project within this document does not necessarily reflect a budgeted spending commitment, but instead reflects anticipated priority at this point in time based on estimated future revenues. Current revenues are not enough to keep up with all the capital needs of the City and as such, some projects are shown as unfunded or partially funded in the CIP. Additionally, there are restrictions on many revenue sources in related to where the funds may be spent.

A capital expenditure is defined by the City using the following two criteria: relatively high monetary value (\$10,000 or greater), and a long asset life (1 or more years of useful life), excluding the cost of normal maintenance and repairs that do not add to the value of the asset or materially extend the asset's life.

The CIP is intended as a method of communication with citizens, businesses, advisory groups, the Planning Commission, and City Council. It gives the public the opportunity to see the City's proposed plans for the future and provide feedback to the City Council and City staff.

The goal of this Capital Improvement Plan is to provide the maximum sustainable level of priority capital investment to deliver outcomes that are of the highest importance to our citizens and provide for a healthy, safe, active, efficient, and optimized community with excellent livability and quality of life.

### Factors in Evaluating CIP Projects

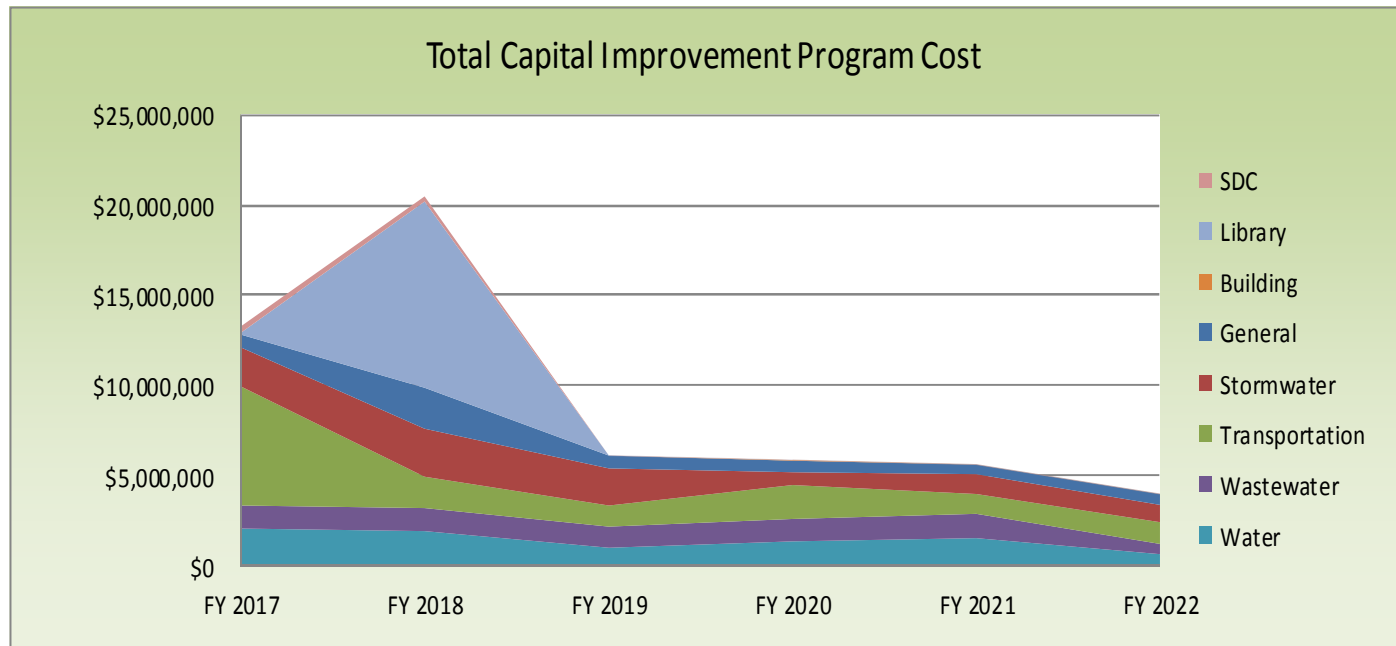
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|--|--|
| • Master planning documents                  | • Health, safety, and environmental effects            |
| • City Council and Planning Commission goals | • Community economic effects                           |
| • Operational needs                          | • Feasibility, including public support and disruption |
| • Regulatory requirements                    | • Implications of deferring the project                |
| • Fiscal impacts                             | • Coordination and advantages of joint projects        |



# Summary Information

## Funding Summary

Fund	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Unfunded	Total
General	\$715,000	\$2,270,000	\$738,000	\$621,000	\$510,000	\$615,000	\$7,681,000	\$13,150,000
Building	-	-	-	\$45,000	-	-	-	\$45,000
Library	\$100,000	\$10,345,000	-	-	-	-	-	\$10,445,000
Transportation	\$6,664,000	\$1,727,000	\$1,140,000	\$1,885,000	\$1,115,000	\$1,215,000	\$33,704,000	\$47,450,000
Water	\$2,050,000	\$1,910,000	\$972,000	\$1,336,000	\$1,512,000	\$645,000	-	\$8,425,000
Wastewater	\$1,265,000	\$1,295,000	\$1,205,000	\$1,255,000	\$1,355,000	\$555,000	-	\$6,930,000
Stormwater	\$2,175,000	\$2,660,000	\$2,060,000	\$715,000	\$1,100,000	\$940,000	\$9,900,000	\$19,550,000
SDC	\$353,000	\$270,000	-	-	-	-	-	\$623,000
<b>City Wide Total</b>	<b>\$13,322,000</b>	<b>\$20,477,000</b>	<b>\$6,115,000</b>	<b>\$5,857,000</b>	<b>\$5,592,000</b>	<b>\$3,970,000</b>	<b>\$51,285,000</b>	<b>\$106,618,000</b>



### Funding for capital projects comes from four distinct sources

- (1) **Fees:** including utility rates, franchise utility fees, state gas tax and vehicle registration fees, interest income, streets/parks fees, and property taxes.
- (2) **Bonds**
- (3) **Grants and intergovernmental:** from outside agencies such as ODOT, Metro, Clackamas County, DEQ, CDBG, Oregon Parks, and the Oregon Marine Board.
- (4) **Development:** funds paid by new development to cover the cost of the development's impact to the systems either by their request or as a condition of development.

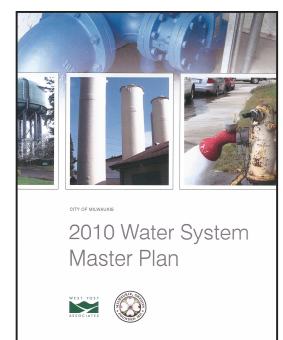
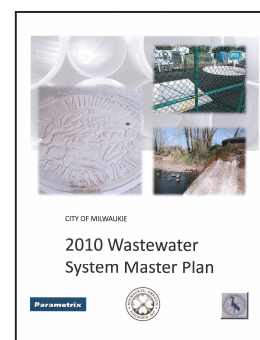
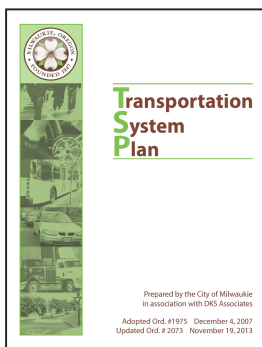




# Multi-Document Transparency

The City of Milwaukie recognizes that the projects included in the Capital Improvement Plan represent a significant amount of public monies and it is the City's intention to present this information across several documents to ensure that projects are clearly understood and accounted for in financial forecasts, budgets, capital improvement plans and master plans.

Multi-document transparency means that a capital project necessitated by a master plan will be included in the CIP document and then planned for in the forecast document. Funding for the project will then be included in the budget document and the expense will be recorded in quarterly and annual financial reports.



City of Milwaukie						Stormwater Fund (amounts in thousands)					
						Current Year Estimated	+1	+2	+3	+4	+5
ACTUALS						PROJECTED					
Resources	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Beginning fund balance	\$ 821	\$ 1,081	\$ 1,416	\$ 1,896	\$ 2,528	\$ 3,391	\$ 2,784	\$ 1,909	\$ 618	\$ 202	\$ 1,441
Stormwater fee - base	1,747	1,834	1,971	2,205	2,572	2,950	2,950	3,366	3,709	4,073	4,480 0.00%
Stormwater fee - rate increases	-	-	-	-	-	-	416	337	370	407	448 Scheduled Below
Interest	2	-	-	-	-	-	-	-	-	-	- 0.00%
Miscellaneous	46	5	19	7	9	4	7	7	7	7	7 0.00%
Fees in Lieu of Construction (FILOC)	-	-	-	-	-	120	-	-	-	-	- 0.00%
Intergovernmental	-	-	3	-	-	-	-	-	-	-	- 0.00%
Debt proceeds	-	-	-	-	-	-	130	-	-	-	- 0.00%
Transfers from other funds	70	-	-	-	-	16	-	-	-	-	- 0.00%
Total revenues	1,867	1,839	1,993	2,212	2,581	3,090	3,503	3,710	4,086	4,487	4,935
Total Resources	\$ 2,688	\$ 2,920	\$ 3,400	\$ 4,108	\$ 5,109	\$ 6,481	\$ 6,267	\$ 5,619	\$ 4,698	\$ 4,689	\$ 6,378
Requirements											
Personnel Services	\$ 386	\$ 390	\$ 423	\$ 422	\$ 483	518	694	751	784	822	848 PS Spreadsheet
Materials & services (base)	114	102	106	95	118	182	220	220	227	234	241 3.00%
M&S (Franchise Fee to Streets)	136	148	156	178	205	234	269	296	330	360	400 Calculated
Debt service	-	-	-	-	-	-	-	14	14	14	14 0.75%
Transfers to other funds	867	837	740	760	905	985	1,020	1,060	1,081	1,103	1,125 2.00%
Capital outlays											
Scheduled capital projects	104	20	83	125	7	1,295	1,750	2,360	1,950	820	1,000 Per CIP
Unfunded CIP	-	-	3	-	-	-	-	-	-	-	- Estimated
Other	-	-	-	-	-	-	130	-	-	-	-
Additions (vehicles & equip)	-	-	-	-	-	503	295	300	110	95	100 Estimated
Total expenditures	1,607	1,504	1,513	1,580	1,718	3,697	4,378	5,001	4,406	3,348	3,728
Ending Fund Balance											
Policy requirement (25%)	380	370	380	360	430	470	550	580	610	630	650
Reserve for vehicle replacement	-	-	50	100	100	100	100	150	100	100	100
Over (under) policy reserves	701	1,048	1,486	2,068	2,881	2,214	1,259	(150)	(500)	711	1,988
Total ending fund balance	1,081	1,416	1,896	2,528	3,391	2,784	1,909	618	202	1,441	2,648
Total Requirements	\$ 2,688	\$ 2,920	\$ 3,400	\$ 4,108	\$ 5,109	\$ 6,481	\$ 6,267	\$ 5,619	\$ 4,698	\$ 4,689	\$ 6,378

## Financial Reporting

Projects funded within the CIP are reported as "Capital Outlay" in financial forecasts, budgets, quarterly reports, and annual reports. This line item corresponds with the annual funded totals shown in this Capital Improvement Plan (CIP).

The adoption of this CIP document provides the baseline for Capital Outlay that will be included in future budget documents for the Budget Committee to review, consider, and approve, and for the City Council to formally adopt.



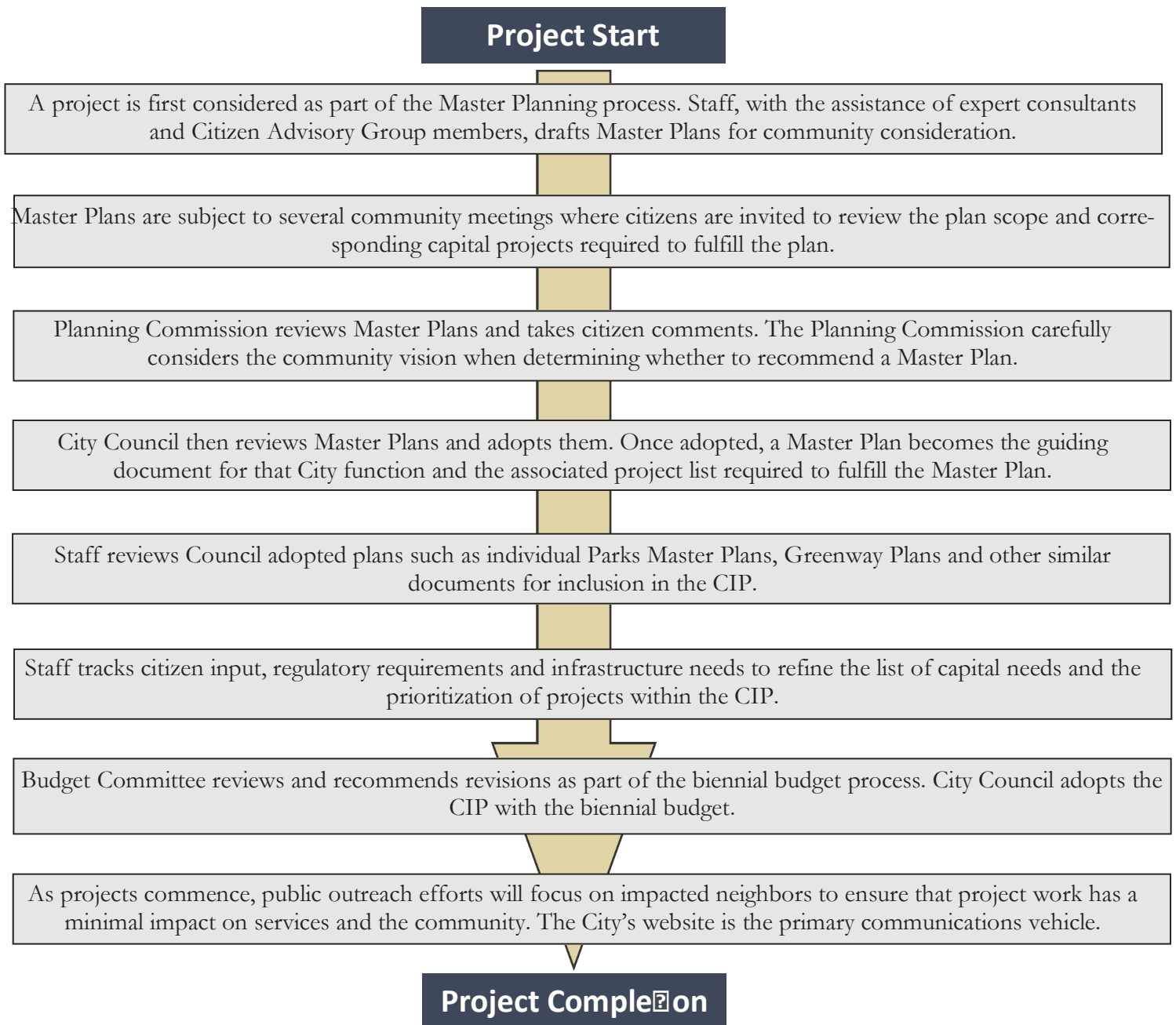
# The Process of a CIP Project

## Question:

How does a project get placed on the Capital Improvement Plan?

## Answer:

Citizen involvement is the cornerstone of the Capital Improvement Plan. Projects are vetted through a multi-step process (see below) that includes public comment at several stages to ensure that projects meet the community's needs, in addition to expert analyses during plan development. Projects do not begin until funding has been confirmed, approved, and adopted into the City's biennial budget.



## Overview

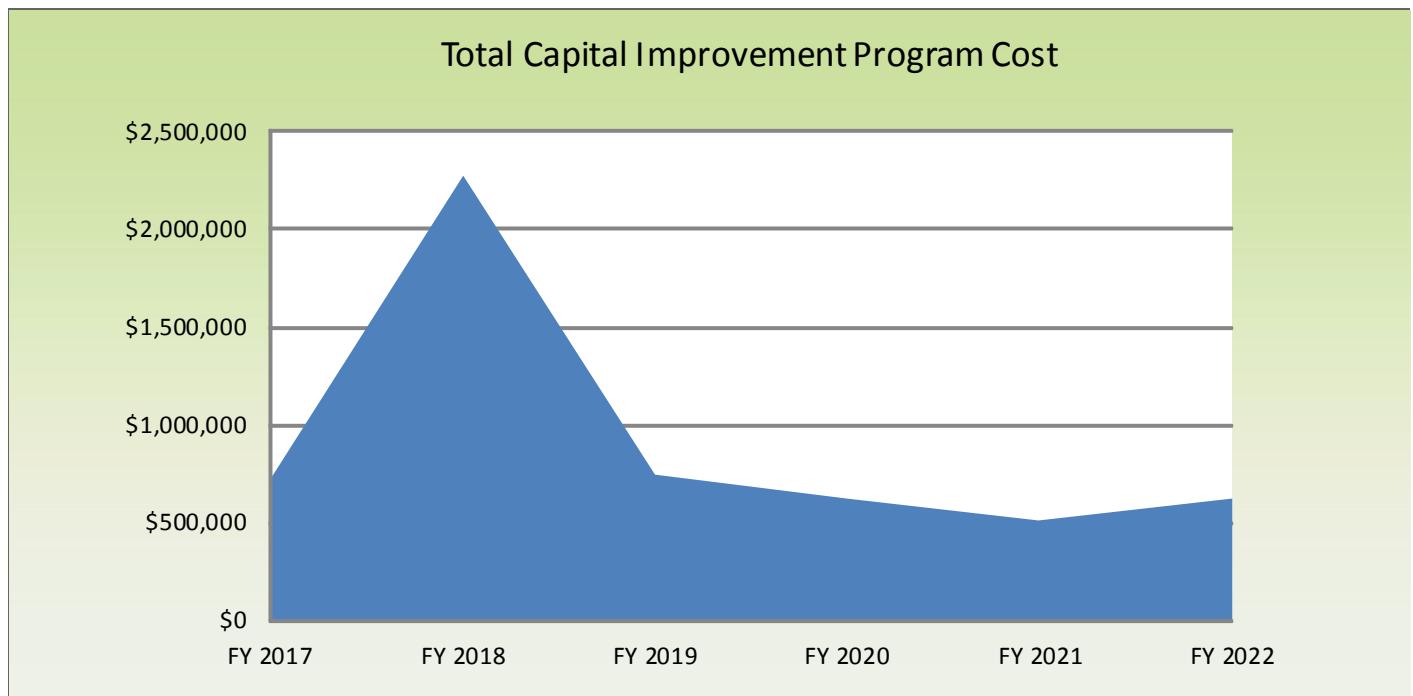
The General Fund is the main operating fund of the City. It accounts for and reports all financial resources not accounted for and reported in another fund.

The City's General Fund accounts for the following departments:

- City Council
- City Manager
- Community Development
- Public Works Administration
- Engineering
- Facilities Management
- Finance
- Fleet Services
- Human Resources
- Information System Technology
- Municipal Court
- Planning
- Code Enforcement
- Public Access Studio
- Records and Information Management
- Police Administration, Field Services & Support
- Non-departmental

Ongoing revenue sources for the General Fund are property taxes, reimbursement charges for services to other funds, intergovernmental revenues, franchise fees, fines and forfeitures, licenses and permits, and miscellaneous income. The General Fund also may anticipate debt proceeds.

The General Fund expenditures consist of Personnel Service to support the budgeted full-time equivalents (FTEs), Materials and Services, Debt Service, and Capital Outlay across the 17 departments listed above.





# Capital Projects

## General Fund Summary

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Unfunded	Total
16	General Fund Department Vehicle Purchases	95,000	70,000	210,000	-	45,000	150,000	250,000	820,000
17	Police - Vehicle Replacements	150,000	150,000	150,000	150,000	150,000	150,000	-	900,000
18	CD - Kronberg Park Multi-Use Trail	-	1,700,000	-	-	-	-	-	1,700,000
18	CD - Riverfront Park Phase 3	-	-	-	-	-	-	3,000,000	3,000,000
19	CD - Adams Street Plaza	-	20,000	-	-	-	-	320,000	340,000
19	CD - Wayfinding	40,000	-	-	-	-	-	150,000	190,000
20	CD - Kronberg Park Improvements	-	-	-	-	-	-	1,151,000	1,151,000
20	CD - Riverfront Park Beach	25,000	-	-	-	-	-	-	25,000
21	CD - McLoughlin Blvd Gateway and Entryway Improvements	-	-	-	-	-	-	100,000	100,000
21	CD - McLoughlin Blvd Bridge	-	-	-	-	-	-	2,200,000	2,200,000
22	CD - Dogwood Park Improvements	-	-	-	-	-	-	100,000	100,000
22	Non Departmental - Public Education and Government Capital (PEG)	40,000	40,000	50,000	50,000	50,000	50,000	-	280,000
23	Finance - Incode VIO Upgrade	46,000	-	-	-	-	-	-	46,000
23	Fleet - Equipment	14,000	10,000	20,000	20,000	20,000	20,000	-	104,000
24	IT - Data Center Consolidation	-	30,000	-	-	-	-	-	30,000
24	IT - Core Infrastructure Update	50,000	-	-	-	-	-	-	50,000
25	IT - Back-up System Upgrades	-	-	22,000	-	-	-	-	22,000
25	IT - VOIP Polycom Device Upgrade	-	30,000	-	-	-	-	-	30,000
26	IT - Annual Security Assessment	-	-	-	14,000	-	-	-	14,000
26	IT - Enterprise Security Firewall and Router Upgrades	50,000	-	-	-	-	-	-	50,000
27	IT - Help Desk System Application Upgrade	50,000	-	-	-	-	-	-	50,000
27	IT - Virtual Environment Host Upgrade	-	65,000	-	-	-	-	-	65,000
28	IT - Remote Monitoring and Management Platform	-	-	-	16,000	-	-	-	16,000
	GENERAL FUND SUBTOTAL	560,000	2,115,000	452,000	250,000	265,000	370,000	7,271,000	11,283,000

Continued on next page...

# General Fund

## FACILITIES SUMMARY

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Unfunded	Total
28	Facilities - Install Bullet Resistance Glass at PSB	60,000	-	-	-	-	-	-	60,000
29	Facilities - Install Central AC at Bertman House	-	-	20,000	-	-	-	-	20,000
29	Facilities - Replace Main Floor Surface at City Hall	30,000	-	-	-	-	-	-	30,000
30	Facilities - Replace Lighting in Fleet Shop at JCB	15,000	-	-	-	-	-	-	15,000
31	Facilities - Improve Customer Interaction Windows at City Hall	40,000	-	-	-	-	-	-	40,000
39	Facilities - Expand Self-Checkout at the Library	10,000	-	-	-	-	-	-	10,000
31	Facilities - Pave Public Works Yard Parking Area at JCB	-	-	-	-	-	-	70,000	70,000
32	Facilities - New Concrete Floor in Pole Barn at JCB	-	30,000	-	-	-	-	-	30,000
32	Facilities - Construct Mud Room in Public Works Building at JCB	-	40,000	-	-	-	-	-	40,000
33	Facilities - Construct Full Height Walls for the Engineering Department at JCB	-	30,000	-	-	-	-	-	30,000
33	Facilities - Install Electronic Door Openers in the Fleet Shop at JCB	-	30,000	-	-	-	-	-	30,000
34	Facilities - Replace Cabinets at PSB	-	25,000	-	-	-	-	-	25,000
34	Facilities - Replace Suspended Ceiling at PSB	-	-	40,000	-	-	-	-	40,000
35	Facilities - Replace Windows at Bertman House	-	-	50,000	-	-	-	-	50,000
35	Facilities - Construct Meeting Room at JCB	-	-	20,000	-	-	-	-	20,000
36	Facilities - Refinish Woodwork at PSB	-	-	20,000	-	-	-	-	20,000
37	Facilities - Replace Security System Server at PSB	-	-	15,000	-	-	-	-	15,000
37	Facilities - Replace Apparatus Bay Doors at PSB	-	-	16,000	-	-	-	-	16,000

Continued on next page...



# Capital Projects

Continued from page 12

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Unfunded	Total
38	Facilities - Install Emergency Generator at City Hall	-	-	75,000	-	-	-	-	75,000
38	Facilities - Remodel Council Chambers at City Hall	-	-	30,000	-	-	-	-	30,000
39	Facilities - Interior Lighting Upgrades at the Library	-	-	-	-	-	-	30,000	30,000
40	Facilities - Landscape Renewal at the Library	-	-	-	-	-	-	10,000	10,000
40	Facilities - Replace Roof Mansard at the Library	-	-	-	-	-	-	50,000	50,000
41	Facilities - Re-roof 40th & Harvey Office Building	-	-	-	70,000	-	-	-	70,000
41	Facilities - Upgrade Surveillance System at PSB	-	-	-	50,000	-	-	-	50,000
42	Facilities - Remodel Council Conference Room at City Hall	-	-	-	20,000	-	-	-	20,000
42	Facilities - Replace HVAC System at City Hall	-	-	-	150,000	-	-	-	150,000
43	Facilities - Remodel Restrooms at City Hall	-	-	-	30,000	-	-	-	30,000
43	Facilities - Remodel Restrooms/Locker Rooms at JCB	-	-	-	35,000	-	-	-	35,000
44	Facilities - Repaint Shop Floor	-	-	-	16,000	-	-	-	16,000
44	Facilities - Replace JCB (CD) Admin Roof	-	-	-	-	110,000	-	-	110,000
45	Facilities - Replace Leaking Windows at City Hall	-	-	-	-	20,000	-	-	20,000
45	Facilities - Replace Boiler at City Hall	-	-	-	-	15,000	-	-	15,000
46	Facilities - Replace HVAC Controls (All City Buildings)	-	-	-	-	100,000	-	-	100,000
46	Facilities - Remodel Restrooms at the Library	-	-	-	-	-	-	40,000	40,000
47	Facilities - Scott Park Lighting at the Library	-	-	-	-	-	-	25,000	25,000

# General Fund

## General Fund

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Unfunded	Total
47	Facilities - Replace JCB (Fleet) Roof	-	-	-	-	-	150,000	-	150,000
48	Facilities - Rebuild Employee Parking Lot at City Hall	-	-	-	-	-	45,000	-	45,000
48	Facilities - Rebuild Public Parking Lot at City Hall	-	-	-	-	-	50,000	-	50,000
49	Facilities - Install Seismic Bookshelves at the Library	-	-	-	-	-	-	150,000	150,000
49	Facilities - Remodel Breakroom at the Library	-	-	-	-	-	-	15,000	15,000
	FACILITIES SUBTOTAL	155,000	155,000	286,000	371,000	245,000	245,000	390,000	1,847,000
	GENERAL FUND TOTAL	715,000	2,270,000	738,000	621,000	510,000	615,000	7,661,000	13,130,000







## MILWAUKIE

*Dogwood City of the West*



### Public Works Property Acquisition

This project will acquire property adjacent to the existing public works facility to ensure capacity for continued growth of the maintenance and operational needs of the City.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Stormwater	130,000	-	-	-	-	-	130,000
Funded	Wastewater	130,000	-	-	-	-	-	130,000
Funded	Transportation	130,000	-	-	-	-	-	130,000
Funded	Water	130,000	-	-	-	-	-	130,000
TOTAL		<u>520,000</u>	-	-	-	-	-	<u>520,000</u>

### Operating Budget Impact

This project will have no impact on operations.

# General Fund



## General Fund Department Vehicle Purchases

Vehicles scheduled to be replaced in FY17 include one for Community Development (\$25,000 each) used for transportation to and from meetings or out of town events. The vehicles they currently use are “hand me down” vehicles that police retired years ago and are in poor condition. Also during FY17, the City Hall/Rim (non-departmental) staff vehicle (\$25,000) and the Asset Management Technician service truck (\$45,000) will be replaced. During FY18, an Engineering Van (\$35,000) and the IT staff vehicle (\$35,000) will be replaced. During FY19, Public Works Administrator will replace one vehicle (\$50,000), Fleet will replace two service trucks (\$90,000) and Facilities will replace one vehicle (\$45,000). In FY21, Facilities will replace one service truck (\$45,000) and in FY22, Community Development will replace one vehicle (\$40,000), Engineering will replace one vehicle (\$40,000), Fleet will replace one service truck (\$60,000) and Facilities will replace the riding lawn mower (\$10,000).

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Community Dev	25,000	-	25,000	-	-	40,000	90,000
Funded	Public Works	45,000	-	50,000	-	-	-	95,000
Funded	Non-Department	25,000	-	-	-	-	-	25,000
Funded	IT	-	35,000	-	-	-	-	35,000
Funded	Engineering	-	35,000	-	-	-	40,000	75,000
Funded	Fleet	-	-	90,000	-	-	60,000	150,000
Funded	Facilities	-	-	45,000	-	45,000	10,000	100,000
TOTAL		<u>95,000</u>	<u>70,000</u>	<u>210,000</u>	-	<u>45,000</u>	<u>150,000</u>	<u>570,000</u>

### Operating Budget Impact

Replacing vehicles with newer models often reduces expenditures because they require less repair. However, when replacing vehicles with newer models some expenditures may increase, like hours spent to repair an item, due to not having the ability to repair items quickly like in the past. The newer vehicles are of better quality, but it is more difficult to replace simple things such as headlights and keys. For example, a portion of the bumper must be removed to replace headlights now, and all of the keys that come with the vehicles are computerized and the replacement cost is at least \$200 per key.



## Police - Vehicle Replacement

Police patrol, detective and chief's vehicles are all on an updated replacement schedule. When a vehicle is scheduled to be replaced, it is evaluated by the Fleet Department to see if the life of the vehicle can be extended or needs to be replaced. The replacement schedule for the vehicles has been extended due to the quality of the vehicles being purchased. However, the down side to newer vehicles is that they are more difficult to work on, and require more time to repair a "little item". Patrol cars are due to be evaluated every 6 years, while detective and police chief vehicles are evaluated every 7 years. Currently both the remaining staff cars (used by all staff for

court/training/spare detective or command staff when vehicles are in shop) are in excess of 110k miles. These vehicles have been rotated out of use as command staff or detectives vehicles in years past. Since command staff vehicles have not been replaced, these vehicles are aging and becoming much more costly to run. The three command staff vehicles (daily drivers for two Captains and the Chief) are all in excess of 90k miles. Normally these vehicles would have already been moved to staff vehicles. If they are not replaced soon, they will have as many miles on them as the current staff cars do. The plan is to add one command staff vehicle in each of the next three fiscal years. As the command staff vehicles are replaced the old ones will be rotated to staff vehicles, which in turn will be sent to the Fleet Department for sale. At the end of those three years the current detective vehicles will start requiring replacement as well.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	150,000	150,000	150,000	150,000	150,000	150,000	900,000

### Operating Budget Impact

These vehicle purchases are anticipated to lower operating costs due to reduced maintenance and repair frequency of newer model vehicles. When newer models are purchased, the maintenance time to repair a vehicle can sometimes take longer than before. For example, just to replace a headlight on the newer vehicles, the entire front bumper shield has to be removed. The Fleet Department cannot just swap out a light bulb on the license plate, without disassembling the back portion of the bumper.



# General Fund



## Community Development - Kronberg Park Multi-Use Trail

This project will construct a multi-use trail connecting the newly constructed Kellogg Creek Bridge to the pedestrian signal across McLoughlin Boulevard at River Road. The trail will include an elevated portion through Kronberg Park.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Grant	-	1,700,000	-	-	-	-	1,700,000

### Operating Budget Impact

This project will have a marginal impact on maintenance and operations.



## Community Development - Riverfront Park Phase 3

The Downtown and Riverfront Land Use Framework Plan, adopted in 2000, identified development of the Riverfront Park as a high priority project. The existing site contains a boat launch, parking areas and a small restroom. Phase 3 will complete the park and include a play area for children, one large restroom facility, an amphitheater for performances, a festival lawn, fountain water feature, and pathways for pedestrians and bikers.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	3,000,000

### Operating Budget Impact

This project will not increase operating expenditures. The maintenance of the park will continue to be handled by North Clackamas Parks and Recreation District.

# Capital Projects



## Community Development - Adams Street Plaza

The adopted South Downtown Concept Plan calls for a plaza on Main Street connecting Adams Street to Dogwood Park. This will be the focal point of South Main Street and connect the light rail station with future access to Riverfront Park.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Community Dev	-	20,000	-	-	-	-	20,000
Unfunded		-	-	-	-	-	-	320,000
<b>TOTAL</b>		-	<u>20,000</u>	-	-	-	-	<u>340,000</u>

### Operating Budget Impact

This project will have marginal impacts on operating expenditures.



## Community Development - Wayfinding

With the recent opening of the Main Street Station and Max Orange Line, an expanded wayfinding system is needed. Improvements include potential signage design, content and placement, informational kiosk, and implementation plan.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	40,000	-	-	-	-	-	40,000
Unfunded		-	-	-	-	-	-	150,000
<b>TOTAL</b>		<u>40,000</u>	-	-	-	-	-	<u>190,000</u>

### Operating Budget Impact

This project will require a minor increase in operating and maintenance expenditures due to sign maintenance needs.



**Community Development - Kronberg Park Improvements**  
City Council adopted a master plan for Kronberg Park in October 2015. The park provides a key connection between the light rail station via the Kellogg Lake bicycle/pedestrian bridge, and the Island Station neighborhood to the south.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Community Dev	-	-	-	-	-	-	1,151,000

Operating Budget Impact

This project will not increase operating expenditures. The maintenance of the park will continue to be handled by North Clackamas Parks and Recreation District.



**Community Development - Riverfront Park Beach**  
This project will reconstruct the beach area within Riverfront Park and repair the damage caused by the storm event on December 6-26, 2014.

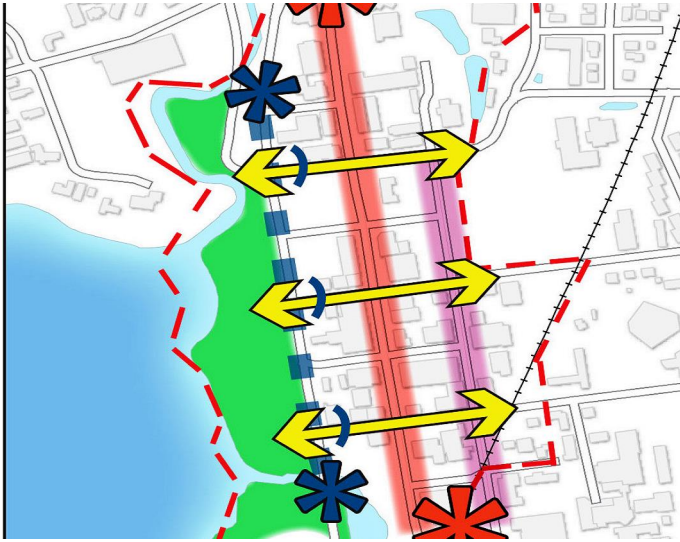
Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Community Dev	25,000	-	-	-	-	-	25,000

Operating Budget Impact

No impact on the operating budget.



# Capital Projects



## Community Development - McLoughlin Blvd Gateway and Entryway Improvements

The Downtown and Riverfront Land Use Framework Plan ("Framework Plan," adopted in 2000, revised and refreshed in 2014 to incorporate the South Downtown Concept) identifies key entrances to downtown and intersections along McLoughlin Blvd. The appropriate gateway improvements will be identified, designed, and constructed.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Community Dev	-	-	-	-	-	-	100,000

### Operating Budget Impact

This project may increase operating expenditures. New gateway features may require ongoing maintenance.



## Community Development - McLoughlin Blvd Bridge

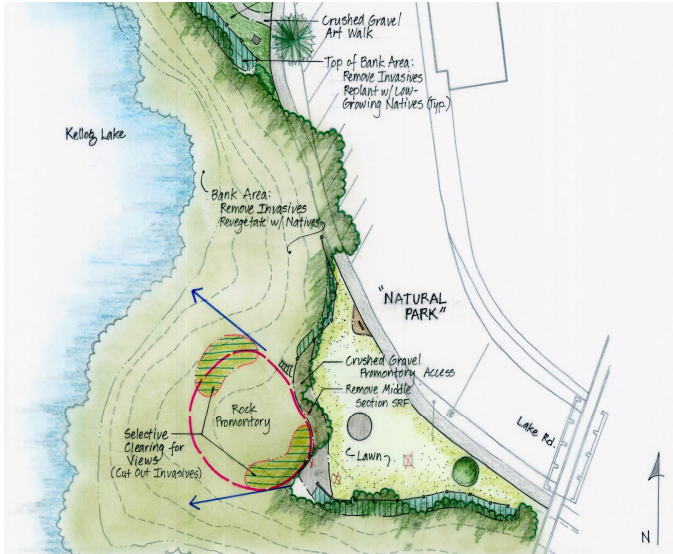
The Downtown and Riverfront Land Use Framework Plan ("Framework Plan," adopted in 2000, revised and refreshed in 2014 to incorporate the South Downtown Concept) identifies a pedestrian bridge connecting downtown to Riverfront Park as a key project to implement the Framework Plan.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Community Dev	-	-	-	-	-	-	2,200,000

### Operating Budget Impact

This project may increase operating expenditures. A new City-owned pedestrian bridge will require ongoing maintenance and policing.

# General Fund



## Community Development - Dogwood Park Improvements

The Downtown and Riverfront Land Use Framework Plan (adopted in 2000, revised and refreshed in 2014) identifies Dogwood Park Improvements as a key project to implement the Framework Plan. Dogwood Park is currently minimally improved with a picnic table and a sign. A concept plan for the park was completed in 2011. The concept plan establishes an interim design in anticipation of the implementation of the South Downtown Concept Plan. Refined design for the South Downtown Plaza will include integration with Dogwood Park and will identify key improvements for the area.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Community Dev	-	-	-	-	-	-	100,000

### Operating Budget Impact

This project will not increase operating expenditures. The maintenance of the park will continue to be handled by North Clackamas Parks and Recreation District.



## Non Departmental - Public Education and Government (PEG) Capital

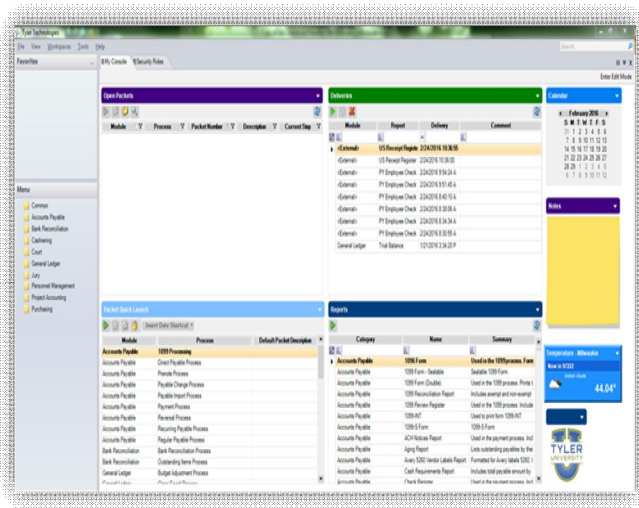
The City collects funds from cable providers to support the capital facilities and equipment of PEG Access Centers. The City supports several PEG access centers: Willamette Falls Media Center, the City of Milwaukie's government access center and the public access center; Sabin Schellenberg Center, an educational access center; and Clackamas Community College, an educational access center. The equipment and facilities of the PEG Access Centers need to be continually updated to keep pace with changes in broadcasting technology.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Dedicated Funds	40,000	40,000	50,000	50,000	50,000	50,000	280,000

### Operating Budget Impact

These projects will not increase operating expenditures. The funds are dedicated and can only be used for this purpose.

# Capital Projects



## Finance—Incode VIO Upgrade

Complete the upgrade of the City's financial software suite to version 10 in Incode, a Tyler Technologies product. The upgrade began in FY2016 and will continue into FY2017 with Cash Collections, Utility Billing and a document storage component. This upgrade will improve on City-wide processing efficiency, sustainability and saves City funds utilizing electronic functionality.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	46,000	-	-	-	-	-	46,000

### Operating Budget Impact

This project would reduce future operational expenditures that would result from the need to operate multiple facilities.



## Fleet - Equipment

During FY2017, the Fleet Department will purchase an automatic parts washing machine to improve efficiencies in the shop. During FY2018, the department will purchase a used fork lift to unload equipment and materials from delivery trucks. During FY2019-22, the department will purchase replacement tools and equipment as needed.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	14,000	10,000	20,000	20,000	20,000	20,000	104,000

### Operating Budget Impact

These purchases is expected to decrease operating expenditures.





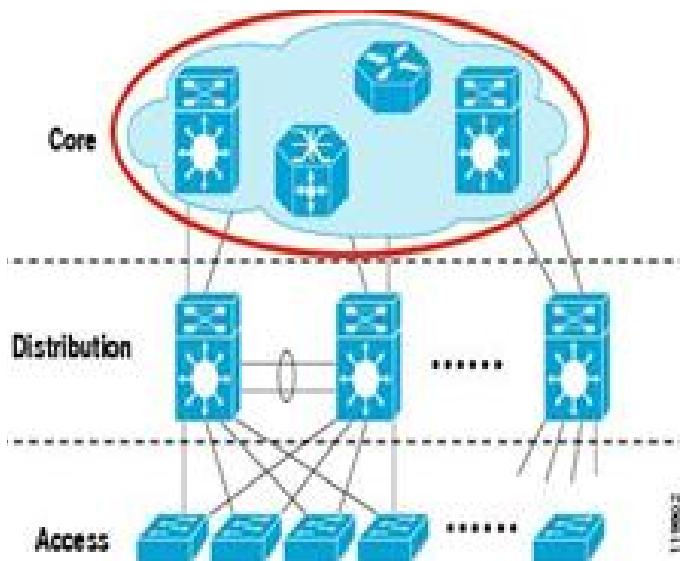
## IT - Data Center Consolidation

City of Milwaukie, has server equipment at each facility; City Hall, Johnson Creek, Ledding Library, and Public Safety Building. A consolidated data center will allow for reduction of server count, less power consumption, and technological complexity. The consolidated data center will be located at the Public Safety Building. In addition, staff is exploring a co-located site as an alternate to the Public Safety Building.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	30,000	-	-	-	-	30,000

### Operating Budget Impact

A consolidated data center will not increase the operating budget. A co-located site will increase the operating budget for Information Technology but, will marginally reduce budget for Public Works due to removed utility consumption.



## IT - Core Infrastructure Update

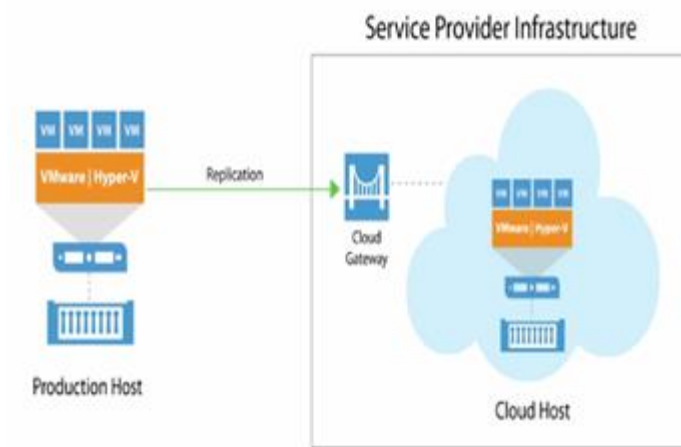
The Core Infrastructure at the City of Milwaukie is approaching obsolescence. Equipment is nearing end-of-life status and poses an increased risk of device failure and bandwidth saturation. The core consists of eight year old network cards, cabling, and switches. Devices must be replaced with current technology to support anticipated data volume growth, and enable faster throughput and application response times to users.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	50,000	-	-	-	-	-	50,000

### Operating Budget Impact

This purchase will not increase operating expenditures and protects the existing investment.

# Capital Projects



## IT - Back-up System Upgrade for Virtual Environment

The City of Milwaukee needs to consider a backup solution for disaster recovery of virtual servers running on Hyper-V. Veeam software will facilitate this operation with ease and affordability. Veeam restore gives you the ability to recover entire Hyper-V virtual machines (VMs) in minutes and recover individual files or application items residing inside a Hyper-V backup. Also, Veeam software integrates seamless with Cloud storage when that time arises.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	22,000	-	-	-	22,000

### Operating Budget Impact

No operational impacts.



## IT - VOIP Polycom Device Upgrade

Purchase a supply of replacements for (1) VOIP end user phones which fail intermittently; (2) to upgrade phones needed by front desk teams who answer and monitor multiple user phones such as the City Hall, Johnson Creek, Leding Library, and Public Safety Building customer-facing front desk/receptionist functions; and (3) to upgrade the audio capabilities for the conference room phone used for Council meetings at City Hall.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	30,000	-	-	-	-	30,000

### Operating Budget Impact

Marginal operating budget impact because equipment would replace obsolete equipment.

# General Fund



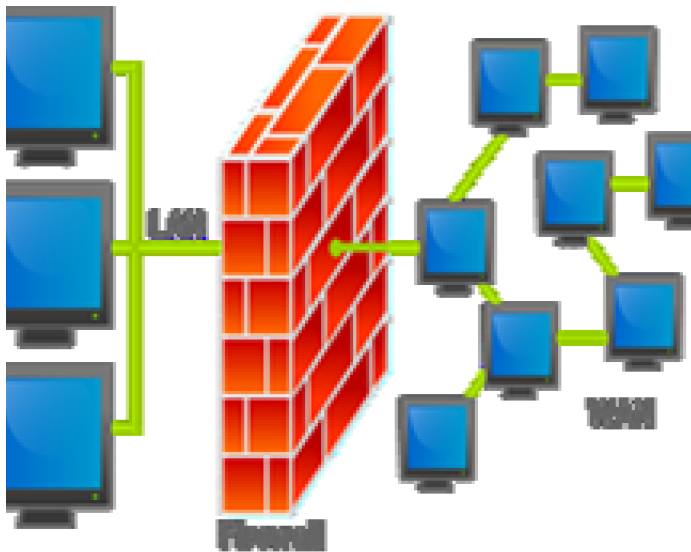
## IT - Annual Security Assessment

Engage an external security auditing firm for a comprehensive security assessment to be followed by an implementation project for necessary upgrades to the environment.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	14,000	-	-	14,000

### Operating Budget Impact

This assessment will not increase operating expenditures.



## IT - Enterprise Security Firewall and Router Upgrades

Upgrade internet security measures including firewalls and perimeter devices to protect against malware, browser vulnerabilities and web-based and other intrusion attempts. The upgrade will also include URL filtering and inspection services. The City's current internet firewall is nearing the end of its vendor supported life and lacks features required for the City's future mobility and remote access needs. Replacement of the security appliance before vendor support ends will maintain a high level of security for the City and position its technology services for increased use of mobile technology improving City service delivery.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	50,000	-	-	-	-	-	50,000

### Operating Budget Impact

Marginal operating budget impact because equipment would replace obsolete equipment.



# Capital Projects



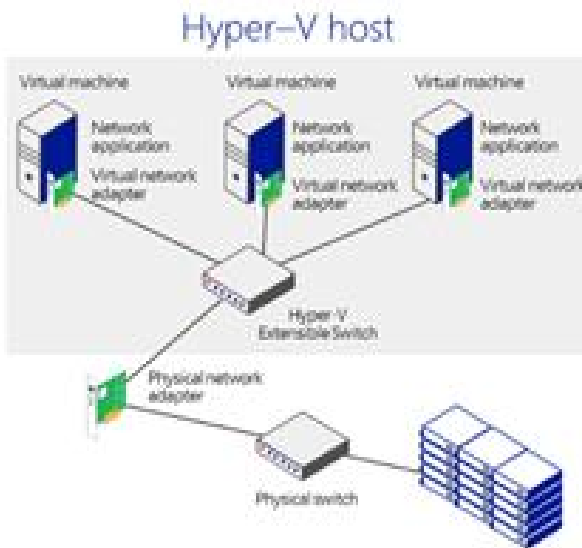
## IT - Help Desk System Application Upgrade

The current Help Desk system, TrackIt, is a tier-one application provided by a leading Help Desk provider, BMC. TrackIt is designed for small entities to manage a Help Desk operation. This project would consider whether the next step product would provide functionality to manage a broader spectrum of IT services and enable the group to scale further.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	50,000	-	-	-	-	-	50,000

### Operating Budget Impact

A marginal operating budget impact is estimated at \$7,000 due to migrating to a different software application.



## IT - Virtual Environment Host Upgrade

The current virtual host environment will be 4 years old on July 1, 2017. All enterprise applications are running in that environment, therefore this environment must not be at risk of hardware failure. The environment should be upgraded to a new 5 host, clustered environment. The likelihood of all enterprise applications being offered as cloud-based subscription licenses along with an attractive ROI in this time frame is unlikely. Therefore, further investment in this hardware infrastructure should be anticipated and planned.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	65,000	-	-	-	-	65,000

### Operating Budget Impact

Additional operating budget funds are needed due to adding two additional hosts to the environment. Additional operating funds required would be approximately \$5,300 per year.

# General Fund



## IT - Remote Monitoring and Management Platform

Implement a software application to securely and remotely support user systems from the central IT location, enabling IT to expend less time commuting and resolve user issues as quickly as possible.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	16,000	-	-	16,000

### Operating Budget Impact

Marginal operating budget impact as equipment would replace obsolete equipment.



## Facilities - Install Bullet Resistance Glass at PSB

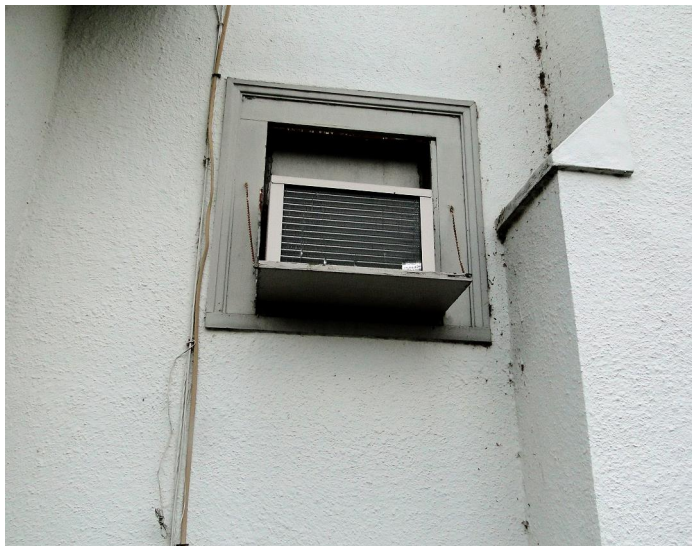
This is a project to replace existing windows around the receptionist office at the Public Safety Building (PSB) with bullet resistant glass. The receptionist interaction area will also be modified so that initial customer contact is moved from the lobby area to a newly created interaction point in the vestibule (between the inner and outer entry doors). This replacement was scheduled for fiscal year 2013-14 before being unfunded. Work has begun with consultations with an architect, and plans have been developed.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	60,000	-	-	-	-	-	60,000

### Operating Budget Impact

This purchase will not increase operating expenditures and protects the existing investment.

# Capital Projects



## Facilities - Install Central AC at Bertman House

Install central air conditioning and repair HVAC ducting. Air conditioning is currently provided by window mounted units. This upgrade would incorporate the heating system.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Capital Outlay	-	-	-	-	-	-	20,000

### Operating Budget Impact

This purchase will lower operating expenditures with an energy efficient unit replacing window mounted units.



## Facilities - Replace Main Floor Surface at City Hall

Replace vinyl floor on main level. The floor was installed 1996 and is at the end of its serviceable life.

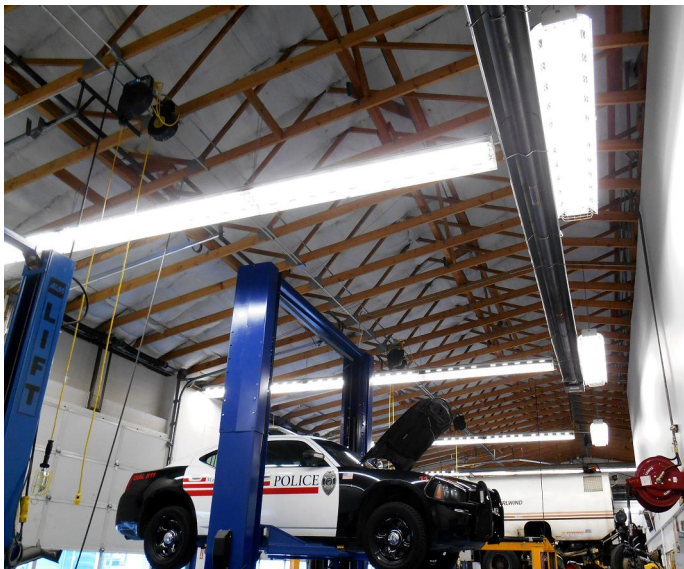
Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	30,000	-	-	-	-	-	30,000

### Operating Budget Impact

This purchase will not increase operating expenditures and protects the existing investment.



# General Fund



## Facilities - Replace Lighting in Fleet Shop at JCB

Replace inefficient and outdated lighting in the Fleet Shop as part of normal maintenance practice.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	15,000	-	-	-	-	-	15,000

### Operating Budget Impact

This project will not increase operating expenditures significantly and with more efficient lights installed, lower electricity costs will result.



# Capital Projects



## Facilities - Improve Customer Interaction Windows at City Hall

Current interaction windows do not provide good customer-staff interface or proper security. This project would replace the reception window with a solid flat piece of bullet resistant glass with a transaction drawer and an amplified communication device.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	40,000	-	-	-	-	-	40,000

### Operating Budget Impact

This project is not expected to increase operating expenditures.



## Facilities - Pave Public Works Yard Parking Area at JCB

Complete the paving of the parking area in the PW yard. A portion of the area is surfaced with gravel, a source of dust and frequent maintenance. Paving this surface was anticipated and the impervious surface mitigated with the construction of the swale in the front parking lot in 2010.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Capital Outlay	-	-	-	-	-	-	70,000

### Operating Budget Impact

This project will not increase operating expenditures significantly. It adds to the pavement maintenance budget, a cost which is offset by the cost to maintain the gravel surface.

# General Fund



## Facilities - New Concrete Floor in Pole Barn at JCB

Construct new concrete floor for utility truck parking in the pole barn at the Johnson Creek facility (operations yard). The paved floor is worn out and does not support the weight of the public work vehicles.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	30,000	-	-	-	-	30,000

### Operating Budget Impact

This project will not increase operating expenditures significantly.



## Facilities - Construct Mud Room in Public Works Building at JCB

Construct a room that will be used to remove muddy boots and outerwear. The locker room is currently used for this function, but it was not designed appropriately.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	40,000	-	-	-	-	40,000

### Operating Budget Impact

This project will not increase operating expenditures significantly.



# Capital Projects



## Facilities - Construct Full Height Walls for the Engineering Department at JCB

Construct full height walls to provide a sound and visual barrier for the engineering area at the Johnson Creek facility. This project was anticipated when the area was remodeled in 2009 but was postponed due to funding concerns

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	30,000	-	-	-	-	30,000

### Operating Budget Impact

This project will not increase operating expenditures.



## Facilities - Install Electronic Door Openers in the Fleet Shop at JCB

This project will replace the current seven manual opening doors with electronic operating doors. This purchase will reduce the amount of time used to manually open the doors and greatly reduce the possibility of back injury.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	30,000	-	-	-	-	30,000

### Operating Budget Impact

This project will not increase operating expenditures significantly with a small amount of additional electricity and maintenance time needed.

# General Fund



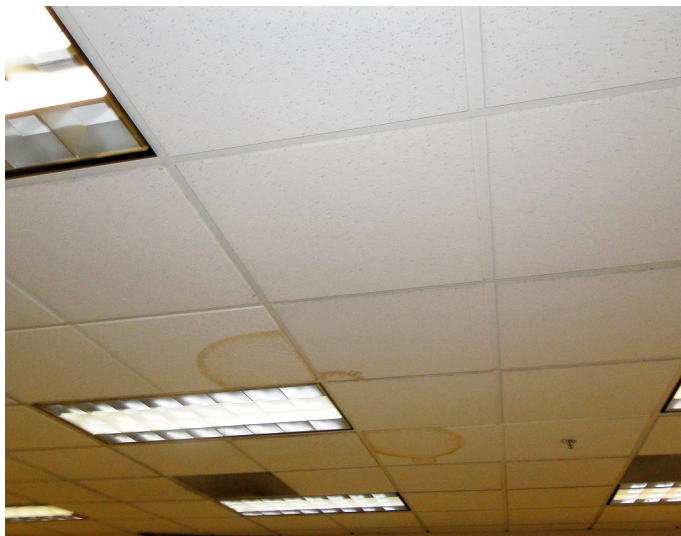
## Facilities - Replace Cabinets at PSB

Replace all cabinets in the Public Safety Building as recommended in the 2009 Facility Assessment Report. This is part of normal maintenance work.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	25,000	-	-	-	-	25,000

### Operating Budget Impact

This project will not increase operating expenditures.



## Facilities - Replace Suspended Ceiling at PSB

This project replaces the ceiling tiles throughout the Public Safety Building. This project is recommended in the 2009 Facilities Report.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	40,000	-	-	-	40,000

### Operating Budget Impact

This project will not increase operating expenditures.

# Capital Projects



**Facilities - Replace Windows at Bertman House**  
Existing windows are in poor shape, and structural damage from rain entry is apparent.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	50,000	-	-	-	50,000

## Operating Budget Impact

This purchase will not increase operating expenditures and protects the existing investment.



**Facilities - Construct Meeting Room at JCB/OPS**

Construct a new meeting room in the second floor of the Operations Building at JCB. Intended to alleviate meeting space shortage. This project has been deferred for a few years.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	20,000	-	-	-	20,000

## Operating Budget Impact

This project will not increase operating expenditures.



# General Fund



**Facilities - Refinish Woodwork at PSB**  
Refinish woodwork within offices and walls at the Public Safety Building as part of normal maintenance.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	20,000	-	-	-	20,000

Operating Budget Impact  
This project will not increase operating expenditures and protects the building structure.



# Capital Projects



## Facilities - Replace Security System Server at PSB

Replaces the security server in the Public Safety Building as part of the normal maintenance schedule. This server provides for access card entry and other security features for all City Buildings.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	15,000	-	-	-	15,000

### Operating Budget Impact

This project will not increase operating expenditures.



## Facilities - Replace Apparatus Bay Doors at PSB

Replace the apparatus bay doors and openers at the Public Safety Building as recommended by the 2009 Facility Assessment Report. Lease payments from CFD1 help offset the cost of capital improvements, such as this one, that benefit the District.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	16,000	-	-	-	16,000

### Operating Budget Impact

This project will not increase operating expenditures and protects the building structure.



# General Fund



## Facilities - Install Emergency Generator at City Hall

Install a generator at City Hall for protection from outages and emergency use. The other office buildings in the City, PSB and JCB, are served by generators for backup power. City Hall is a backup EOC site and houses the City's key administrative offices.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	75,000	-	-	-	75,000

### Operating Budget Impact

This project will increase operating expenditures, the generator requires about \$2,000 per year for maintenance and fuel.



## Facilities - Remodel Council Chambers at City Hall

Remodel the Council Chambers at City Hall as part of normal maintenance practice. Work includes updating/replacing furniture and flooring.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	30,000	-	-	-	30,000

### Operating Budget Impact

This project will not increase operating expenditures.



# Capital Projects



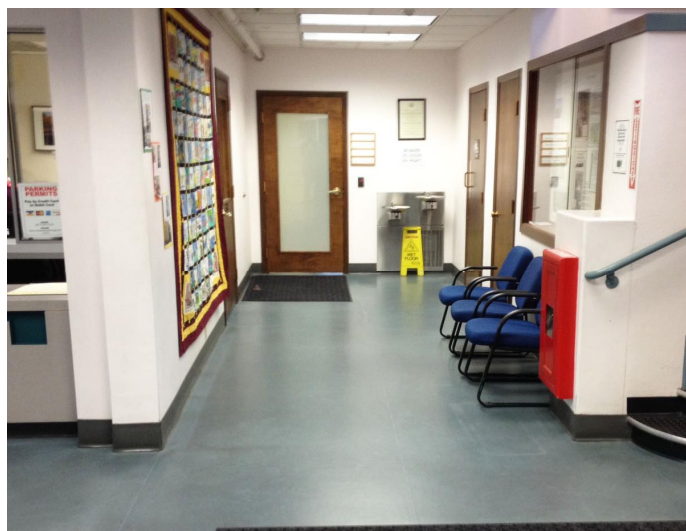
## Facilities - Expand Self-Checkout at the Library

Front counter modification to allow for additional self-checkout capacity.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	10,000	-	-	-	-	-	10,000

### Operating Budget Impact

This purchase will not increase operating expenditures significantly and provides for efficiency in checking out patrons.



## Facilities - Interior Lighting Upgrades at the Library

This project replaces the interior lighting system in the Library as part of the normal maintenance schedule.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Capital Outlay	-	-	-	-	-	-	30,000

### Operating Budget Impact

This project will not increase operating expenditures. The new fixtures will be more efficient and lower operational costs.

# General Fund



## Facilities - Landscape Renewal at the Library

Restore and update landscaping at the Library.

<u>Status</u>	<u>Funding Source</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Unfunded	Capital Outlay	-	-	-	-	-	-	10,000

### Operating Budget Impact

This purchase will not increase operating expenditures and protects the existing investment.



## Facilities - Replace Roof Mansard at the Library

Replace the cedar shingle roof on the Library Mansard.

<u>Status</u>	<u>Funding Source</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Unfunded	Capital Outlay	-	-	-	-	-	-	50,000

### Operating Budget Impact

This purchase will not increase operating expenditures and protects the existing investment.

# Capital Projects



## Facilities - Re-roof 40th & Harvey Office Building

This project is to replace the entire roof of the office building most recently occupied by North Clackamas Parks and Recreation District (NCPRD) at the 40<sup>th</sup> and Harvey site. The roof has been patched but is over 30 years old and in poor condition.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	70,000	-	-	70,000

### Operating Budget Impact

This purchase will not increase operating expenditures, but will eliminate the need for temporary patching, providing a small savings of time and money. The larger impact is related to preserving the building by maintaining the integrity of the roof system.



## Facilities - Upgrade Surveillance System at PSB

Upgrade the video surveillance system for the Public Safety Building as part of normal maintenance schedule. Replace non-working cameras.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	50,000	-	-	50,000

### Operating Budget Impact

This project will not increase operating expenditures.



# General Fund



## Facilities - Remodel Council Conference Room at City Hall

Remodel the Council conference room at City Hall as part of normal maintenance practice. Work includes updating/replacing furniture and flooring.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	20,000	-	-	20,000

### Operating Budget Impact

This project will not increase operating expenditures.



## Facilities - Replace HVAC System at City Hall

Replace the HVAC for City Hall as part of the normal maintenance schedule. The current system was installed in 2000 and is expected to be replaced on a 20-year cycle.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	150,000	-	-	150,000

### Operating Budget Impact

This purchase will not increase operating expenditures and protects the existing investment. The new windows will improve energy savings.

# Capital Projects



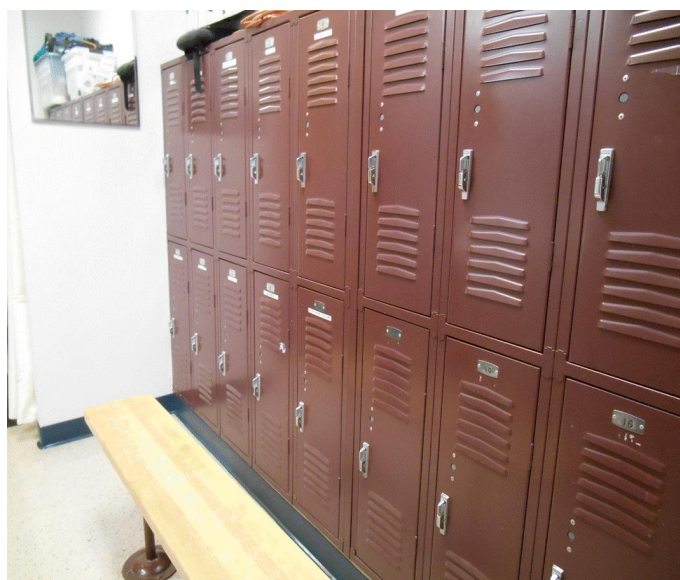
## Facilities - Remodel Restrooms at City Hall

Remodel the City Hall (main and second floor) restrooms as part of the normal maintenance schedule. Work involves updating fixtures as needed, replace floor, and paint walls.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	30,000	-	-	30,000

### Operating Budget Impact

This project will not increase operating expenditures.



## Facilities - Remodel Restrooms/Locker Rooms at JCB

Remodel all restrooms and locker rooms at the Johnson Creek facility as part of the normal maintenance schedule.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	35,000	-	-	35,000

### Operating Budget Impact

This project will not increase operating expenditures.



# General Fund



## Facilities - Repaint Shop Floor

This project consists of stripping the original paint from 1994, when the building was first built and repainting the concrete floor and replacing all walkway strips and work zone strips.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	16,000	-	-	16,000

### Operating Budget Impact

This project will not increase operating expenditures.



## Facilities - Replace JCB (CD) Admin Roof

The current roof was installed with the initial construction of the building in 1990 and has exceeded its 20 year life as evidenced by increasing leakage issues. The new roof will be a later developed metal roof with a 30 year life.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	110,000	-	-	110,000

### Operating Budget Impact

Little impact although the new roof will have slightly improved insulation properties to reduce energy costs. There will be additional maintenance savings as leakage problems are mitigated.



# Capital Projects



## Facilities - Replace Leaking Windows at City Hall

The existing windows are poorly designed and leaking between the panes. The replacement windows must be wooded to match the historic nature of the building.

<u>Status</u>	<u>Funding Source</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Funded	Capital Outlay	-	-	-	-	20,000	-	20,000

### Operating Budget Impact

This project will not significantly impact the operating budget.



## Facilities - Replace Boiler at City Hall

The boiler is 20 years old and nearing end of life. Replacing it with a high efficiency boiler will provide the City with energy savings and a probable Energy Trust incentive.

<u>Status</u>	<u>Funding Source</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Funded	Capital Outlay	-	-	-	-	15,000	-	15,000

### Operating Budget Impact

The operating cost for a new boiler will be significantly less due to energy savings and is expected to incur less maintenance cost.

# General Fund



## Facilities - Replace HVAC Controls (All City Buildings)

The existing controls are old enough that they are no longer factory-supported. This project is in the process of reviewing for Energy Savings Performance Contracting (ESPC) with the City's contracted Energy Savings Contractor (ESCO) – Ameresco. If the ESPC process is used this project will be moved forward to FY2017.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	-	100,000	-	100,000

### Operating Budget Impact

A decrease in the operating budget due to the energy savings would result from energy savings. The new controls would also require less maintenance.



## Facilities - Remodel Restrooms at the Library

Remodel the Library restrooms as part of normal maintenance schedule. This project includes an update of the fixtures, new flooring and painting.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Capital Outlay	-	-	-	-	-	-	40,000

### Operating Budget Impact

This project will not increase operating expenditures.

# Capital Projects



## Facilities - Scott Park Lighting at the Library

Install a new lighting system in Scott Park. The existing system does not provide adequate lighting for security purposes. This project may be affected by library expansion.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Capital Outlay	-	-	-	-	-	-	15,000

### Operating Budget Impact

This project will not increase operating expenditures. The new lights are anticipated to be more energy efficient.



## Facilities - Replace JCB (Fleet) Roof

The current roof was installed with initial construction of the building in 1990 and has exceeded its 20 year life as evidenced by increasing leakage issues. The new roof will be a metal roof with a 30 year life.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	-	-	150,000	150,000

### Operating Budget Impact

Little operating budget impact expected although the new roof will have slightly improved insulation properties to reduce energy costs. There will be additional maintenance savings as leakage problems are mitigated.



# General Fund



## Facilities - Rebuild Employee Parking Lot at City Hall

The pavement for the employee parking lot (behind City Hall exiting on Jackson St) is in poor condition. This project is to grind off the top surface and overlay with 1-1/2" to 2" of asphalt.

<u>Status</u>	<u>Funding Source</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Funded	Capital Outlay	-	-	-	-	-	45,000	45,000

### Operating Budget Impact

No appreciable impact to the operating budget is expected with this project.



## Facilities - Rebuild Public Parking Lot at City Hall

The public parking lot across from City Hall (not including the lot owned by Metro) is in poor condition including damage from tree roots. This project will grind off the top surface, repair root damage and install root barrier as needed before overlaying with 1-1/2" to 2" of asphalt and restriping.

<u>Status</u>	<u>Funding Source</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Funded	Capital Outlay	-	-	-	-	-	50,000	50,000

### Operating Budget Impact

No appreciable impact to the operating budget is expected with this project.

# Capital Projects



## Facilities - Install Seismic Bookshelves at the Library

This project is a carryover from the previous budget. The need for the seismic reinforcement of the bookshelves was identified in studies. The project has been deferred due to uncertainty over the future of the library expansion.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Capital Outlay	-	-	-	-	-	-	150,000

### Operating Budget Impact

This purchase will not increase operating expenditures.



## Facilities - Remodel Break Room at the Library

The break room has not been updated since it has been used as a library (1964). This project includes upgrading the furniture as well as installing new features. This project has been deferred due to uncertainty over the future of the library expansion.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded	Capital Outlay	-	-	-	-	-	-	15,000

### Operating Budget Impact

This purchase will not increase operating expenditures; a new, more efficient unit will provide lower operating costs.

## Overview

### Building Overview

The Building Inspection Fund is the operating fund for Building Inspections Department that functions to ensure the safety of public buildings and private residences through the effective administration of the adopted state specialty codes governing construction in Oregon. The Department's goal is to provide quick, dependable and quality service to the residents of the City of Milwaukie.

The purpose and function of the Building Operations Department is to:

- Perform plan review and inspections for public and privately owned structures;
- Respond to citizen inquiries and code compliance issues; and
- Coordinate with other internal departments on development issues.

### Building Inspections Fund Summary

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
51	Vehicle Purchase	-	-	-	45,000	-	-	45,000
Building Inspections Fund Total					45,000			45,000







## **Building Inspections - Vehicle Purchase**

Replacement of one vehicle.

<u>Status</u>	<u>Funding Source</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Funded	Capital Outlay	-	-	-	45,000	-	-	45,000

### Operating Budget Impact

This purchase will decrease operating expenditures. This purchase will take the current vehicle out of service and replace it with a newer vehicle.



**MILWAUKIE**  
*Dogwood City of the West*

## Overview

### Library Overview

The Library Fund is the operating fund for the Ledding Library. The Ledding Library of Milwaukie upholds the principles of intellectual freedom and the public's right to know by providing people of all ages with access and personalized guidance to information, technology, and collections that reflect all points of view. The Library supports the pursuit of education and personal goals by providing informational, recreational, and cultural materials and services including those utilizing advancing technologies.

To carry out this mission, the Ledding Library has the following functions:

- Serve the community by providing reference and readers' advisory to access the collection; interlibrary loan; outreach to the homebound, Head Start, schools, and daycare providers;
- Serve children and teens by stimulating their appreciation for reading and library use, and providing support for their educational growth;
- Provide programming for all ages including preschool, toddler, and infant story times; programs for home schooling families; book clubs for middle school students and adults; summer reading programs for children, teens, and adults; health information lectures for adults; multi-ethnic music, informational, literary, and poetry programs for adults; special performers and storytellers during the summer, and school vacations for school aged children; programs in Spanish for children in the Library's Hispanic community;
- Provide a print, online, and multimedia collection that meets the demands and needs of the community. Materials provided include books, e-books, audiobooks, downloadable books, Kindles, music CDs, DVDs, Blu-Ray discs, computer software and games, newspapers, and magazines for adults and children. Materials are provided in English, Russian and Spanish; and
- Provide electronic resources such as Internet access, word processing, on-line reference databases, computer use instruction for patrons, and CD-ROM stations with educational games for children.

### Library Fund Summary

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Unfunded	Totals
53	RFID Installation	100,000	-	-	-	-	-	-	100,000
53	Library Expansion	-	10,345,000	-	-	-	-	-	10,345,000
Library Fund Total		100,000	10,345,000						10,445,000

# Capital Projects



## Library - RFID Installation

Over the next year, the Ledding Library of Milwaukie will be participating in a County-wide effort to implement RFID (Radio Frequency Identification) technology in all LINCC libraries. By affixing small RFID labels to all materials, and employing different types of scanning equipment, libraries can make their materials handling processes more efficient, streamline inventory processes, and improve the overall library patron experience. Each library is responsible for the tags and equipment needed for this advancement. Initial start-up includes tagging all materials with RFID tags, installation of self-check stations, updating scanners, and updating circulation areas.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	100,000	-	-	-	-	-	100,000

### Operating Budget Impact

This project is expected to reduce the operating budget by safeguarding library materials.



## Library Expansion

The Milwaukie Ledding Library needs to be renovated and expanded by 22,950 sq. ft. (for a total of 35,200 sq. ft.) to meet current and future demands of the community.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	County	-	1,000,000	-	-	-	-	1,000,000
Funded	Bond	-	9,200,000	-	-	-	-	9,200,000
Funded	Library	-	145,000	-	-	-	-	145,000
<b>TOTAL</b>		-	<u>10,345,000</u>	-	-	-	-	<u>10,345,000</u>

### Operating Budget Impact

There will be little impact to the Library's operating budget. There will be neither an increase in service hours nor an increase in staffing hours.



## Overview

Milwaukie's Transportation system includes over 148 lane miles of pavement, 10.2 miles of bike lanes, 50 miles of sidewalk, and 510 acres of right-of-way that must constantly be maintained and upgraded to safely and efficiently serve all modes of traffic.

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 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 mechanisms.

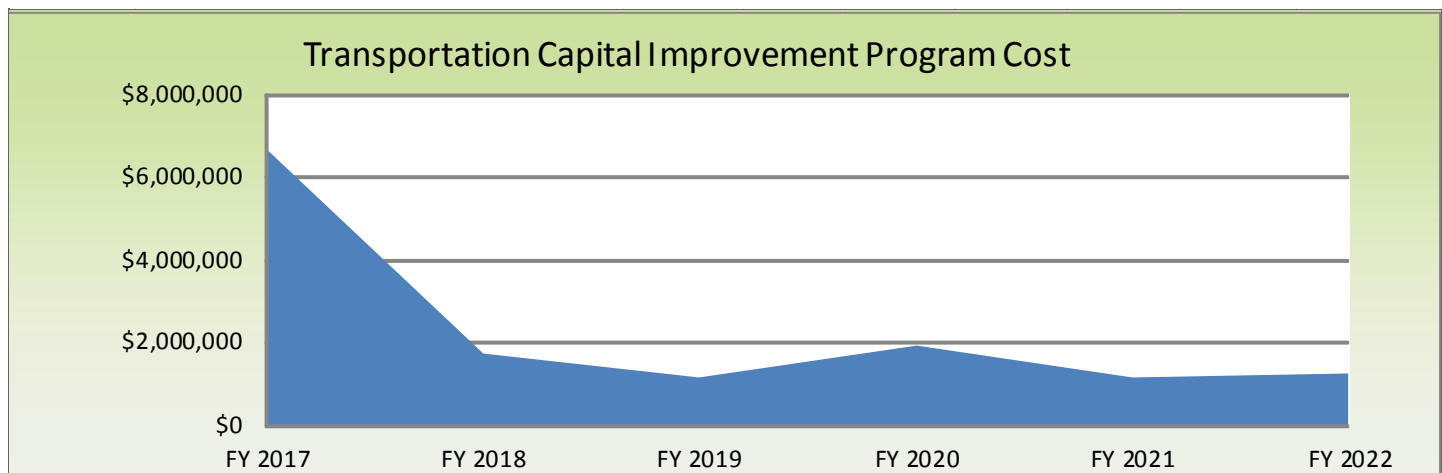
The main sources of funding are:

- Federal Gas Tax Funds (Metro Grants)
- City share of State Highway Trust Fund
- Local Funds—Fees and Taxes:
  - Franchise Fees, PGE Privilege Tax, Local Gas Tax, Street Surface Maintenance Fee
- System Development Charges (SDC's)
- Fee in Lieu of Construction (FILOC) Charges

The CIP is based on the projects identified within the plans and programs that affect all of the modes of travel within the Transportation System.

The Transportation CIP identifies and prioritizes projects within each of the Transportation System Programs resulting in a Comprehensive Plan that attempts to balance the systems needs within the available funding parameters.

The resulting CIP includes projects involving bicycle and pedestrian improvements, asphalt paving, surface preservation (crack and slurry seals), roadway reconstruction and capitalized maintenance needs.



# Capital Projects

## Transportation Summary

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Unfunded	Totals
15	Public Works Property Acquisition	130,000	-	-	-	-	-	-	130,000
58	21st & Washington Signal Reconfiguration	131,000	-	-	-	-	-	-	131,000
59	Street Surface Maintenance Program Paving	1,400,000	1,000,000	1,000,000	1,600,000	1,000,000	1,000,000		7,000,000
59	Street Surface Maintenance Program Slurry Seal	-	100,000	-	100,000	-	100,000	-	300,000
60	Street Surface Maintenance Program Crack Seal	15,000	15,000	15,000	15,000	15,000	15,000	-	90,000
60	17 <sup>th</sup> Avenue Multi-Use Trail	3,810,000	-	-	-	-	-	-	3,810,000
61	Transportation Vehicle Purchases	45,000	60,000	125,000	170,000	100,000	100,000	-	600,000
61	ADA Ramp Enhancements	200,000	-	-	-	-	-	-	200,000
62	Monroe Street Greenway Section E	15,000	125,000	-	-	-	-	3,100,000	3,240,000
62	Kellogg Creek Bridge #22142	818,000	427,000	-	-	-	-	-	1,245,000
67	Bicycle and Pedestrian Improvements	50,000	-	-	-	-	-	-	50,000
68	Main St. Crossing Improvements	50,000	-	-	-	-	-	-	50,000
58	Public Area Requirements (PARs)	-	-	-	-	-	-	13,300,000	13,300,000
63	Linwood Pedestrian Improvements	-	-	-	-	-	-	131,000	131,000
63	McLoughlin Blvd Improvements	-	-	-	-	-	-	270,000	270,000
64	Harrison St/32nd Ave Intersection	-	-	-	-	-	-	270,000	270,000
64	Connection through Union Pacific Railroad Property & McFarland Site	-	-	-	-	-	-	85,000	85,000
65	Oak St/34th Ave Connection	-	-	-	-	-	-	100,000	100,000
65	Campbell St and Railroad Ave Upgrades	-	-	-	-	-	-	250,000	250,000
66	Home Ave and King Rd Pedestrian Crossing Improvements	-	-	-	-	-	-	63,000	63,000
66	Northern Bike Connection	-	-	-	-	-	-	85,000	85,000
67	Crossing at Harrison St/31st Ave	-	-	-	-	-	-	250,000	250,000
68	Hwy 224 Intersection Upgrades	-	-	-	-	-	-	2,300,000	2,300,000

# Transportation Division

Continued from Page 55

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Unfunded	Totals
69	McLoughlin Intersection Upgrades	-	-	-	-	-	-	2,000,000	2,000,000
69	Downtown Parking Improvements	-	-	-	-	-	-	11,500,000	11,500,000
Transportation Fund Totals		6,664,000	1,727,000	1,140,000	1,885,000	1,115,000	1,215,000	33,704,000	31,650,000

## Transportation SDC Summary

58	17 <sup>th</sup> Avenue Multi-Use Trail	20,000	-	-	-	-	-	-	20,000
60	Kellogg Creek Bridge #22142	180,000	-	-	-	-	-	-	180,000
Transportation SDC Fund Total		200,000							200,000



## Accessibility Program

This project will implement the Bicycle and Pedestrian Accessibility Plan which includes the ADA Transition Plan throughout the City. Project includes removing barriers within existing sidewalks, constructing or reconstructing sidewalks, enhancing bicycling facilities, and constructing ADA sidewalk access ramps. The program is anticipated to be adopted during the FY 2017.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	-

## Operating Budget Impact

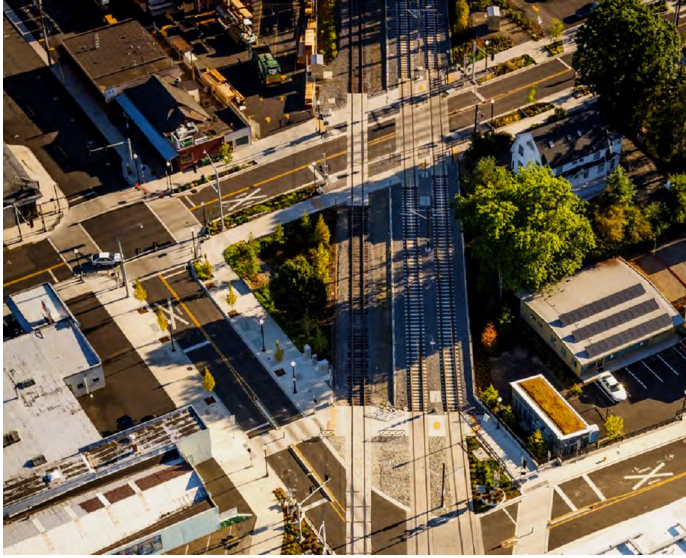
This project will potentially increase maintenance and operating expenses.







# Transportation Division



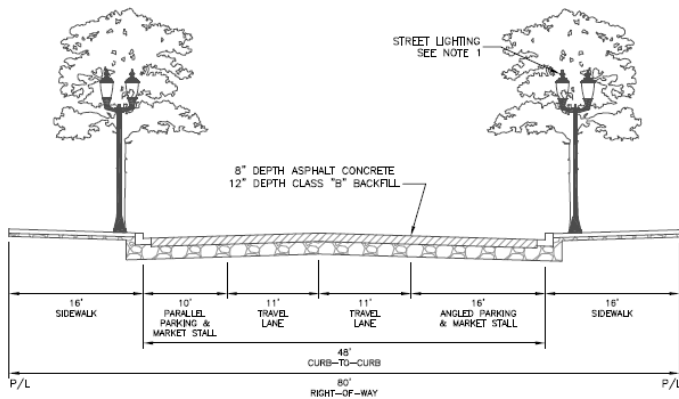
## 21st & Washington Signal Reconfiguration

Reconfigure traffic signal timing and phasing to reduce wait time during preemption by freight rail or light rail traffic.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Tri-Met	131,000	-	-	-	-	-	131,000

### Operating Budget Impact

This project will not increase operational expense.



## Public Area Requirements (PAR's)

These improvements will complete the downtown refinement plan and all of the associated pedestrian improvements. Project includes roadway, sidewalk parking, lighting, and landscaping improvements throughout the downtown.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	13,300,000

### Operating Budget Impact

This project will potentially increase maintenance and operating expenses.

# Capital Projects



## Street Surface Maintenance Program - Paving

This paving program began in 2006 and set out to resurface or reconstruct all of the City's arterials and collectors. Once the original goal is completed, the program will begin to focus on the City in a more holistic manner. Addressing the needs that are the most cost effective to the entire network.

- 42nd Ave (Railroad - Monroe) FY 2017
- Home Ave (Railroad - King) FY 2018
- Stanley Ave (Railroad - Lloyd) FY 2018
- Overlay Program

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	SSMP	1,400,000	1,000,000	1,000,000	1,600,000	1,000,000	1,000,000	7,000,000

### Operating Budget Impact

This project will reduce operating expenditures by fixing routine trouble spot areas throughout the City.



## Street Surface Maintenance Program - Slurry Seal Program

The purpose of this program is to treat street surfaces in a "good" condition prior to them needing a grind and inlay (or overlay). By surface sealing worn asphalt, the City can prolong the life of its streets thus reducing the need for more costly measures.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	SSMP	-	100,000	-	100,000	-	100,000	300,000

### Operating Budget Impact

This project will reduce maintenance operating expenditures by providing a short-term wearing course on the streets and reduce the potential for potholes and surface cracking.



# Transportation Division



## Street Surface Maintenance Program - Crack Seal

This project will provide protection to roadways from possible damage due to water within cracks that form as part of the natural process by sealing them before more expensive measures are required.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	15,000	15,000	15,000	15,000	15,000	15,000	90,000

### Operating Budget Impact

This project will reduce maintenance operating expenditures by providing a short-term wearing course on the streets and reduce the potential for potholes and surface cracking.



## 17<sup>th</sup> Avenue Multi-Use Trail

Originating from the City's Transportation System Plan. This high priority project was selected by Metro to receive Regional Flex Funds allocations. Once completed, the trolley trail (that currently terminates at Riverfront Park) will be extended to Ochoco Street (or the Springwater Corridor). Currently conceptual, the project plans to address many ADA concerns along 17th Avenue while providing a safe place for non-experienced cyclists to ride.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Metro Grant	3,395,000	-	-	-	-	-	3,395,000
Funded	FILOC - HM	84,000	-	-	-	-	-	84,000
Funded	FILOC - HMDT	16,000	-	-	-	-	-	16,000
Funded	Stormwater SDC	53,000	-	-	-	-	-	53,000
Funded	Streets SDC	20,000	-	-	-	-	-	20,000
Funded	SSMP	315,000	-	-	-	-	-	315,000
<b>TOTAL</b>		<b>3,883,000</b>	-	-	-	-	-	<b>3,883,000</b>

### Operating Budget Impact

This project will increase operating expenditures for additional street maintenance (bike/ped trail) and stormwater maintenance (water quality facilities). Specific costs have yet to be determined.

# Capital Projects



## Transportation Vehicle Purchases

In FY 2017, the Department will participate in their portion of purchasing some of the shared vehicles such as sump trucks, loaders, and backhoes totaling \$45,000. In FY 2018, the Department will purchase a one ton service truck for approximately \$60,000. In FY 2019, \$65,000 will be spent on shared vehicles and \$60,000 for a service truck. In FY 2020, \$50,000 will be spent on shared vehicles and \$120,000 on a 5 yard dump truck with a hot box. In FY 2020 and 2021, the Department will participate in their portion of the shared vehicles estimated at \$100,000 for each year.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	45,000	60,000	125,000	170,000	100,000	100,000	600,000

### Operating Budget Impact

These purchases will not increase operating expenditures.



## ADA Ramp Enhancements

This project will enhance pedestrian safety by constructing or reconstructing ADA sidewalk access ramps as part of a Community Development Block Grant (CDBG).

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	50,000	-	-	-	-	-	50,000
Funded	CDBG	150,000	-	-	-	-	-	150,000
<b>TOTAL</b>		<u>200,000</u>	-	-	-	-	-	<u>200,000</u>

### Operating Budget Impact

This project will have no effect on operational expenditures.

# Transportation Division



## Monroe Street Greenway - Section E Improvements

This project will further the completion of the Monroe Street Greenway. Current funding is for further development and analysis of the plan and future construction of Section E of the Monroe Street Greenway.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Transportation	15,000	125,000	-	-	-	-	140,000
Unfunded	Grant	-	-	-	-	-	-	3,100,000
	<b>TOTAL</b>	<b>15,000</b>	<b>125,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,240,000</b>

### Operating Budget Impact

This project has no impact to operational expenditures, however future construction may increase operational expenditures.



## Kellogg Creek Bridge #22142 Emergency Replacement

The access bridge to Riverfront Park and the boat dock was damaged by the storm event of December 6th-23rd 2015. The existing structure will be replaced with a new vehicular bridge that will also accommodate pedestrians and connect Riverfront Park with the Kellogg Creek Trail.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Storm SDC	100,000	-	-	-	-	-	100,000
Funded	Stormwater	260,000	-	-	-	-	-	260,000
Funded	Street SDC	180,000	-	-	-	-	-	180,000
Funded	Capital Outlay	-	247,000	-	-	-	-	247,000
Funded	FEMA	654,000	-	-	-	-	-	654,000
Funded	CCSD #1	164,000	180,000	-	-	-	-	344,000
	<b>TOTAL</b>	<b>1,358,000</b>	<b>427,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,785,000</b>

### Operating Budget Impact

This project will reduce operating expenditures and address several long-term maintenance issues.



# Capital Projects



## Linwood Pedestrian Improvements

Provide sidewalks and pedestrian activated signals to improve pedestrian connectivity and safe-route-to-school access.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	131,000

### Operating Budget Impact

This project will marginally increase operational expenditures.



## McLoughlin Boulevard Improvements

The Downtown and Riverfront Land Use Framework Plan identifies improvements to McLoughlin Blvd as a key project to implement the Framework Plan. McLoughlin Blvd was improved in 2007, from Harrison St in the north to the UPRR bridge to the south. The section north of Harrison St remains unimproved. Improvements to this section would provide a signal to visitors that they are entering downtown and would enhance pedestrian safety. This project would conduct a refinement study to establish alternatives and explore ways to minimize barriers and improve multi-model mobility.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	270,000

### Operating Budget Impact

This project will not increase operating expenditures. The maintenance of the facility will continue to be handled by Oregon Department of Transportation.

# Transportation Division



## Harrison St/32nd Ave Intersection

Open the currently closed pedestrian crosswalk on the west leg of the intersection. 32nd Ave is a key north-south pedestrian connection between the residential areas to the north and the Milwaukie Marketplace. As of 2014, the intersection of 32nd Ave and Harrison St had marked pedestrian crosswalks and phasing on only three of the four segments. Because intersection capacity analysis from the Transportation System Plan (TSP) assumed full pedestrian access for this intersection, it is assumed that there is sufficient capacity now at this location (and that there will be in 2035 as well) to add a marked pedestrian crosswalk and phasing to the west segment. This will significantly improve pedestrian connectivity and convenience by reducing out-of-direction travel and delay at this location.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	270,000

### Operating Budget Impact

This project will increase operational expenditures for additional signal maintenance and traffic control.



## Connection through Union Pacific Railroad Property and McFarland Site

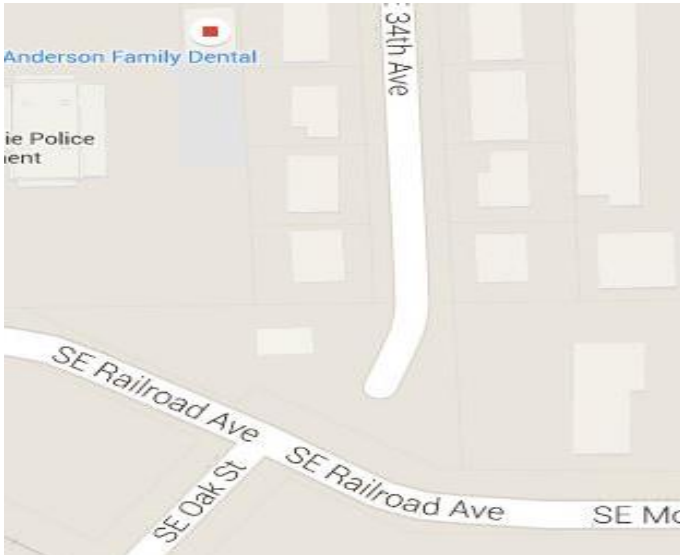
Provide pedestrian/bicycle connection on Union Pacific Railroad Property and McFarland Site.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	85,000

### Operating Budget Impact

This project will increase operational expenses for street maintenance.

# Capital Projects



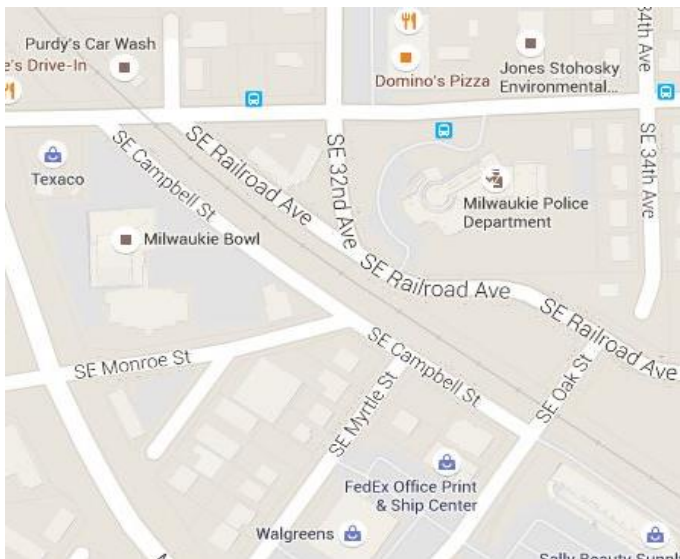
## Oak St/34th Ave Connection

Provide pedestrian/bicycle connection between Monroe St and 34th Ave. (including access for a nearby residential neighborhood).

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	100,000

### Operating Budget Impact

This project will increase operational expenses for additional street maintenance.



## Campbell St. and Railroad Ave. Upgrades

Provide pedestrian/bicycle treatments on Campbell St. and Railroad Ave. between Monroe St. and Harrison St. Railroad Ave between Harrison St and Monroe St is the natural direct bicycle connection between the two central Milwaukie opportunity sites (Murphy site and McFarland site).

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	250,000

### Operating Budget Impact

This project will increase operational expenses for additional street maintenance.



# Transportation Division



## Home Ave. and King Rd. Pedestrian Crossing Improvements

Provide pedestrian activated signal (RRFB) to improve pedestrian connectivity and school access.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	63,000

### Operating Budget Impact

This project will increase operational expense for signal maintenance.



## Northern Bike Connection

Provide a bicycle connection through the Murphy site north to 29th Ave. Exact location to be determined by future development and is anticipated to utilize 31st Ave.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	85,000

### Operating Budget Impact

This project will increase operational expenses for street maintenance.

# Capital Projects



## Crossing at Harrison St./31st Ave.

Provide bicycle crossing across Harrison St. between Campbell St. and 31st Ave.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	250,000

### Operating Budget Impact

This project will increase operational expenses for signal maintenance.



## Bicycle and Pedestrian Improvements

This project will construct bicycle and pedestrian improvements. Potential projects include ADA ramps, improved crosswalks, installation of RRFB's, etc.

- Pedestrian improvements on Van Water St
- Pedestrian improvements on Lake Rd.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	SSMP	36,000	-	-	-	-	-	36,000
Funded	FILOC	14,000	-	-	-	-	-	14,000
TOTAL		<u>50,000</u>	-	-	-	-	-	<u>50,000</u>

### Operating Budget Impact

No increase on operational or maintenance expense.

# Transportation Division



## Main Street Crossing Improvements

This project will make additional required improvement to Main Street under Union Pacific Railroad and TriMet structures to comply with new rail order. Work includes new advance warning signs and devices to protect the railroad bridge.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Intergovernmental	50,000	-	-	-	-	-	50,000

### Operating Budget Impact

This project will have a minor increase in operational expenses by adding warning signals to the network.



## Hwy 224 Intersection Upgrades

This project will reconfigure the intersections of Harrison Street, Oak Street, 37th Avenue and Freeman Way at Highway 224 by adding left turn lanes and protected signal phasing on the local streets together with reconfiguring the intersections as needed to improve overall intersection functioning.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded			-	-	-	-	-	2,300,000

### Operating Budget Impact

This project will have a minor increase in operational expenses by adding additional infrastructure.



# Capital Projects



## McLoughlin Intersection Upgrades

This project would add pedestrian improvements across McLoughlin to enhance and promote pedestrian connectivity between downtown and riverfront Park and the Trolley Trail. By adding improved pedestrian crosswalks, extended signal timing, signage, etc.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	2,000,000

### Operating Budget Impact

This project will have no effect on operational expenses.



## Downtown Parking Improvements

This project would develop and construct alternatives to address parking requirements within the downtown area.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Unfunded		-	-	-	-	-	-	11,500,000

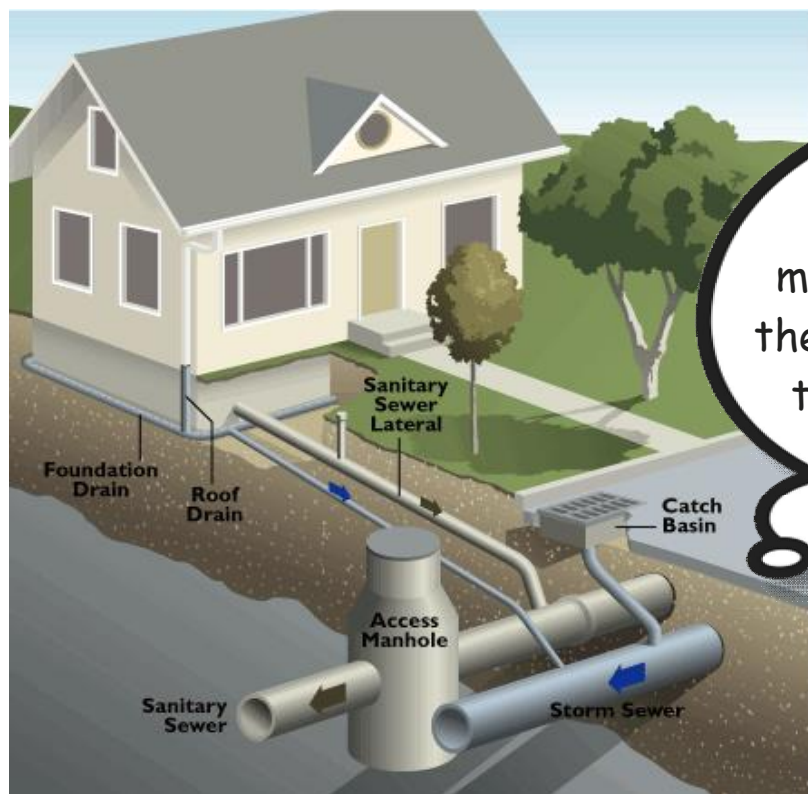
### Operating Budget Impact

This project will increase operational expenses by adding infrastructure.

## Overview

The City of Milwaukie wastewater system consists of approximately 396,000 feet (75 miles) of pipe, 1,615 manholes and 5 sewage pumping stations. City Engineering and Public Works staff are responsible for pipe and manhole replacement and construction, routine maintenance and inspection, system inventory, emergency call-outs, and flow monitoring. Treatment for the City wastewater system is provided by Clackamas County Sewer District #1. Treatment costs have escalated rapidly over the past three years and are expected to increase further.

Wastewater system capital needs include funding for the Wastewater Main Repair Program (WWMRP), Clay Pipe Replacement Program, and the I&I Reduction Program as well as lift station improvements. The 2010 Wastewater Master Plan recommends a yearly WWMRP budget of \$100,000. This program's goal is to address wastewater pipe issues identified by operations staff through routine maintenance. The goal of the Clay Pipe Replacement Program is to systematically replace all aging clay pipes within the system. The I&I Reduction Programs goal is to reduce the infiltration and inflow of ground water into the sanitary system reducing the City's treatment needs.



Did you know...  
that in Milwaukie  
maintenance and repair of  
the sanitary sewer lateral is  
the responsibility of the  
homeowner?

# Capital Projects

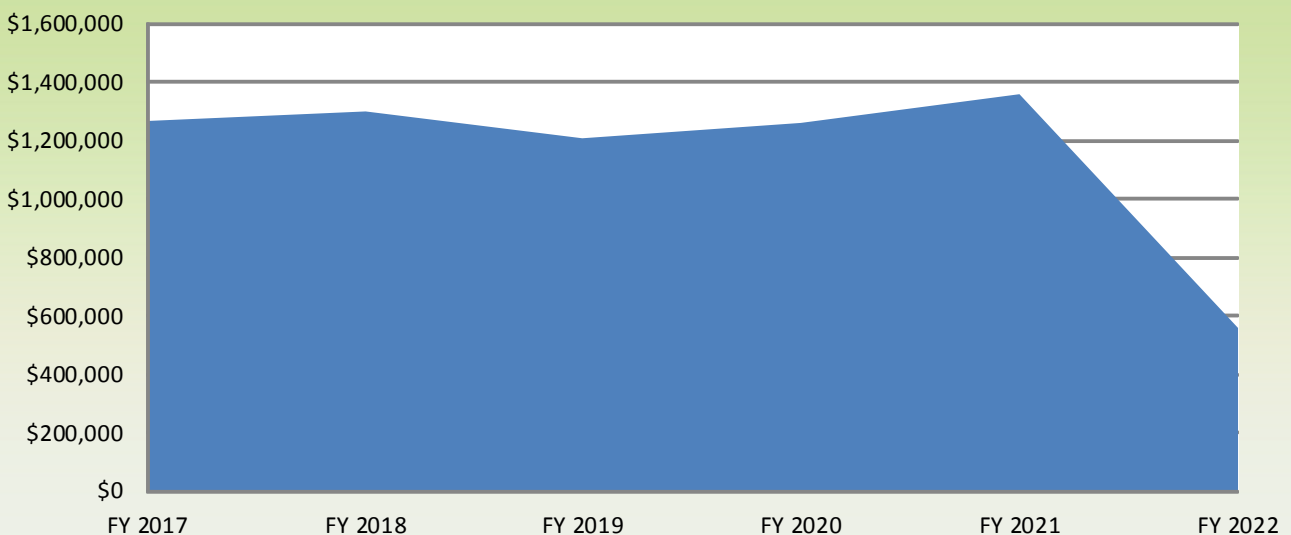
## Wastewater Summary

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
72	Wastewater Main Repair Program	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
72	I&I Reduction Program	165,000	165,000	165,000	165,000	165,000	165,000	990,000
73	Clay Pipe Replacement Program	485,000	600,000	-	-	-	-	1,085,000
73	Wastewater Vehicle Purchases	45,000	60,000	240,000	400,000	100,000	100,000	945,000
74	Lift Station Improvement Program	190,000	90,000	90,000	90,000	90,000	90,000	640,000
74	Kellogg Creek Manhole Repair	50,000	-	-	-	-	-	50,000
15	Public Works Property Acquisition	130,000	-	-	-	-	-	130,000
75	Capacity Building Pipe Replacement Project	-	180,000	-	-	-	-	180,000
75	Waverly Heights Wastewater System Reconfiguration (Design)	-	-	510,000	400,000	800,000	-	1,710,000
<b>Wastewater Fund Total</b>		<b>1,265,000</b>	<b>1,295,000</b>	<b>1,205,000</b>	<b>1,255,000</b>	<b>1,355,000</b>	<b>555,000</b>	<b>6,930,000</b>

## Wastewater SDC Summary

75	Capacity Building Pipe Replacement Project	-	180,000	-	-	-	-	180,000
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Wastewater Capital Improvement Program Cost





# Wastewater Division



## Wastewater Main Repair Program

Projects under this program consist of replacements where structural or inadequate flow conditions exist and lining of pipes with excessive groundwater infiltration and/or stormwater inflow. Projects are identified based on routine system monitoring and/or maintenance done by the Wastewater Department and projects identified in the 2010 Wastewater Master Plan.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000

### Operating Budget Impact

This project will not increase operating expenditures. These projects will replace wastewater pipes one-for-one and will not increase the number of wastewater assets system-wide.



## I&I Reduction Program

This program will reduce infiltration and inflow (I&I) of stormwater or groundwater into the City's collection system by utilizing trenchless technologies and slip lining of identified pipes throughout the City.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Grant	15,000	15,000	15,000	15,000	15,000	15,000	90,000
Funded	Capital Outlay	150,000	150,000	150,000	150,000	150,000	150,000	900,000
<b>TOTAL</b>		<u>165,000</u>	<u>165,000</u>	<u>165,000</u>	<u>165,000</u>	<u>165,000</u>	<u>165,000</u>	<u>990,000</u>

### Operating Budget Impact

This project will decrease operating expenditures. These projects seal existing wastewater pipes and as a result increase overall capacity.

# Capital Projects



## Clay Pipe Replacement Program

This program was created to ensure the replacement of all remaining Vitrified Clay Pipe (VCP) throughout the City. Vitrified Clay Pipes are susceptible to chemical attack at their joints, are brittle, and due to their short lengths and numerous joints, are more prone to infiltration. Sections of VCP to be replaced will be identified by Engineering staff on an annual basis and will focus strongly on coordination with the Street Surface Maintenance Program (SSMP) schedule and replacement recommendations from the Wastewater Department based on routine system monitoring.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	485,000	600,000	-	-	-	-	1,085,000

### Operating Budget Impact

This project will not increase operating expenditures. These projects replace wastewater pipes one-for-one and will not increase the number of wastewater assets system-wide.



## Wastewater Vehicle Purchases

In FY 2017, the Department will participate in their portion of purchasing some of the shared vehicles such as dump trucks, loaders and backhoes totaling \$45,000. In FY 2018, a one-ton service truck will be replaced for \$60,000. In FY 2019, two 3/4-ton service trucks will be replaced for \$45,000 each as well as a new TV van for \$150,000. In FY 2020, the VacCon is due to be replaced for \$350,000 and some shared vehicles will be replaced for the Department totaling \$50,000. In FY 2021 and 2022, some shared vehicles for \$100,000 will be replaced for each year.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	45,000	60,000	240,000	400,000	100,000	100,000	945,000

### Operating Budget Impact

These purchases will not increase operating expenditures.



# Wastewater Division



## Lift Station Improvement Program

This program will include equipment and facility upgrades to the City's five sewer lift stations by replacing pumps, upgrading equipment, etc., to improve overall reliability.

- Emergency Generator (FY17) \$50,000
- Brookside Wet Well Lining (FY17) \$50,000
- Pump Replacement (FY17-22) \$40,000/yr.
- SCADA Improvements (FY17-22) \$50,000/yr.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	190,000	90,000	90,000	90,000	90,000	90,000	640,000

### Operating Budget Impact

Completing preventive maintenance in advance of emergency repairs should reduce the possibility of sewer back up, claims against the City, and reduce operating expenditures.



## Kellogg Creek Manhole Repair

This project will repair and upgrade the sewer manhole within Kellogg Creek as well as provide streambank stabilization and reestablishment due to the storm event of December 6th-23rd, 2015.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	50,000	-	-	-	-	-	50,000

### Operating Budget Impact

These purchases will not increase operating expenditures.



# Capital Projects



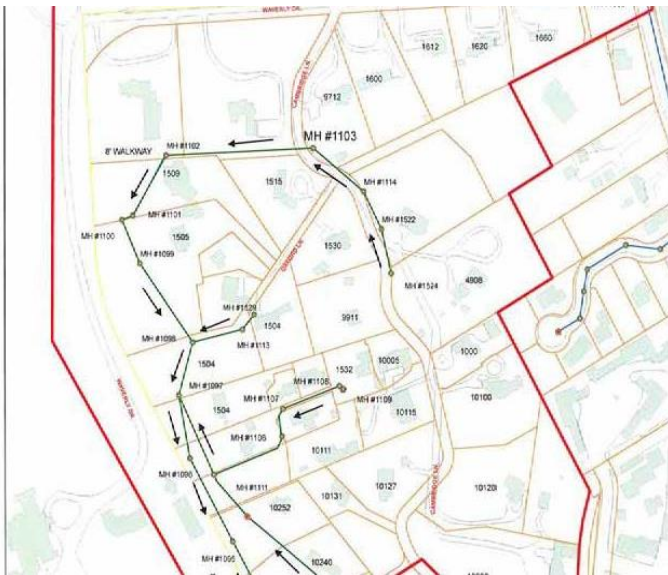
## Capacity Building Pipe Replacement

This project will increase the capacity within the collection system for the Home and Monroe Basins.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	180,000	-	-	-	-	180,000
Funded	SDC	-	180,000	-	-	-	-	180,000
TOTAL		-	360,000	-	-	-	-	360,000

### Operating Budget Impact

This purchase will not increase operating expenditures.



# Waverly Heights Wastewater System Reconfiguration Design

This project will replace and reconfigure the aging wastewater system within the Waverly Heights area of northwest Milwaukie. The 2010 Wastewater System Master Plan proposes five design alternatives. Funding for fiscal year 2020 will be used to design the appropriate solution for this neighborhoods sewer system. Construction of this project will follow as soon as design is complete.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	510,000	400,000	800,000	-	1,710,000

### Operating Budget Impact

This project will not increase operating expenditures. This design will help solve a major maintenance issue for the City.

## Overview

The City of Milwaukie water supply is provided through seven wells drawing from an underground basin of the Troutdale Aquifer. The pumping capacity of the well system is 6.6 million gallons per day (MGD). The water system consists of 2 treatment facilities, 3 storage tanks totaling 6 million gallons (MG) storage, and 112 miles of pipeline providing potable water to 6,800 customer connections over 4 pressure zones.

The CIP is based on priorities determined as part of the recently completed Water Master Plan. The highest priority projects are prioritized by Street Surface Maintenance Program schedule, fire flow deficiencies in areas zoned “public”, 4” diameter pipe installed before 1960, and 6” diameter pipe installed before 1960. The Master Plan identifies \$10 million dollars in CIP projects to be completed over the next 10 years.

The Water Master Plan identifies the need for \$2 million in Capital Outlay per year. Most of the funding is needed to replace the aging pipelines that delivery water throughout the City. In order to minimize the impact to the water rates needed to provide roughly \$1.3 million of additional funding, staff worked with the Citizen’s Utility Advisory Board (CUAB) on a ten-year plan to ramp the rates up to the level needed to reach the necessary Capital Outlay funding.

The CIP, as recommended by the CUAB, includes the minimum projects necessary to replace deficient pipelines ahead of the scheduled street surface maintenance projects over the next 4 years. The CUAB’s recommendation includes increasing CIP funding over the following 6 years to reach the original goal of \$2 million of Capital Outlay per year 10 years from now, meeting the recommended CIP funding level of the Master Plan.



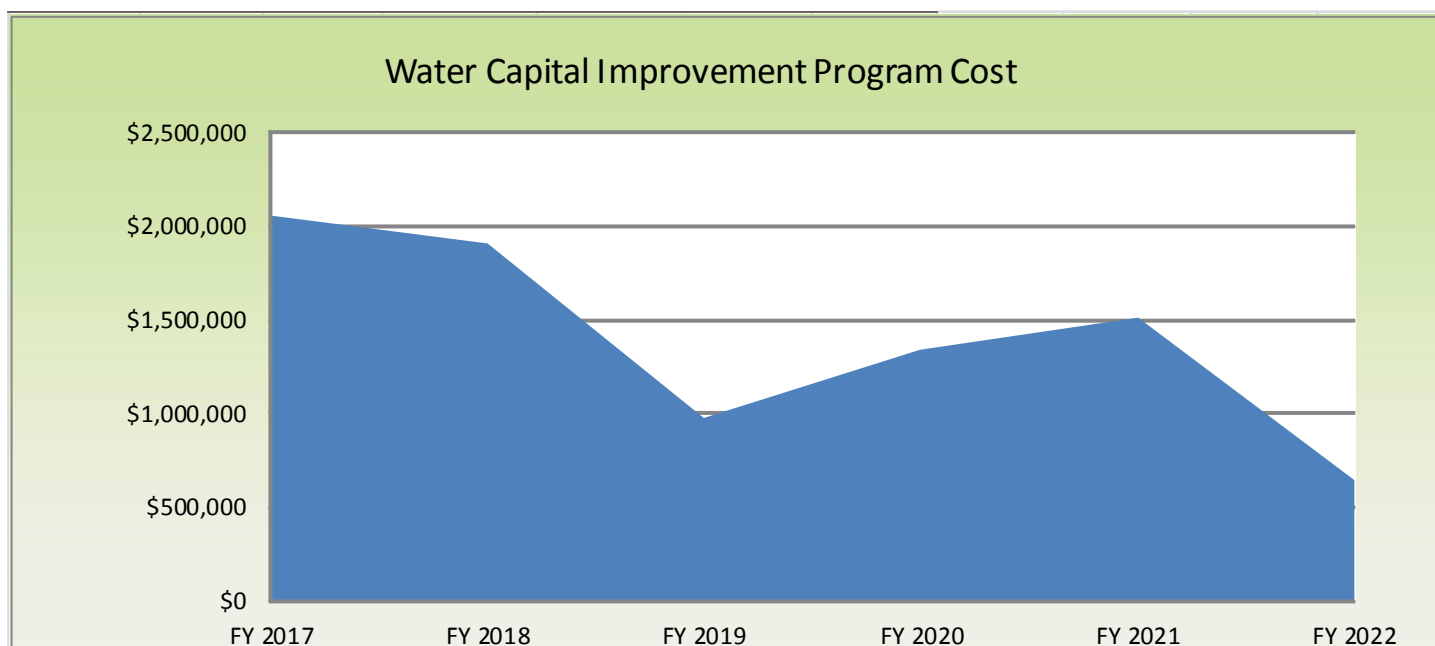
# Capital Projects

## Water Summary

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
78	McBrod Avenue System Improvements	-	510,000	-	-	-	-	510,000
78	Water Vehicle Purchases	105,000	-	55,000	32,000	-	-	192,000
79	Water Well No. 2 Storage Tank Maintenance	1,255,000	-	-	-	-	-	1,255,000
79	Water Well No. 6 Storage Tank Maintenance	-	400,000	-	-	-	-	400,000
80	Water Well #8 Rehabilitation	200,000	1,000,000					1,200,000
80	FY 2017 Water System Improvements	360,000	-	-	-	-	-	360,000
81	FY 2019 Water System Improvements	-	-	917,000	-	-	-	917,000
81	FY 2020 Water System Improvements	-	-	-	1,304,000	-	-	1,304,000
82	FY 2021 Water System Improvements	-	-	-	-	1,512,000	-	1,512,000
82	FY 2022 Water System Improvements	-	-	-	-	-	645,000	645,000
15	Public Works Property Acquisition	130,000	-	-	-	-	-	130,000
<b>Water Fund Total</b>		<b>2,050,000</b>	<b>1,910,000</b>	<b>972,000</b>	<b>1,336,000</b>	<b>1,512,000</b>	<b>645,000</b>	<b>8,425,000</b>

## Water SDC Summary

78	McBrod Avenue System Improvements	-	90,000	-	-	-	-	90,000
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## 2018 Water System Improvements - McBrod Avenue System Improvements

This project consists of replacement of 2,850 feet of existing 6" and 8" lead joint water main with 8" and 10" ductile iron water main. This project is not listed in the January 2001 Water System Master Plan as a project. However, the Milwaukie Water Department has identified this project as a high priority due to the high level of continuing maintenance on the lead joint water mains. This project is in preparation for the McBrod Avenue Street Surface Maintenance Project.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	510,000	-	-	-	-	510,000
Funded	Water SDC's	-	90,000	-	-	-	-	90,000
<b>TOTAL</b>		-	<u>600,000</u>	-	-	-	-	<u>600,000</u>

### Operating Budget Impact

This project is anticipated to reduce operating expenditures due to the reduction in maintenance issues once the pipe is replaced.



## Water Vehicle Purchases

In FY 2017, the Department will participate in their portion shared vehicles such as dump trucks, loaders, and backhoes totaling \$45,000 and purchase a diesel one-ton service truck for \$60,000. In FY 2018, there are no purchases for the Department. In FY 2019, the Department will purchase a new service truck for \$50,000. In addition the department has an unfunded need to purchase shared vehicles in the amount of \$65,000 in FY2019. In FY 2020, shared vehicles will be replaced for the department at the cost of \$50,000, \$18,000 of which is unfunded. In FY 2021 and FY 2022 the Department has an unfunded need for a service truck in the amount of \$60,000 and some shared vehicles need to be replaced in the amount of \$100,000, and a tow behind vacuum trailer and exercising machine in the amount of \$100,000 needs to be replaced.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	105,000	-	55,000	32,000	-	-	192,000
Unfunded		-	-	-	-	-	-	338,000

### Operating Budget Impact

These purchases will not increase operating expenditures as they replace existing vehicles.

# Capital Projects



## Water Well No. 2 Storage Tank Maintenance

Well No. 2 elevated storage tank needs to be repainted including the top exterior surface and interior surface, a need that was discovered during inspection in 2015. The estimated cost to paint the exterior surface is \$555,000. The cost for the work on the interior of the Well No. 2 elevated storage tank painting is \$700,000.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	1,255,000	-	-	-	-	-	1,255,000

### Operating Budget Impact

This purchase will not increase operating expenditures.



## Water Well No. 6 Storage Tank Maintenance

Well No. 6 storage tank needs to be stripped of the exterior paint and repainted. The estimated cost to complete the project is \$400,000. It was scheduled for FY 2016 but delayed when the need to paint the interior of Well No. 2 elevated storage tank was discovered.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Water Fund	-	400,000	-	-	-	-	400,000

### Operating Budget Impact

This purchase will not increase operating expenditures.





## Water Well # 8 Rehabilitation & Relocation

Well 8 is experiencing some issues with excessive iron in the water its drawing. Possible solutions include moving the well to a previous site used by the Wichita Water district that is vacant but planned to be the Wichita Park site for the Linwood Neighborhood. This project provides funding to explore the viability of siting well 8 on the Wichita site and presumes constructing the well there in 2018.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Water Fund	200,000	1,000,000	-	-	-	-	1,200,000

### Operating Budget Impact

Little impact to the operating cost as this well would replace the current well with similar operational and maintenance parameters.



## FY 2017 Water System Improvements

This project consists of water line replacements and abandonments at various locations throughout the City to address hydraulic, structural and water quality issues. Scheduled water line replacements include:

- Main Street Water Line Extension (Mailwell Drive - Beta Street)
- Riverway Lane Water Line Replacement (south of Lava Drive)
- Wood Court Water Line Replacement (Wood Avenue - Cul-de-Sac)
- Monroe Street Water Line Abandonment (37<sup>th</sup> Avenue - Oak Street)
- Llewellyn Street (32nd Avenue - 34th Avenue)

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	360,000	-	-	-	-	-	360,000

### Operating Budget Impact

This project is anticipated to reduce operating expenditures due to the reduction of maintenance issues once the pipe is replaced.



# Capital Projects



## FY 2019 Water System Improvements

This project consists of water line replacements at various locations throughout the City to address hydraulic, structural and water quality issues. Scheduled water line replacements include:

- Park Street Water System Improvements (Home Avenue – Beckman Ave)
- Beckman Avenue Water System Improvements (Railroad Avenue – Park Street)
- River Road Pressure Boundary Reconfiguration (Sparrow Street – Highway 99E)
- Milwaukie High School Fire Flow Improvements
- Public Works Campus Fire Flow Improvements

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	917,000	-	-	-	917,000

### Operating Budget Impact

This project is anticipated to reduce operating expenditures due to the reduction of maintenance issues once the pipe is replaced.



## FY 2020 Water System Improvements

This project consists of water line replacements at various locations throughout the City to address hydraulic, structural and water quality issues. Scheduled water line replacements include:

- Harvey Street (32<sup>nd</sup> Avenue – 42<sup>nd</sup> Avenue)
- 33<sup>rd</sup> Avenue (Harvey Street – Dead End)
- 36<sup>th</sup> Avenue (Harvey Street – Dead End)
- 42<sup>nd</sup> Avenue (Harvey Street – Olsen Street)
- Drake Street and 38<sup>th</sup> Avenue (40<sup>th</sup> Avenue – End)
- Howe Lane Loop (Howe Lane, 44<sup>th</sup> Avenue & 46<sup>th</sup> Avenue south of Howe Street)

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	1,304,000	-	-	1,304,000

### Operating Budget Impact

This project is anticipated to reduce operating expenditures due to the reduction of maintenance issues once the pipe is replaced.



## FY 2021 Water System Improvements

This project consists of water line replacements at various locations throughout the City to address hydraulic, structural and water quality issues. Scheduled water line replacements include:

- 32<sup>nd</sup> Avenue (Harrison Street – Filbert Street)
- Olsen Street (32<sup>nd</sup> Avenue – 29<sup>th</sup> Avenue)
- Malcolm Street (32<sup>nd</sup> Avenue – 29<sup>th</sup> Avenue)
- Roswell Street (32<sup>nd</sup> Avenue – 29<sup>th</sup> Avenue)
- 29<sup>th</sup> Avenue (Roswell Street – Van Water Street)
- 30<sup>th</sup> Avenue (Roswell Street – Van Water Street)
- 31<sup>st</sup> Avenue (Roswell Street – Van Water Street)
- Llewellyn Street (32<sup>nd</sup> Avenue – 34<sup>th</sup> Avenue)

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	-	1,512,000	-	1,512,000

### Operating Budget Impact

This project is anticipated to reduce operating expenditures due to the reduction of maintenance issues once the pipe is replaced.



## FY 2022 Water System Improvements

This project consists of water line replacements at various locations throughout the City to address hydraulic, structural and water quality issues. Scheduled water line replacements include:

- Public Works Fire Flow Improvements
- 55<sup>th</sup> Avenue (Firwood Street – Johnson Creek Blvd)
- Firwood Street (55<sup>th</sup> Avenue – Stanley Avenue)

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	-	-	645,000	645,000

### Operating Budget Impact

This project is anticipated to reduce operating expenditures due to the reduction of maintenance issues once the pipe is replaced.







## Overview

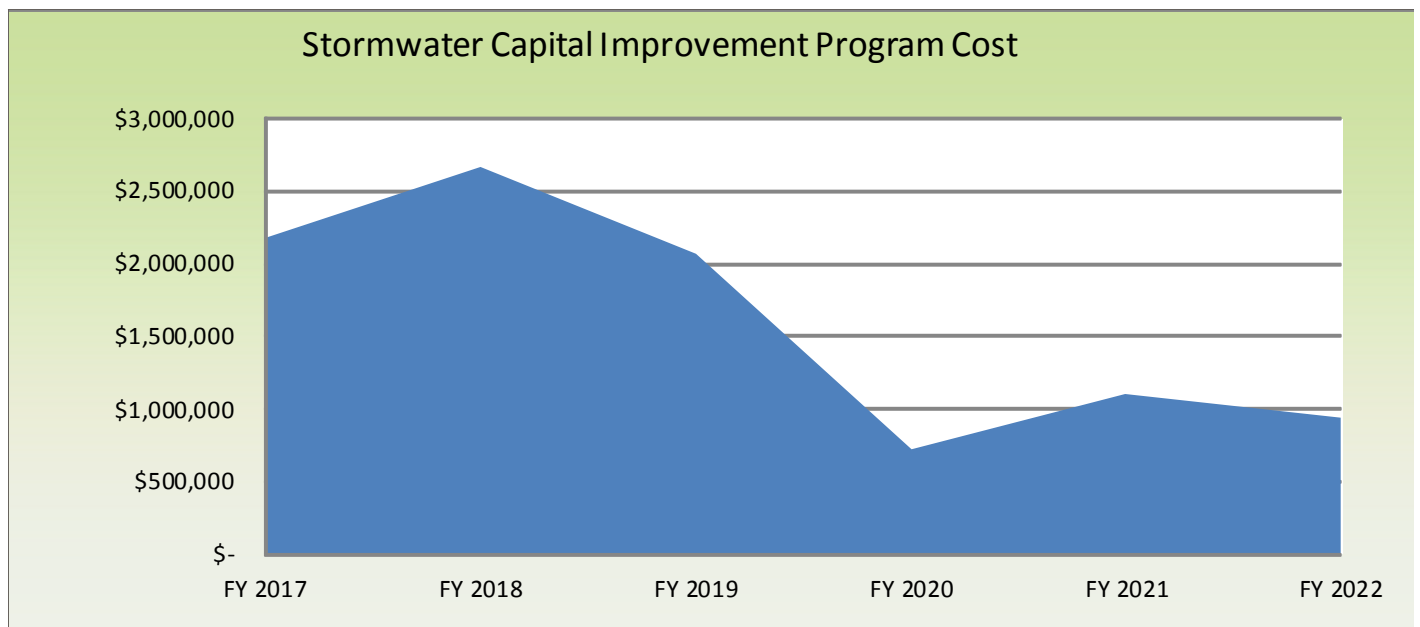
The stormwater system includes 41 miles of pipe, 1,606 catch basins, 559 manholes, 124 sedimentation manholes, 4 water quality manholes, 210 drywells, 126 outfalls, 5 water quality/flood control facilities (detention ponds), and 11 control structures.

Treatment for the City's stormwater system is required by Federal (Clean Water Act) and State law. The City has steadily built the stormwater utility beginning with an utility rate that was implemented in the early 1990's and the need to properly manage stormwater runoff was addressed. Today the stormwater utility is focused on maintaining the infrastructure in a manner that recognizes the correlation with runoff and the environment.

An update of the Stormwater Master Plan was completed in 2014. This update included a new look at the capital improvement need for the utility. The current project list incorporates the updated master plan and includes both infrastructure replacement and facility enhancements.

Primary capital needs involve modification of the drywells or (UICs) so that they are not detrimental to the aquifer. This means providing pretreatment of the runoff flowing to the drywells in addition to regular inspection and maintenance. There are also projects from localized flooding issues to major drainage basin infrastructure identified within the plan. Additional projects address local infiltration facilities constructed by development or the City storm crew.

The Stormwater Capital Maintenance Program's goal is to replace aging pipe and resolve current issues identified by operations staff through routine maintenance and inspection of the system.



# Capital Projects

## Stormwater Summary

Page	Project Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
62	Kellogg Creek Bridge #22142	260,000	-	-	-	-	-	260,000
86	36th Avenue Stormwater Improvements	105,000	-	-	-	-	-	105,000
86	47th Avenue and Llewellyn Street Stormwater Improvements	160,000	-	-	-	-	-	160,000
87	Main/Milport Pipe Replacement	250,000	-	-	-	-	-	250,000
87	55th Avenue and Monroe Street Stormwater Improvements	25,000	-	-	-	-	-	25,000
88	Stormwater Vehicle Purchases	295,000	300,000	110,000	95,000	100,000	100,000	1,000,000
88	Kellogg Creek Dam Removal	-	50,000	50,000	-	-	-	100,000
89	Meek Street Pipe Installation	500,000	800,000	750,000	-	750,000	-	2,800,000
89	Hemlock Street Pipe Replacement	-	560,000	-	-	-	-	560,000
90	Linwood Elementary Pipe Replacement	-	-	-	470,000	-	-	470,000
90	Plum and Apple Street Pipe Installation	180,000	-	-	-	-	-	180,000
91	Stormwater Capital Maintenance Program	150,000	150,000	150,000	150,000	150,000	150,000	900,000
91	Washington Street Pipe Replacement	-	800,000	1,000,000	-	-	-	1,800,000
92	Willow Street Detention Pond Retrofit	-	-	-	-	-	70,000	70,000
92	Stanley-Willow UIC Decommissioning	-	-	-	-	100,000	-	100,000
93	Harrison Street Outfall	-	-	-	-	-	620,000	620,000
93	Washington Water Quality Facility	120,000	-	-	-	-	-	120,000
15	Public Works Property Acquisition	130,000	-	-	-	-	-	130,000
Stormwater Fund Total		2,175,000	2,660,000	2,060,000	715,000	1,100,000	940,000	9,650,000

## Stormwater SDC Summary

62	Kellogg Creek Bridge #22142	100,000	-	-	-	-	-	100,000
60	17th Avenue Milwaukie Multi-Use Path	53,000	-	-	-	-	-	53,000
Stormwater SDC Total		153,000						153,000

# Stormwater Division



## 36th Avenue Stormwater Improvements

This project will install new underground injection control devices or raingardens on 36th Avenue north of King Road to prevent routine flooding.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	105,000	-	-	-	-	-	105,000

### Operating Budget Impact

This project will reduce operating expenditures because stormwater crews are routinely called to this area to help alleviate flooding.



## 47th Avenue and Llewellyn Street Stormwater Improvements

This project will install new underground injection control devices or raingardens at the intersection of 47th Avenue and Llewellyn Street. This intersection routinely floods because the existing infrastructure is under capacity.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	160,000	-	-	-	-	-	160,000

### Operating Budget Impact

This project will reduce operating expenditures because stormwater crews are routinely called to this area to help alleviate flooding.



# Capital Projects



## Main/Milport Pipe Replacement

This project replaces the undersized pipe that has caused flooding along Main Street. This project replaces the existing 12x24 elliptical CMP and 18" CP with a new 30" pipe, plus replacement of the existing manholes. This work is being done in preparation of an ODOT project on McLoughlin Boulevard.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	250,000	-	-	-	-	-	250,000

### Operating Budget Impact

This project will reduce operating expenditures.



## 55th Avenue and Monroe Street Stormwater Improvements

This project will install new underground injection control devices or raingardens on 55th Avenue and Monroe Street. This intersection routinely floods because the existing infrastructure is under capacity.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	25,000	-	-	-	-	-	25,000

### Operating Budget Impact

This project will reduce operating expenditures because stormwater crews are routinely called to this area to help alleviate flooding.

# Stormwater Division



## Stormwater Vehicle Purchases

In FY 2017, the Department will participate in purchasing some shared vehicles such as dump trucks, loaders and backhoes totaling \$45,000. The Department will also purchase a new sweeper in the amount of \$250,000. In FY 2018, another sweeper will be purchased in the amount of \$180,000 and two 3/4-ton service trucks are due to be replaced for \$60,000 each. In FY 2019, a one-ton service truck for \$45,000 and they will also participate in purchasing shared vehicles in the amount of \$65,000. In FY 2020, a new 3/4-ton service truck for \$45,000 and shared vehicles will be replaced for the Department at the cost of \$50,000. In FY 2021 and 2022, some shared vehicles will be replaced.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	295,000	300,000	110,000	95,000	100,000	100,000	1,000,000

### Operating Budget Impact

These purchases will not increase operating expenditures.



## Kellogg Creek Dam Removal

This project will remove the Kellogg Dam, address contaminated sediments, re-establish fish passage, and restore riparian habitat for endangered salmon and native wildlife. The Stormwater Fund contributes minimal funding to fund necessary environmental studies as the waterway is an important stormwater feature.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	50,000	50,000	-	-	-	100,000
Unfunded		-	-	-	-	-	-	9,900,000
TOTAL		-	<u>50,000</u>	<u>50,000</u>	-	-	-	<u>10,000,000</u>

### Operating Budget Impact

Unknown at this time.



# Capital Projects



## Meek Street Pipe Installation

This project will install a new 36-inch storm pipe from Boyd Street south to Monroe Street along with two detention facilities totaling 1 acre in size.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	500,000	800,000	750,000	-	750,000	-	2,800,000

### Operating Budget Impact

This project will increase operating expenditures due to the added expense of maintaining the additional pipe and detention ponds. However, this project will also reduce the amount of emergency maintenance on Harrison Street due to flooding caused by its undersized system.



## Hemlock Street Pipe Replacement

This project will replace existing storm pipe on Hemlock Street and Cedarcrest Drive. The existing pipe is undersized and currently floods in heavy rain events.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	560,000	-	-	-	-	560,000

### Operating Budget Impact

Since this project replaces existing undersized pipe, there will be a net reduction in operating expenditures because stormwater crews are routinely called to this area to help alleviate flooding.



# Stormwater Division



## Linwood Elementary Pipe Replacement

This project will replace the existing undersized storm pipe that runs across the Linwood Elementary School property from Linwood Avenue to Stanley Avenue.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	470,000	-	-	470,000

### Operating Budget Impact

This project replaces existing stormwater pipe and will not generate additional costs to the operating budget.



## Plum and Apple Street Pipe Installation

This project will install new 12-inch stormwater pipe from the intersection of Plum and Apple Streets to the intersection of Juniper and Aspen Streets.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	180,000	-	-	-	-	-	180,000

### Operating Budget Impact

Since this project replaces existing undersized pipe, there will be a net reduction in operating expenditures because stormwater crews are routinely called to this area to help alleviate flooding.

# Capital Projects



## Stormwater Capital Maintenance Program

This yearly project will begin to replace Milwaukie's aging stormwater infrastructure. Complete replacement of the City's system is set to a 75-year cycle.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	150,000	150,000	150,000	150,000	150,000	150,000	900,000

### Operating Budget Impact

This project will reduce the operating expenditures by upgrading materials which requires less maintenance.



## Washington Street Pipe Replacement

This project will replace existing 18-inch pipe in Washington Street with 24-inch pipe. The current pipe system is under capacity and will flood under 10-year rain events.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	800,000	1,000,000	-	-	-	1,800,000

### Operating Budget Impact

This project will reduce operating expenditures by upgrading the existing system to limit flooding.



# Stormwater Division



## Willow Detention Pond Retrofit

This project will retrofit the existing Willow Street detention pond to incorporate a water quality component. The City's NPDES MS4 Permit requires a water quality retrofit project be identified and constructed within the permit term.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	-	-	70,000	70,000

### Operating Budget Impact

This project will increase operating expenditures because the pond will require more attention once the treatment component is installed.



## Stanley-Willow UIC Decommissioning

This project will decommission two sub-standard drywells along Stanley Avenue and construct new storm pipe on Stanley Avenue from Hill Street to Ball-Michel Park.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	-	100,000	-	100,000

### Operating Budget Impact

This project will increase operating expenditures due to additional maintenance of the stormwater pipe conveyance system.



# Capital Projects



## Harrison Street Outfall

This project replaces the existing 24-inch storm pipe in Harrison Street between 21st Avenue and the outfall into Johnson Creek with 36-inch pipe. This section currently floods in 10-year storm events.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Capital Outlay	-	-	-	-	-	620,000	620,000

### Operating Budget Impact

This project will reduce the operating expenditures because stormwater crews are routinely called to this area to help alleviate flooding.



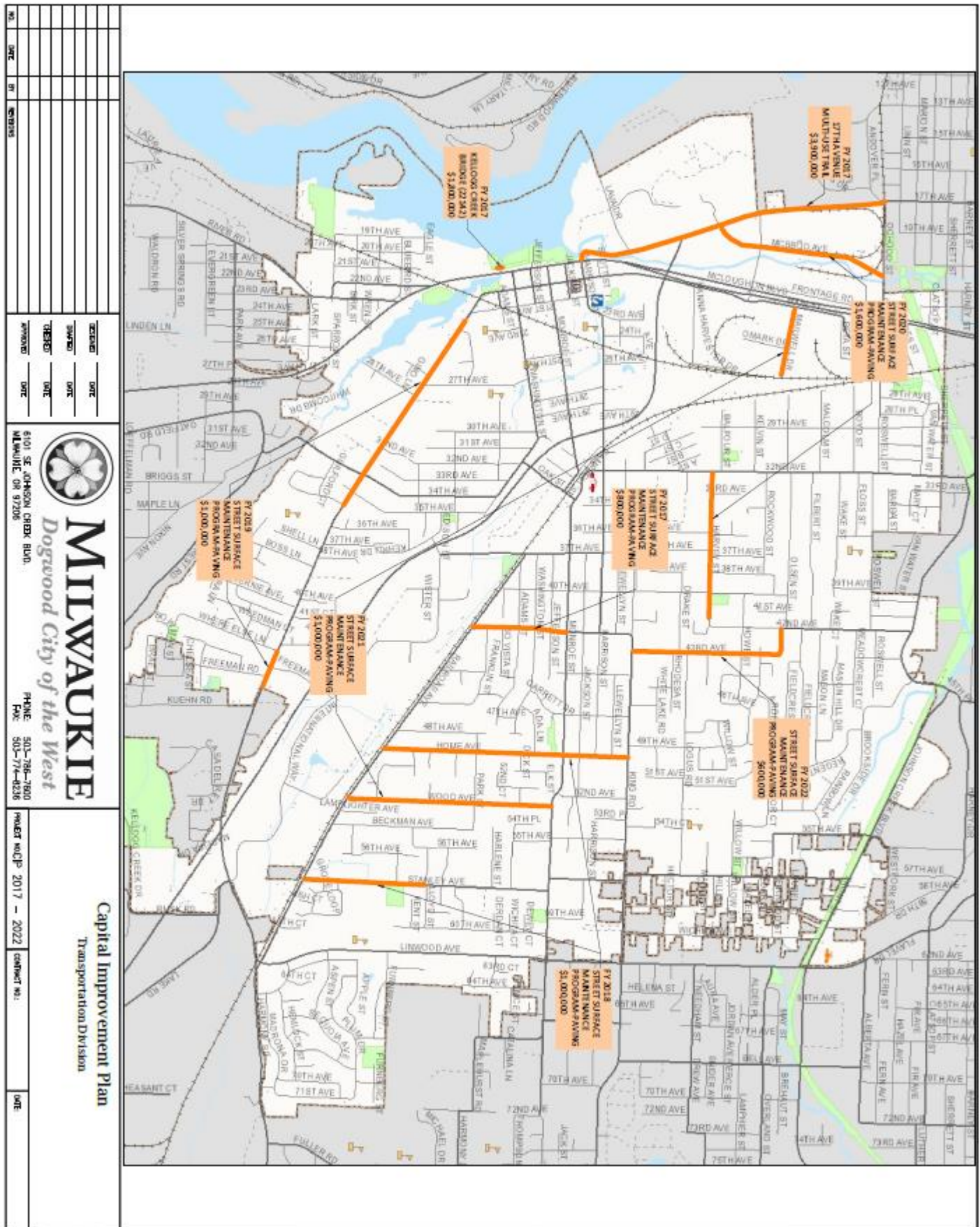
## Washington Water Quality Facility

The project will install a water quality facility on the Washington Street Basin on Main Street just before it connects to the Lake Rd trunk and provide water quality where none currently exists.

Status	Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Total
Funded	Tri-Met	120,000	-	-	-	-	-	120,000

### Operating Budget Impact

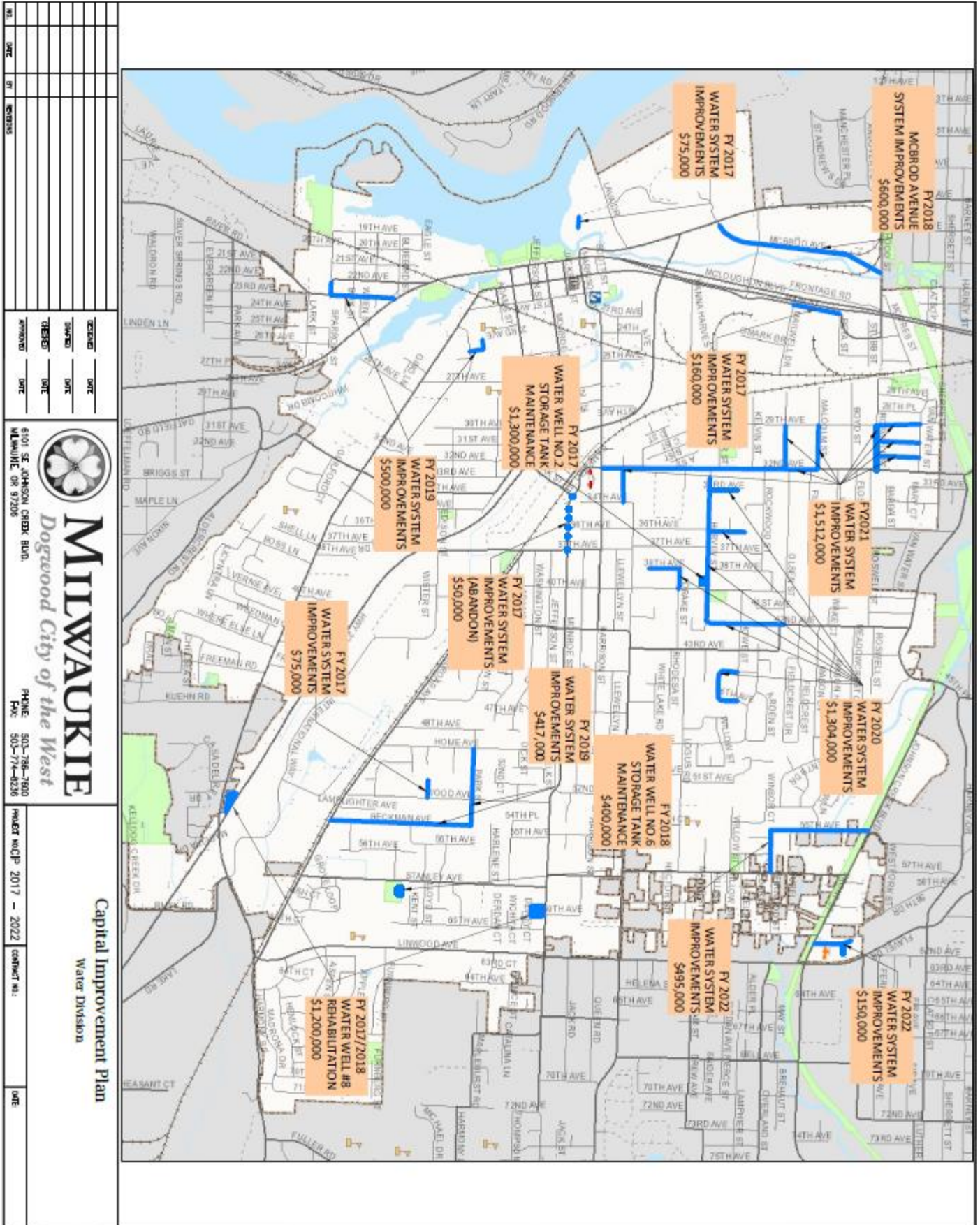
This project increases operational expenditures due to the addition of a new water quality facility. Water quality facilities are a regulatory requirement.



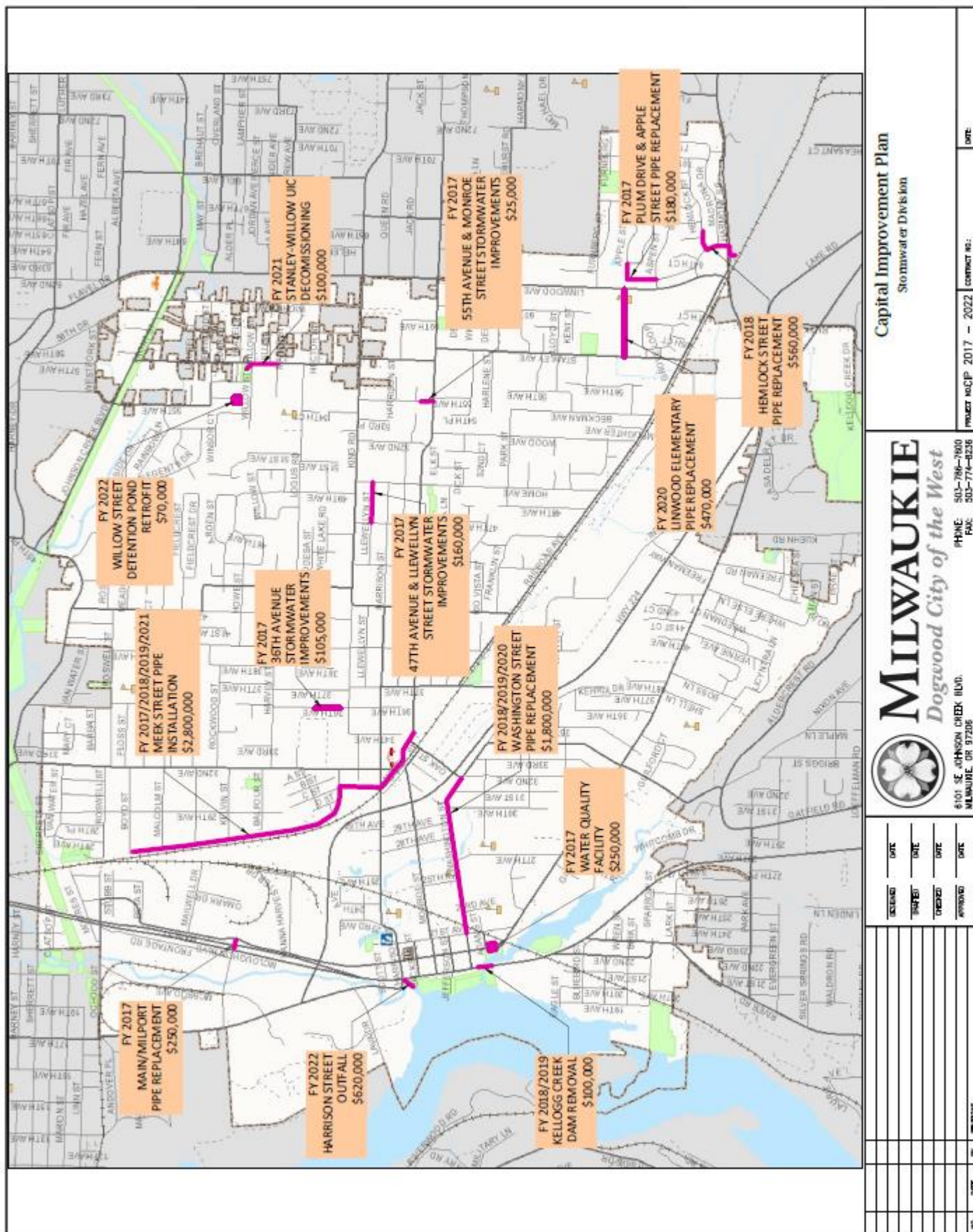


















# Acknowledgements

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Edward Simmons  
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Gary Parkin

## Public Safety Advisory Board

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Chris Ortolano, Secretary, at large member  
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