



City of Olympia, Washington
**2017-2022 Capital
Facilities Plan**
(Excerpts)



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Executive Summary

The 2017-2022 Capital Facilities Plan (CFP) is a multi-year plan of capital projects with projected beginning and completion dates, estimated costs, and proposed methods of financing. The Plan is reviewed and updated annually according to the availability of resources, changes in City policy and community needs, unexpected emergencies and events, and changes in cost and financial strategies.

It is important to understand that a multi-year Capital Facilities Plan does not represent a financial commitment. City Council approval does not automatically authorize funding. It does approve the program in concept and provides validity to the planning process. Appropriations are made in the Capital Budget, which is the first year of the capital program. Projects beyond the current year Capital Budget should not be viewed as a commitment to fund the project, but instead as an indication that given the information available at the time, the City plans to move forward with the project in the future.

Capital Costs of Proposed Projects in the 2017-2022 Capital Facilities Plan

Capital project costs for the City's 2017-2022 six-year capital facilities planning period total \$141,127,463. Chart 1.1 illustrates the percentage of the plan's six-year capital costs attributed to each program category. Table 1.1 illustrates planned capital costs by program category and the planned year of expenditure.

2017-2022 Capital Facilities Plan Cost by Project Category \$ 141,127,463

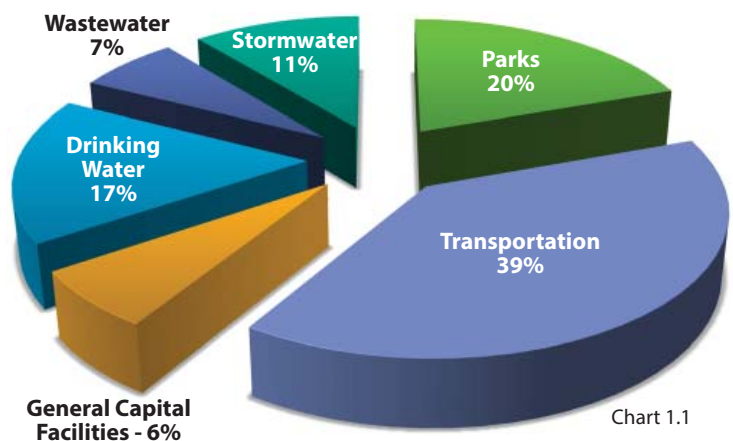


Table 1.1

	2017	2018-2022	Total
Parks	\$ 5,637,105	\$ 22,197,400	\$ 27,834,505
Transportation	\$ 9,702,823	\$ 45,238,136	\$ 54,940,958
General Capital Facilities	\$ 1,510,000	\$ 7,500,000	\$ 9,010,000
Drinking Water	\$ 6,166,500	\$ 17,874,500	\$ 24,041,000
Wastewater	\$ 2,171,000	\$ 7,497,000	\$ 9,668,000
Stormwater	\$ 2,116,100	\$ 13,516,900	\$ 15,633,000
Total	\$ 27,303,528	\$ 113,823,936	\$ 141,127,463





What Are We Building in 2017?

The following projects are what the City will be building in 2017. These projects are past the planning and design phase and are “shovel ready.” You should expect to see construction or land acquired. Some projects begin construction in 2017 and are a one-year project, whereas other projects run longer than one year and are therefore considered major projects. We think it is important to list single-year and multiple-year projects so that our citizens are aware of what projects are taking place with their dollars.

You will not find all of these projects listed in the project sections of the 2017-2022 Capital Facilities Plan (CFP) as some of them may have already been appropriated in previous budget years. These projects are marked with an asterisk (*). Only new projects or projects that need additional funds will be listed in the current CFP.

It is important to remember that for many projects, it takes a number of years to get to the construction phase. This is because rights-of-way may need to be purchased, environmental reviews are necessary, and/or engineering design work needs to be completed. These are only a few examples of what takes place before a project begins actual construction. So while the following projects are what is under construction and/or acquired in 2017, a lot of work is under way behind the scenes on several other future projects.

Transportation	Total Project Cost	Estimated Construction/ Acquisition Start Date	Estimated Construction/ Acquisition Completion Date
Pacific Avenue Pedestrian Crossings Improve the crossing of Pacific Avenue at Lansdale Road and Devoe Street. Improvements may include curb ramps, flashing beacons, and a crossing island.	\$375,000	2017	2017
Quince Street Sidewalk A six-foot sidewalk will be built on the east side of Quince Street from Miller Avenue to Reeves Middle School.	\$254,000	2016	2016
Street Preservation Chipseal and Asphalt Paving Treatment on various roads throughout the City to extend the life of the pavement and delay the need to replace streets.	\$1,282,000	2016	2016

Drinking Water	Total Project Cost	Estimated Construction/ Acquisition Start Date	Estimated Construction/ Acquisition Completion Date
AC Pipe Replacement – Boulevard Roundabout at Morse Merryman Road* Replace asbestos cement water main in conjunction with future roundabout at Morse Merryman and Boulevard Roads.	\$820,000	2017	2017
Boulevard Reservoir Coatings (Interior / Exterior) This project provides for the recoating of the existing steel storage reservoir on the inside and outside to prolong service life and enhance water quality by preventing rust and corrosion.	\$650,000	2017	2017
Fones Road Booster Station Replacement* Build a new booster pump station to replace existing pumps, electrical components, and associated equipment that are past their useful life.	\$2,380,000	2016	2017
Ground Water Monitoring Wells This project will drill 12 new additional groundwater monitoring wells within the capture zones to provide advance warning of any water quality issues that could impact the City's drinking water sources.	\$428,000	2017	2018
Kaiser Road Water Main Extension This project will install a new 12-inch water main from the LOTT sewer lift station to Evergreen Park Drive, increasing service reliability to the Evergreen State College area.	\$814,000	2017	2017
Log Cabin Reservoir and Transmission Main* Construction of a new storage tank and transmission main in Zone 417, located south of Morse-Merryman Road and east of the Boulevard Storage Tank to address storage deficiencies in Zone 417.	\$11,800,000	2016	2017
McAllister Wellfield Corrosion Control Treatment* Construct aeration towers at the Meridian Reservoirs to raise the pH of the McAllister well water to meet Federal and State safe drinking water standards	\$3,300,000	2016	2017
McCormick Valve House This will replace the original pipes and valves installed when the Fir Street tanks were constructed in 1935.	\$200,000	2017	2017

*You will not find all of these projects listed in the project sections of the 2017-2022 Capital Facilities Plan (CFP) as some of them may have already been appropriated in previous budget years.

Drinking Water	Total Project Cost	Estimated Construction/ Acquisition Start Date	Estimated Construction/ Acquisition Completion Date
Olympia Brewery Wellfield Well Decommissioning The Cities of Olympia, Tumwater, and Lacey are joint owners of the former Olympia Brewery wells and water rights. Approximately 30 wells are not suitable for future municipal water purposes. State law requires wells to be properly decommissioned when no longer in use to protect public safety and groundwater quality.	\$150,000	2017	2017
West Bay Booster Station and Electrical Upgrade* Replace existing pumps, electrical components, and associated equipment that are past their useful life. The last major upgrades of the station was in 1997.	\$670,000	2016	2017

Wastewater	Total Project Cost	Estimated Construction/ Acquisition Start Date	Estimated Construction/ Acquisition Completion Date
East Bay Marina Force Main Relocation Install a new section of force main to relocate all or a portion of the existing 4-inch PVC sewer force main currently threatened by bank erosion, in order to mitigate the potential for a wastewater spill into the Puget Sound.	\$150,000	2017	2017
Ensign Road Generator Install an on-site emergency generator for the lift station.	\$260,000	2017	2017
Water Street Soil Investigation and Cleanup This project funds soil investigation and cleanup efforts associated with the Water Street Lift Station.	\$60,000	2017	2017

Storm and Surface Water	Total Project Cost	Estimated Construction/ Acquisition Start Date	Estimated Construction/ Acquisition Completion Date
Cooper Point and Black Lake Conveyance Design This project will evaluate the feasibility and present a cost effective design for increasing the capacity of an extensive Westside stormwater conveyance system serving approximately 700 acres of development. The project will perform design work to evaluate options and design conveyance to reduce the potential for flooding of the Cooper Point Road and Black Lake Boulevard intersection.	\$500,000	2016	2017
Harrison Avenue Water Quality Retrofit The project will provide water quality treatment for runoff from Harrison Avenue between West Bay Drive and Milroy Street. The Harrison Avenue drainage basin is tributary to Budd Inlet and comprises more than 20 acres zoned predominately high-density corridor. Subject to grant funding from Ecology.	\$534,000	2017	2017
Neighborhood Low-Impact Development Design This project will evaluate several locations for stormwater retrofit using low impact development best management practices such as bioretention/ rain gardens. Focus will be given to neighborhood centers identified in the City's Comprehensive Plan. Subject to grant funding from Ecology.	\$150,000	2016	2017

*You will not find all of these projects listed in the project sections of the 2017-2022 Capital Facilities Plan (CFP) as some of them may have already been appropriated in previous budget years.

New Projects

How do we define “new” projects? Capital facilities projects are considered new when (1) funding is requested for the first time, or (2) when a project appeared in the CFP more than three years ago, was removed and is now being added back.

New Projects: *Parks, Arts and Recreation*

Grass Lake Nature Park Trailhead

Project Description:

Construct a trailhead for a future neighborhood park and paved trail in Grass Lake Nature Park from Kaiser Road to Harrison Avenue. Trailhead will include parking, frontage improvements and signage.

Anticipated Result:

Completed trailhead serving the Grass Lake Nature Park.

Kaiser Woods Site Stabilization Plan

Project Description:

Provide interim signage, hazard tree evaluation, noxious weed removal, minor trail improvements, and debris removal

Anticipated Result:

Undeveloped park will be safer for informal public use.

Land Acquisitions

Project Description:

Purchase park land for future generations of Olympians. The 2017-2022 sets aside a sum of \$6.3 million dollars to acquire additional property over the next ten years. The City will sell bonds to cash flow land purchases. The payment of the bonds will be from the voted and non-voted utility tax funds. The sum of \$6.3 million will buy, depending on the location of land, about 194 acres. The specific sites have not been determined, but all land purchases must be reviewed and approved by the Olympia City Council.

Anticipated Result:

Acquisition of approximately 194 acres of land added to Olympia's overall park system.

Morse-Merryman LBA Woods Site Stabilization Plan

Project Description:

Provide interim signage, hazard tree evaluation, noxious weed removal, minor trail improvements, and debris removal.

Anticipated Result:

Undeveloped park will be safer for informal public use.

Upgrade Infield at Existing Park

Project Description:

Seek ways to increase the capacity of existing athletic fields without the cost of building new fields.

Anticipated Result:

Increased capacity and/or reduced maintenance at existing athletic fields.

WSDOT/OWT Dog Run

Project Description:

The City of Olympia closed the off-leash dog park at Sunrise Park in 2013. A new site has not been proposed given the complexity of locating such a facility without any substantial impacts to surrounding properties. The Dog Run concept is new. It will be located between the OWT and I-5 Bikepath on land the City proposes to lease on a long term basis from WSDOT.

Anticipated Result:

A concept plan for a dog run at the Olympia Woodland Trail.

New Projects: *Transportation*

Olympia Avenue and East Bay Drive Pedestrian Crossing Improvement

Project Description:

Project Description: Improve the crossing of East Bay Drive at Olympia Avenue for pedestrians.

Anticipated Result:

This project will allow pedestrians to more easily walk between the northeast neighborhood and downtown.

Transportation Master Plan

Project Description:

Update and consolidate prioritized project lists for pedestrian, bicycle, transit and motor vehicle improvements.

Anticipated Result:

This plan will describe the long-term development of our transportation system for all modes. The plan will be used, in part, for the development and implementation of a multimodal concurrency program.

Wiggins Road Roadway and Storm Drain Pre-design

Project Description:

Explore alternative designs for improving the safety of Wiggins Road for people walking, biking, and driving as well as manage stormwater runoff better.

Anticipated Result:

Design alternatives from which a preferred option can be identified. Subsequent steps will be design and construction.

New Projects: *Drinking Water*

Boulevard Reservoir Coatings (Interior/Exterior)

Project Description:

Recoat the inside and outside of the Boulevard Reservoir.

Anticipated Result:

Recoating the steel-walled reservoir will prolong service life and enhance water quality by preventing the formation of rust and corrosion.

Capital Village Water Main Replacement

Project Description:

Design and install a new water main intended to replace the problematic pipe. The water main (PVC) near Capital Village has broken multiple times in recent years.

Anticipated Result:

Enhance system reliability and mitigate the risk of additional breaks and associated costly repairs and property restoration.

Fones Road Water Main Design

Project Description:

Design a new water main intended to replace a problematic section of AC water main in Fones Road from Pacific Avenue to 17th Avenue.

Anticipated Result:

Provide a water main design and associated bid documents suitable to advertise and award the project to a contractor for construction.

Olympia Brewery Wellfield Well Decommissioning

Project Description:

Decommission the well. The Cities of Olympia, Tumwater, and Lacey are joint owners of the former Olympia Brewery wells and water rights. Approximately 30 of the wells are not suitable for use as future municipal water sources and will therefore be decommissioned. All three Cities will fund the project equally.

Anticipated Result:

Enhance public safety, protect groundwater quality, and provide for regulatory compliance as required by State law.

Park Drive Booster Pump Station Design

Project Description:

This project will design a new booster pump station to increase residential pressure and fire flows in a small portion of Zone 298 just west of Ken Lake in the Park Drive area.

Anticipated Result:

This project will provide a booster pump station design and associated bid documents suitable to advertise and award the project to a contractor for construction.

Park Drive Booster Pump Station Construction

Project Description:

This project will construct a new booster pump station to increase residential pressure and fire flows in a small portion of Zone 298 just west of Ken Lake in the Park Drive area.

Anticipated Result:

The new booster pump station will provide increased domestic pressure and fire flow capacity to the Park Drive area, as well as a larger surrounding area.

Security and Remote Systems Program

Project Description:

This project will provide enhancements to the security and remote monitoring systems of Drinking Water Utility sites

Anticipated Result:

These enhancements will improve the security of the drinking water system and increase remote monitoring capabilities.

Water Meter Replacement Program

Project Description:

This program will provide for a systematic replacement of water meters and AMR radios.

Anticipated Result:

Implementation of this program will allow the Utility to strategically phase water meter and AMR radio replacements in an effort to maintain a sustainable program that distributes capital investment over time.

New Projects: *Wastewater*

East Bay Marina Force Main Relocation

Project Description:

A new section of force main was installed to replace an existing 4-inch PVC sewer force main that was threatened by bank erosion.

Anticipated Result:

The project replaced a compromised sewer main, mitigating the potential for a wastewater spill into the Puget Sound.

New Projects: *Storm and Surface Water*

Martin Way at Mary Elder Water Quality Retrofit

Project Description:

The project will construct water quality facilities providing treatment of stormwater runoff on Martin Way from Mary Elder Road to Sleater-Kinney Road. Martin Way is an arterial roadway located in a High Density Corridor zone. Polluted street runoff from over eight acres of street right-of-way currently flows untreated to Woodard Creek just west of Mary Elder Road.

Anticipated Result:

Martin Way is one of the City's highest traveled arterial roadways. Providing treatment for runoff from the roadway should improve water quality and habitat conditions in an important and intact wetland complex.

Completed Projects

How do we define “completed” projects? Completed projects are those that were completed during the prior year. In this 2017 CFP, it refers to projects that were completed in 2016.

Completed Projects: *Parks, Arts and Recreation*

Artesian Commons Park Improvements

Project Description:

Improved security lighting, fence modifications, information kiosk relocation, security camera installation and additional tables and umbrellas.

End Result:

Enhanced the user experience and security of the park.

Heritage Fountain 2016 Repairs

Project Description:

Replaced inner workings of the equipment vault at the Heritage Fountain. It contains the mechanical equipment that operated the fountain for the last 21 years.

End Result:

Improved water treatment and extended the life of the facility.

Kettle View Bike Shelter

Project Description:

Constructed a bike shelter at Kettle View Park.

End Result:

Provided a new bike shelter to protect and secure visitors bikes.

Land Aquisition

Project Description:

Purchased 74-acres located at 3355 Morse-Merryman Road SE (“Trillium”), 75-acres located at 4300 Park Drive SW (“Kaiser Woods”).

End Result:

Expand park land and open space.

Olympia Woodland Trail Hub Junction

Project Description:

Install wayfinding signage, seating and informational kiosk at the pedestrian/bicycle roundabout intersection of the Chehalis Western Trail and Woodland Trails.

End Result:

Create a commemorative and wayfinding “hub” at the intersection of the three regional trails.

Rose Garden Shelter

Project Description:

Demolished the current shelter, constructed a new larger shelter and improved site access at the Priest Point Park Rose Garden.

End Result:

Built a new and expanded park shelter at the Rose Garden in Priest Point Park.

Skate Court Improvements

Project Description:

Upgraded some areas of the court that are unused and added other features.

End Result:

Increased interest in and usability of the skate court.

Completed Projects: *General Capital Facilities*

Downtown Alley Lighting


Project Description:

Installed LED lighting in nine additional alleys in the downtown core.

End Result:

Increase safety and reduces criminal activity in alleys that experience high crime rates.

Maintenance Center Roof Replacement

Project Description:

Replace the roof on the Maintenance Center and Waste ReSources buildings.

End Result:

Eliminated the leaky roof on the Waste ReSources building. Provided new life to both roofs, ensuring building occupants have a dry place to work for years to come.

Completed Projects: *Transportation*

2016 Crack Sealing Project

Project Description:

Seal roadway pavement cracks throughout the City.

End Result:

Sealed cracks in the road surface in order to preserve the integrity of the pavement and provide a seal so that moisture cannot penetrate the crack and then freeze, causing the crack to widen and deepen.

2016 Pavement Preservation

Project Description:

Restored the pavement surface condition and extended the life of the roadways by applying a chip seal application.

End Result:

Improvements to the roadway surface condition for approximately 3.6 miles in length and new striping on streets throughout the City of Olympia.

22nd Avenue Sidewalk

Project Description:

Built a six-foot sidewalk on the south side of 22nd Avenue from Boulevard Road to Cain Road.

End Result:

Provides pedestrian safety and accessibility along a major street connecting southeast Olympia to parks and schools.

26th Avenue Predesign

Project Description:

Evaluated right-of-way needs and creek crossing for future sidewalk or path construction.

End Result:

Predesign work will inform future decision to proceed with sidewalk construction or interim gravel pathway.

Bike Corridors Pilot Project

Project Description:

As a pilot project, a bike corridor was built from Sylvester Park to Lions Park. Bike corridors are selected low-volume streets that are enhanced for bicyclists.

End Result:

Provides an all-ages, all-abilities bicycle facility from the east side neighborhood to the downtown. This pilot will inform development for future Bike Corridors.

Completed Projects: *Transportation*

Neighborhood Pathways- Fairview Pathway

Project Description:

Built a paved path for bicyclists and pedestrians from the end of Fairview Street SE to the Olympia Woodland Trail.

End Result:

Provides bicyclists and pedestrians more direct off-street routes within neighborhoods by constructing pathway connections that enhance mobility.

Completed Projects: *Drinking Water*

Small Diameter and AC Pipe Replacement

Project Description:

Replaced AC mains associated with a high frequency of repairs and excessive water outages. Replaced many small diameter pipes associated with low water pressure and flow (commonly galvanized lines that corrode on the inside.)

End Result:

Improved system reliability and performance while mitigating the risk and associated cost of water main failure.

Completed Projects: *Storm and Surface Water*

Port Storm Diversion

Project Description:

Separated the City and Port of Olympia stormwater drainage systems. The project costs were split between the City and the Port.

End Result:

Eliminated the need to access Port property for maintenance.

Completed Projects: *Multi-Funded*

Percival Creek Bridge Stabilization

Project Description:

Shored up failing utility bridge foundations that were undermined by changes to creek flow. Repaired the bridge safety railing and installed new stairs on the bridge access path.

End Result:

Stabilized the bridge to support the existing utilities for years to come. Staff will also have better access to the bridge.

Downtown Compactor

Project Description:

Installed a new compactor, upgrade electrical service and install alley lighting in the alley adjacent to the Capital Theater and the Big Whisky Saloon. The City partnered with property owners and PSE on this project.

End Result:

Made the alley cleaner and brighter. Adjacent properties have access to improved electrical service.





Transportation

The CFP brings the vision of the Olympia Comprehensive Plan (Comp Plan) to reality. The Comp Plan is the blueprint for the development of our transportation system.

The City builds a transportation system that provides people with choices to walk, bike, drive, or ride the bus, and assures the safe delivery of goods and services. The Transportation Mobility Strategy (2009) provides specific guidance in these areas:

- Address system capacity by moving people—not just cars—through walking, biking and transit.
- Build complete streets with features to support all modes of transportation
- Develop bus corridors with fast, frequent and user-friendly bus service
- Increase network connectivity through more street connections and off-street pathways

Types of Projects

Our transportation system is comprised of more than 524 lane miles of street, along with signs, markings, signals, street lights, roundabouts, bike lanes, sidewalks, and trees. A project is included in this plan because it does at least one of the following:

- Maintains and preserves the system we have
- Improves the safety and function of a street, such as adding sidewalks
- Increases the capacity of the street system, such as building a roundabout

How Projects are Added to the CFP

Projects are listed either individually, or as a set of priorities in a program. Projects are identified through planning efforts or engineering studies. A project can be added to the CFP because it is a priority defined in a plan, or it is needed based on a specific evaluation. Some of the ways a project becomes a part of the CFP are as follows:

- **Plans:**
Sub-plans are developed to identify and quantify a specific need in our system, such as bike lanes and sidewalks. Sub-plans like the Sidewalk Program (2004) and Bicycle Master Plan (2009) define projects, which are then added to the CFP.
- **Studies:**
Corridor or district studies evaluate issues and identify solutions and opportunities in a specific area. Projects that result from these area-specific evaluations are added to the CFP.

- **Advisory Boards:**

The Olympia Planning Commission and the Bicycle and Pedestrian Advisory Committee provide input in the development of plans and studies, and annually provide input in the development of the CFP. Citizen members of these committees bring to the planning process their experience and input from their work on the Comprehensive Plan, their neighborhoods, or through a particular constituency they represent.

- **Citizen requests:**

Throughout the year, City staff, the Council, and advisory committees receive comments about needs and priorities in our transportation system. These are evaluated when drafting the CFP.

- **Pavement ratings:**

The condition of street pavement is surveyed annually. Damaged streets are listed for repairs. Streets with some wear are resurfaced with low-cost treatments to prevent further damage and to offset the need for costly reconstruction. Streets needing major reconstruction are shown in the CFP; streets that will be resurfaced with low-cost treatments are typically not in the CFP.

- **Capacity review:**

Annually, staff reviews how well the transportation system is working relative to growth in traffic volumes. Capacity projects help to reduce congestion at certain intersections or along sections of street. Capacity projects in the CFP might include street widening or changes to intersections, such as roundabouts.

street system. These fees are used for capacity projects. As new residential and commercial development has slowed, so has the collection of impact fees. The lack of development, however, also means there is not a growth in traffic, which would warrant capacity improvements.

Transit signal priority systems give buses the green light so they do not get stuck in traffic. With federal Congestion Mitigation and Air Quality (CMAQ) grant funds, signal systems will be upgraded to allow transit priority functions along 4th/State, Pacific Avenue, and Martin Way corridors. Olympia, Lacey, Tumwater, and Intercity Transit are preparing to use transit signal priority in 2016/2017. Thurston Regional Planning Council is coordinating this inter-jurisdictional project.

During the 2015 State Legislative session, current transportation benefit districts were given the authority to increase the fee from \$20 per vehicle to \$40 per vehicle without voter approval. The TBD Board will implement this increase beginning with renewals due January 1, 2017.

Coordination for Efficiency

Within the Transportation Section programs, projects are combined for construction efficiencies. For example, bike lanes and or bulb outs may be added when a street is resurfaced. Transportation work is also coordinated with utility work. When we plan to rebuild a road, we take the opportunity to upgrade sewer and water lines under the pavement, or find a better way to manage the stormwater that flows off the pavement.

Recent Trends

Transportation projects in the CFP are funded by impact fees, grants, Transportation Benefit District fees (\$40 per vehicle) and other types of specific taxes. (e.g. Utility, Gas Tax and Real Estate Excise Taxes (REET)). In this economic climate, funding is reduced for many CFP programs because the cost of planned projects and programs continue to exceed revenues.

An emphasis in this and prior CFPs continues to be pavement preservation. If the life of a street's pavement can be preserved with a low-cost treatment now, we can avoid costly resurfacing later. Keeping our pavement conditions from deteriorating will lead to future budget savings.

Another area of sustained funding is sidewalks. In 2004, Olympia voters approved the Parks and Recreation Facilities funding measure. The funding measure, referred to as "Parks and Pathways," is the primary source of funds for sidewalks — about \$1 million annually. This revenue comes from the private utility tax levied on utilities, such as cell phone and natural gas.

Impact fees are collected from new developments to help pay for additional traffic trips that the development adds to the current

Access and Safety Improvements

Location	Various locations Citywide
Links to Other Projects or Facilities	Infrastructure Pre-Design and Planning--Stormwater
Description	The purpose of this program is to improve access and safety for all users of the transportation system: • Hazard Elimination and Safety projects improve safety on high accident street sections or intersections. Projects may include new guardrails, railroad crossings, and intersection improvements. • Pedestrian Crossing Improvements help pedestrians cross major streets. Improvements may include bulb-outs, crossing islands, and/or flashing crosswalk beacons. • Street Access projects remove barriers on walkways for persons with disabilities. Projects may include ADA access ramps or audible pedestrian signals.
Project List	Hazard Elimination and Safety projects: 1. Wiggins Road roadway and storm drain pre-design; \$100,000. This project will include safety, shoulder and stormwater modification and will be done jointly with Stormwater planning. 2. Legion Way and Adams Street traffic signal; \$1,091,800 3. Jefferson Street and 8th Avenue traffic signal; \$1,223,000 4. Harrison Avenue and Division Street right turn lane; \$1,312,600. This project is also likely needed for capacity reasons and will be recommended for future impact fee funding. In the past, grant funds have been used to accomplish Hazard Elimination and Safety projects. Pedestrian Crossing Improvements: 1. Martin Way and Pattison Street 2. Martin Way and Chambers Street 3. East Bay Drive and Olympia Avenue Street Access projects: (a long-term list is maintained by staff) 1. Audible pedestrian signals at Pacific and Pattison, and Plum at 8th and Legion 2. Access ramps are planned on State and Franklin and on Central and Thurston
Justification (Need/Demand)	Hazard Elimination and Safety projects are identified through an annual collision analysis. Trends are evaluated and high accident locations are identified in this analysis. Traffic signal installation is based upon signal warrants, criteria established by the Federal Highways Administration that define when a signal is needed. Pedestrian crossing improvements are based upon requests from the public. Requests are evaluated and prioritized based upon a methodology that considers traffic volumes, number of lanes for the pedestrian crossing, speed of traffic, and any collision history. Street Access projects are identified each year with feedback from citizens. The City is currently doing a system-wide inventory of access ramps.
Measurable Outcome	To be Developed
Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GT 1 All streets are safe and inviting for pedestrians and bicyclists. Streets are designed to be human scale, but also can accommodate motor vehicles, and encourage safe driving. PT 1.6 Build intersections that are safe for pedestrians, bicyclists, and motor vehicles. Use minimum dimensions (narrow lanes and crossings) for a human-scale environment, while maintaining vehicle access and safety. GT 23 Pedestrian crossing improvements remove barriers for walkers on major streets, especially wide streets with high vehicle volumes. PT 23.1 Build new streets and retrofit existing streets with crossing islands and "bulb-outs" to increase pedestrian safety. PT 23.2 Raise driver awareness of pedestrians at crosswalks on wide, high-volume streets using blinking lights, flags, signs, markings, and other techniques. PT 23.3 Add safe, mid-block crossings for pedestrians to new and existing streets. This is especially important on major streets that have long distances between stop lights and those with high-frequency transit service. PT 23.6 Consider the needs of the elderly and disabled in all crosswalk design and signal timing.

Access and Safety Improvements (continued)

Capital Costs:	2017	2018-2022	Total
Hazard Elimination and Safety	\$ 100,000	\$ -	\$ 100,000
Pedestrian Crossing Improvements	\$ 50,000	\$ 200,000	\$ 250,000
Street Access	\$ 50,000	\$ 200,000	\$ 250,000
Total	\$ 200,000	\$ 400,000	\$ 600,000

Funding Sources:	2017	2018-2022	Total
CIP Fund	\$ 200,000	\$ 400,000	\$ 600,000
Total	\$ 200,000	\$ 400,000	\$ 600,000

Annual Operations and Maintenance

Estimated Costs	These costs are included in the existing Public Works Transportation operating budgets. Until asset management programs are in place, specific costs are not available.
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	Citywide

Bike Improvements

Location	Various locations Citywide
Links to Other Projects or Facilities	None
Description	The purpose of this program is to complete elements of the bicycle network: • Bike Corridors—Low-volume, low-stress streets improved for bicycle travel. • Other Improvements—Gaps and spot improvements in the bike lane network. Generally, completely new bike lanes are added in the Street Repair and Reconstruction Program as part of Complete Street Reconstruction work.
Project List	The Bicycle and Pedestrian Advisory Committee has developed a preliminary list of streets for possible bike corridor development. Once the program is fully planned, projects will be listed here. Gaps and spot improvements in the bike lane network will be identified annually. 1. Cooper Point Road bike lane extension to Caton Way
Justification (Need/Demand)	A bike lane network on major streets provides bicyclists direct access to destinations. Bike Corridors are a network of low-stress streets that serve all ages and abilities.
Measurable Outcome	We are monitoring the percentage of arterials and major collectors that are “complete streets” serving all modes of transportation. Currently 59% of these streets have bike lanes.
Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GT 25 Bicycling is safe and inviting, and many people use their bikes to both travel and stay active. PT 25.1 Retrofit streets to provide safe and inviting bicycle facilities. Use the Bicycle Master Plan (2009) to guide facilities development, but look for other opportunities to provide bicycle facilities where possible. See also GT 1, PT 1.1, GT 2, PT 2.1 and PT 2.2 This program implements the 2009 Olympia Bicycle Master Plan.

Capital Costs:	2017	2018-2022	Total
Bike Corridors	\$ 151,530	\$ 250,000	\$ 401,530
Other Improvements	\$ 50,000	\$ 250,000	\$ 300,000
TOTAL	\$ 201,530	\$ 500,000	\$ 701,530

Funding Sources:	2017	2018-2022	Total
CIP Fund	\$ 201,530	\$ 500,000	\$ 701,530
TOTAL	\$ 201,530	\$ 500,000	\$ 701,530

Annual Operations and Maintenance

Estimated Costs	Bike facility maintenance is incorporated in annual street sweeping program costs. Until asset management programs are in place, specific costs for bike facility signs and markings are not available.
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	Citywide

Sidewalks and Pathways

Location	Various locations Citywide
Links to Other Projects or Facilities	N/A
Description	The purpose of this program is to: • Maintain and repair sidewalks and pathways. • Construct pathways for pedestrians and bicyclists. Pathways are non-motorized short-cuts that link streets to parks, schools, trails, and other streets. Pathways for improvement will be identified by neighborhoods. • Construct new sidewalks based upon the 2004 Sidewalk Program. The program focuses on building sidewalks on at least one side of arterials, major collectors, and neighborhood collectors.
Project List	Sidewalk and pathway repair and maintenance will be identified annually. Pathways are determined on an annual basis based upon neighborhood proposals. Applications are received each year and projects constructed the following year. For this reason, no projects are listed. These sidewalk projects are derived from the prioritized 2004 Sidewalk Program and will be constructed with voted utility tax revenues. This is a long-term list beyond the six-year time frame of this CFP. 1. Eastside Street/22nd Avenue from Fir Street to I-5; \$4,042,000 2. Fern Street from 9th Avenue to 14th Avenue; \$500,000 3. Kaiser Road from Harrison Avenue to 6th Avenue 4. Fir Street from Bigelow Avenue to Pine Avenue 5. Pine Avenue from Fir Street to Edison Street 6. Cooper Point Road from Conger Avenue to Elliott Avenue 7. Elliott Avenue from Cooper Crest Street to Cooper Point Road 8. 14th Avenue/Walnut Road from Division Street to Kaiser Road 9. Division Street from Walnut Road to Elliott Avenue 10. Elliott Avenue from Division Street to Crestline Boulevard 11. Morse-Merryman Road from Hoffman Road to Wiggins Road 12. Boulevard Road from Log Cabin Road to 41st Avenue 13. Decatur Street from 13th Avenue to Caton Way 14. Boulevard Road from 15th Avenue to 22nd Avenue 15. 18th Avenue from Boulevard Road to Wilson Street 16. Wilson Street from 22nd Avenue to 18th Avenue 17. Mottman Road from Mottman Court to SPSCC 18. McPhee Road from Harrison Avenue to Capitol Mall Drive 19. Lilly Road from Woodard Green Drive to 26th Avenue 20. Marion Street from Ethridge Avenue to Miller Avenue 21. Wiggins Road from Morse-Merryman Road to Herman Road 22. Herman Road from Wiggins Road to the Chehalis Western Trail 23. 26th Avenue from Bethel Street to Gull Harbor Road construction These sidewalk projects are also derived from the 2004 Sidewalk Program but are not intended to be funded with voted utility tax revenues. City funds and grants are needed for these projects: 1. Phoenix Street from South Bay Road to Martin Way and State Avenue from Wilson Street to Phoenix Street (\$1,573,100) 2. 4th Avenue from Pacific Avenue to Phoenix Street 3. Martin Way from Pattison Street to Lilly Road

Sidewalks and Pathways (continued)

Justification (Need/Demand)

The need for sidewalk and pathway repair and maintenance continues to grow.

Pathways provide bicyclists and pedestrians more safe and direct off-street routes within neighborhoods.

By completing sidewalks on major streets, people are safer and more comfortable walking for transportation and recreation.

Measurable Outcome

We are monitoring the percentage of arterials and major collectors that are "complete streets" serving all modes of transportation. Currently 76% of these streets have sidewalks on at least one side. Our target is 100%.

Comprehensive Plan and Functional Plan(s) Citations

This program implements the following Olympia Comprehensive Plan goals and policies:

GT 6 Pathways enhance the transportation network by providing direct and formal off-street routes for bicyclists and pedestrians.

PT 6.1 Establish and improve pathways in existing built areas.

GT 21 Walking is safe and inviting, and more people walk for transportation.

PT 21.3 Build new streets and retrofit existing streets to be more inviting for walking with sidewalks, crossing improvements, and streetscape enhancements.

GT 22 Sidewalks make streets safe and inviting for walking.

PT 22.2 Focus City sidewalk construction on major streets, where heavy traffic volumes and speeds make it difficult for walkers to share space with motor vehicles. Prioritize sidewalk construction projects based upon street conditions, transit routes, and the proximity to destinations such as schools.

This program implements the 2004 Sidewalk Program.

Capital Costs:	2017	2018-2022	Total
Maintenance	\$ 20,000	\$ -	\$ 20,000
Pathways	\$ 175,000	\$ 875,000	\$ 1,050,000
Sidewalks	\$ 966,500	\$ 4,932,500	\$ 5,899,000
TOTAL	\$ 1,161,500	\$ 5,807,500	\$ 6,969,000

Funding Sources:	2017	2018-2022	Total
Stormwater Utility Rates (asphalt overlay)	\$ 186,500	\$ 932,500	\$ 1,119,000
Voted Utility Tax - Sidewalks	\$ 950,000	\$ 4,750,000	\$ 5,700,000
Voted Utility Tax - Parks	\$ 25,000	\$ 125,000	\$ 150,000
TOTAL	\$ 1,161,500	\$ 5,807,500	\$ 6,969,000

In September 2004, voters approved a 3% increase to the private utility tax to pay for parks and recreational facilities. Of this increase, 1% is for sidewalks and recreational walking facilities.

Annual Operations and Maintenance

Estimated Costs	\$25,000 to \$50,000 per year for sidewalk repair. No specific funding to maintain Neighborhood Pathways has been identified.
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Street Repair and Reconstruction

Location	Various locations Citywide
Links to Other Projects or Facilities	Asphalt Overlay Adjustments—Drinking Water and Wastewater sections
Description	This program addresses: - Complete Street Reconstruction projects address streets with pavement in the worst condition. These reconstruction projects add bicycle and pedestrian facilities at the time the street is reconstructed. - Maintenance projects that are beyond the capacity of City maintenance crews. Examples include repairing and replacing striping, guardrails, railing, signals, and lighting. - Major Resurfacing projects are repaving projects that may include other elements such as ADA access ramps, bulb-outs for pedestrians at intersections, streetscapes and bike facilities. - Street Preservation is an on-going effort to preserve the condition of our streets and delay major reconstruction. Examples include chip sealing streets and sealing cracks.
Project List	Complete Street Reconstruction project timing is based upon the pavement condition rating. Because these projects have a larger scope than just resurfacing, they will require grant funds and/or other funding sources to be completed. - Mottman Road from Mottman Court to West of SPSCC—includes an asphalt overlay, bike lanes and sidewalk, planter strip and street lighting on one side. \$ 5,714,500 (Legislative Transportation Funding anticipated 2023-2027.) Maintenance projects include: - Maintenance projects will be identified annually 4th Avenue Bridge Railing Repair; \$420,000 Major Resurfacing projects in this six-year period are focused on downtown streets: - Franklin Street from Legion Way to State Avenue - Legion Way from Water Street to Franklin Street - Capitol Way from Legion Way to State Avenue - Washington Street from Legion Way to Olympia Avenue - Jefferson Street from 7th Avenue to State Avenue The scope and priority of these projects are being informed through the Downtown Strategy. Street Preservation work is identified annually based upon pavement condition ratings and are not shown here.
Justification (Need/Demand)	The City uses a pavement condition rating system to evaluate the condition of our street surfaces. Depending upon the level of deterioration, a project may require minor preservation work such as chip sealing, a simple resurfacing, or full reconstruction. A major emphasis in this program is to preserve the condition of a street before it deteriorates to a point that more costly full reconstruction is needed. Currently our backlog of deferred maintenance is approximately \$48,000,000. Addressing this backlog would bring the streets in our system that are in poor condition up to fair and good condition. The 4th Avenue Bridge railing is cracking and spalling. At this time, the repair is aesthetic, not structural.
Measurable Outcome	The pavement condition is rated on every street in the City, ranging from 1-100. A segment of street with a rating of 49 or below is poor; 50-69 is fair, and 70-100 is good. The average pavement condition target for the whole system is 75. The current system rating is 68.
Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GT 29 The transportation system is maintained at the lowest life-cycle cost to maximize the City's investment in its infrastructure. PT 29.1 Schedule regular maintenance of the City's transportation system for efficiency and greater predictability, and to reduce long-term cost. PT 29.2 Protect street pavement by resurfacing streets with low-cost treatments before they deteriorate to a point that requires major reconstruction. PT 25.1 Retrofit streets to provide safe and inviting bicycle facilities. Use the Bicycle Master Plan (2009) to guide facilities development, but look for other opportunities to provide bicycle facilities where possible.

Street Repair and Reconstruction (continued)

Capital Costs:	2017	2018-2022	Total
Complete Street Reconstruction	\$ -	\$ -	\$ -
Maintenance	\$ 100,000	\$ 500,000	\$ 600,000
Major Resurfacing	\$ 2,072,000	\$ 6,735,000	\$ 8,807,000
Street Preservation	\$ 1,428,000	\$ 7,140,000	\$ 8,568,000
TOTAL	\$ 3,600,000	\$ 14,375,000	\$ 17,975,000

Funding Sources:	2017	2018-2022	TOTAL
CIP Fund	\$ 1,690,000	\$ 5,500,000	\$ 7,190,000
Gas Tax	\$ 275,000	\$ 1,375,000	\$ 1,650,000
Transportation Benefit District (TBD)	\$ 1,635,000	\$ 7,500,000	\$ 9,135,000
TOTAL	\$ 3,600,000	\$ 14,375,000	\$ 17,975,000

TBD Funding: In 2008, the City Council adopted an ordinance creating the TBD that added \$20 to Olympia residents' annual vehicle license fees. The TBD annual fee will increase to \$40 with renewals effective January 1, 2017. It is assumed the TBD pays \$1,500,000/year for paving.

Annual Operations and Maintenance

Estimated Costs	N/A - This project helps minimize the need for additional maintenance funds.
Estimated Revenues	N/A
Anticipated Savings Due to Project	N/A
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Transportation Projects Funded with Impact Fees

Background:

Transportation projects funded with Impact Fees are transportation projects needed to serve anticipated new growth, consistent with the 2040 Regional Transportation Plan, the Olympia Comprehensive Plan (Comp Plan), and the requirements of the Washington State Growth Management Act (GMA).

Transportation System Improvements Needed to Serve New Growth:

The GMA requires the City to plan for its share of growth over a 20-year period as part of Thurston County's growth projections. Growth projections for the County and City are developed by the Thurston Regional Planning Council (TRPC). This growth projection is the foundation for much of the Comp Plan. Long-range (20-year) transportation system needs are identified in the Comp Plan and are based on these growth projections. The City's Capital Facilities Plan (CFP) is a six-year document, so the 20-year growth forecast is adjusted by TRPC to reflect anticipated growth over the next six-year period. The regional transportation model is then updated to reflect this six-year growth increment to identify transportation system needs. The current six-year growth increment projects an additional 6,241 new vehicle trips in the afternoon peak hours (4-6 p.m.) each day on the City's street system. Therefore, the City's transportation planning must address these anticipated impacts.

The GMA also requires local governments to establish Transportation Level of Service (LOS) standards. These LOS standards describe acceptable levels of congestion. The City's LOS threshold is based on a two-hour peak traffic period.

Transportation LOS Standards		
Downtown	LOS E	A point at which traffic flow can be expected to be delayed through two full cycles at a signalized intersection.
Urban Corridors	LOS E	
Other City Streets	LOS D	A point at which traffic flow can be expected to be delayed through at least one full cycle at signalized intersections.
Urban Growth Areas	LOS D	

The City has identified a number of locations that it will accept higher levels of delay and these are identified in the Comp Plan.

These LOS standards serve as a gauge for judging performance of the transportation system. Transportation projects that meet our LOS standards today, but are expected to fall below the LOS standards within the next six-years, are candidates for using Transportation Impact Fee funding. Any transportation projects that are already below our LOS standards are not eligible to be funded by Transportation Impact Fees.

Project Development and Funding Strategy:

Once the transportation modeling analysis is complete for the given growth forecast, the City must make decisions on how to fund the projects necessary to serve the anticipated growth.

There are two options for the City to consider:

1. Develop a funding strategy and plan for the transportation system improvements needed to serve the anticipated growth; or
2. Work with TRPC to lower our transportation LOS standards on specific corridors or intersections and accept more congestion, in lieu of providing additional capacity.

Decisions as to how to proceed are difficult, as there are implications in both the short and long term:

- Developing a funding strategy to provide the necessary transportation system improvements for planned growth will have a financial impact to both the City and the development community.
- Reducing the amount of planned transportation system improvements will require lowering of the Transportation LOS standards, thereby accepting more congestion in the future.
- The GMA does not allow the use of Transportation Impact Fees to resolve an existing deficiency. Therefore, if projects are not planned for the anticipated growth and a facility falls below our LOS standards, the City will have to prohibit development until either project funding is provided or a decision is made to accept the congestion. If congestion is ultimately not acceptable to the public, the City will need to fund the project without the benefit of Transportation Impact Fee funding.
- Transportation Impact Fees will go down with a reduced project list, but the remaining project's time lines for construction will not be accelerated as a result. This is because growth stays constant while Transportation Impact Fee rates go down.

Other requirements that need to be made to be compliant with State Law:

- The CFP must be balanced financially.
- The CFP must reflect the infrastructure needs for the next six years.
- Transportation projects in the CFP need to account for growth projections of the City.
- Transportation projects must be in the CFP in order to be eligible to use Transportation Impact Fee funding.
- Transportation Impact Fees cannot be used to fund existing deficiencies.
- The City cannot apply for grants on projects that are not identified in the City's CFP and Transportation Improvement Program (TIP).

The following project list has been identified using this process. The project list totals \$28.7 Million to meet our capacity needs to accommodate forecasted growth. 64.8 percent of this cost will be collected through Transportation Impact Fees (\$18.6 Million). The remaining 35.2% of the cost will be through a combination of State and/or Federal Transportation Grants and City funds.

Timeline for Construction:

This project list provides the transportation system capacity needed to serve the forecasted growth from new development.

The next projects to be addressed are:

- Boulevard Road and Morse Merryman Roundabout
- Fones Road (improvements from Pacific Avenue to 17th Avenue)
- US 101 / West Olympia Access Project Design, Permitting, and Right-of-Way.
- Cain Road and North Street Intersection Improvements
- Henderson Blvd and Eskridge Blvd Intersection Improvements
- Wiggins Road and 37th Avenue Intersection Improvements

One project is needed as development occurs:

1. Log Cabin Road Extension

While the forecast is for a six-year period, the needs and time lines will be dependent on growth. If new development occurs faster than projections, the time lines for the projects will need to be accelerated. If the development occurs slower than projections, then all of the identified projects will not be needed within the current six-year planning period.

Historically, development has not kept pace with our growth forecasts. This creates suggestions to lower the impact fee collection projections. However, as stated earlier, transportation planning must address all anticipated growth. Lowering the impact fee projection would lower the impact fee rate for projects and could lead to deficiency projects. Any transportation projects that fall below our LOS standards are not eligible to be funded by Transportation Impact Fees in the future.

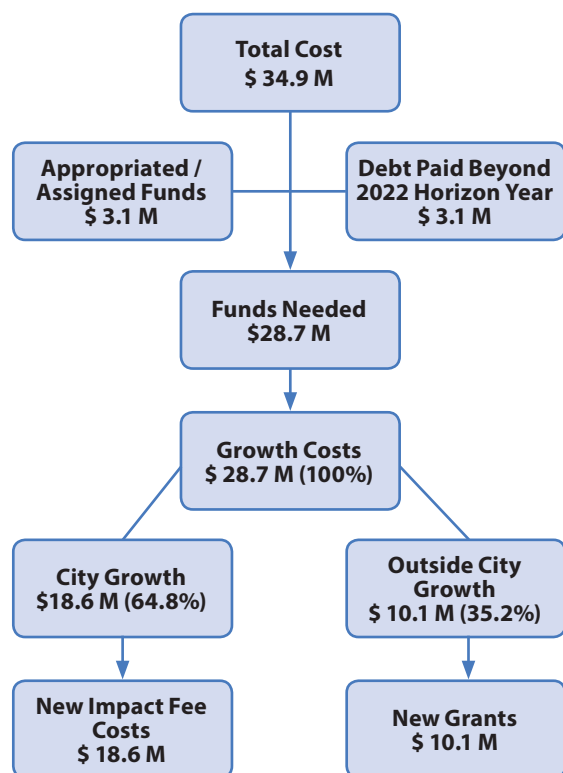
Each year the City does an evaluation to determine the amount of development that has occurred in order to ensure transportation system improvements are keeping pace with the rate of actual development.

Transportation Impact Fee Rate Analysis:

The impact fee structure for the City of Olympia is designed to determine the fair share of improvement costs that may be charged for a new development. The following key points summarize the impact fee structure:

- A six-year roadway facility list oriented to future growth.
- Existing deficiencies are identified and separated from future trips on the roadway system.
- Future trips are allocated to geographic areas inside and outside the City using a traffic-forecasting model.
- A Citywide fee system is established.
- A land-use-based fee schedule is developed.

The figure below illustrates the transportation impact fee cost allocation process:



The Cost per New Trip is then calculated as follows:

Impact Fee Costs	\$18,594,638
New Peak (4 -6 p.m.) Hour Trips	÷ 6,241
Cost per New Trip without Administrative Fee	\$2,979
Administrative Fee	\$20
Cost per New Trip with Administrative Fee	\$2,999

The Transportation Impact Fee Rate Schedule is developed by adjusting the Cost per New Trip information to reflect differences in trip-making characteristics for a variety of land use types between the different geographic areas within and outside the City limits. The fee schedule is a table where fees are represented as dollars per unit for each land use category.

Please note: The project components commonly used in Transportation Projects funded by impact fees are defined in the Glossary section of this document, and therefore not necessarily listed in the individual project descriptions.

2010 Transportation Stimulus Project Repayment

Location In May 2009, the Council agreed to fund a stimulus package for Harrison Avenue, Harrison Avenue - 500' Extension, Boulevard/Log Cabin roundabout, and 18th Avenue from Hoffman Road to Fones Road.

Bond funds were also used to pay for a portion of the City's Yelm Highway project.

Description Repayment of bonds used to complete capacity-related street projects.
Payment Remaining:

YEAR	PRINCIPAL	INTEREST	TOTAL
2017	\$ 260,000	\$ 176,012.50	\$ 436,012.50
2018	\$ 270,000	\$ 135,612.50	\$ 435,612.50
2019	\$ 280,000	\$ 154,812.50	\$ 434,812.50
2020	\$ 295,000	\$ 143,612.50	\$ 438,612.50
2021	\$ 305,000	\$ 131,812.50	\$ 436,812.50
2022	\$ 315,000	\$ 119,612.50	\$ 434,612.50
2023-2029	\$ 2,600,000	\$ 450,962.50	\$ 3,050,962.50

Project List Harrison Avenue, Phase II & III, from College Station frontage improvements to Yauger Way (W:C2)*
18th Avenue from Hoffman Road to Fones Road (S:D7)*
Boulevard and Log Cabin roundabout (S:E6)*
Yelm Highway from Henderson Boulevard to East City Limits (S:F6)*
*(Quadrant: Map Coordinate)

Justification (Need/Demand) In 2010, the City issued councilmanic debt for approximately \$6 million for the completion of major street capacity projects identified through the City's Concurrency Review. The projects were completed in 2010 at a cost of \$18,861,000. The bonds are 20 year bonds.

Level of Service (LOS)

N/A

Comprehensive Plan and Functional Plan(s) Citations

These projects implement the following Olympia Comprehensive Plan goals and policies:

GT 9 The impacts of new land-use development on the transportation system are mitigated appropriately.

PT 9.2 Require new development to construct improvements or contribute funds towards measures that will improve the function and safety of the streets, such as installing bike and pedestrian improvements, turn pockets or special lanes for buses, or roundabouts, or modifying traffic signals.

GT 28 Transportation facilities and services are funded to advance the goals of the City and the region.

PT 28.4 Continue to be innovative with the use of existing funds and explore new funding sources for transportation.

These projects implement the 2040 Regional Transportation Plan.

Funding Sources for Debt Repayment	2017	2018-2022	Total
Impact Fees	\$ 436,012.50	\$ 2,180,462.50	\$ 2,616,475.00
Total	\$ 436,012.50	\$2,180,462.50	\$2,616,475.00

Annual Operations and Maintenance

Estimated Costs	N/A
Estimated Revenues	N/A
Anticipated Savings Due to Project	N/A
Department Responsible for Operations	Public Works
Quadrant Location	Southeast, West



Boulevard Road Intersection Improvements (Program #0628)

Location	Intersection of Boulevard Road and Morse-Merryman Road					
Links to Other Projects or Facilities	Sewer System Planning—Sewer Program Transmission and Distribution Projects—Water Program					
Description	Intersection capacity improvements at the intersection listed above will include a roundabout. Design includes features to assist bicyclists and pedestrians. Stormwater improvements are also part of the project, but are not listed separately. Transportation components include bicycle facilities, pedestrian crossings, raised pavement markings, roadside planting, a roundabout, sidewalks, signs, striping, streetlights, and overhead utility undergrounding.					
Project List	Boulevard Road and Morse-Merryman Road is dependent on receiving grant funding and/or other sources of funding for construction. <table><tr><th>PROJECT</th><th>COST</th></tr><tr><td>Boulevard Road and Morse Merryman Road. Construction of the full intersection.</td><td>\$ 6,001,400*</td></tr></table> *Projected construction year of 2017.		PROJECT	COST	Boulevard Road and Morse Merryman Road. Construction of the full intersection.	\$ 6,001,400*
PROJECT	COST					
Boulevard Road and Morse Merryman Road. Construction of the full intersection.	\$ 6,001,400*					
Justification (Need/Demand)	The Boulevard Road Corridor Study identifies roundabouts at these intersections as the preferred alternative to address traffic congestion and to further enhance safety. Installation of roundabouts improves bicycle, pedestrian and motorist safety and flow, particularly during periods of peak traffic. In addition, they provide increased pedestrian safety by allowing safer access to schools, parks, businesses and other destinations.					
Level of Service (LOS)	LOS D Project Type: Capacity project. Deficient within six years. Functionality project. Functionally deficient.					
Comprehensive Plan and Functional Plan(s) Citations	This project implements the following Olympia Comprehensive Plan goals and policies: PT 8.5 Consider roundabouts instead of signals at intersections to maintain traffic flow. GT 9 The impacts of new land-use development on the transportation system are mitigated appropriately. GT 28 Transportation facilities and services are funded to advance the goals of the City and the region. PT 28.1 Make it a high funding priority to enhance the operational efficiency of the City's transportation system. PT 28.3 Use master plans, sub-area plans and facilities programs to identify improvements to our transportation system and how to fund them. See also GT 9. This project implements the 2040 Regional Transportation Plan.					

Capital Costs:	2017	2018-2022	Total
Construction	\$ 3,380,780	\$ -	\$ 3,380,780
Design & Engineering	\$ -	\$ -	\$ -
Total	\$ 3,380,780	\$ -	\$ 3,380,780

Funding Sources:	2017	2018-2022	Total
Grant	\$ -	\$ -	\$ -
Impact Fees	\$ 3,380,780	\$ -	\$ 3,380,780
Total	\$ 3,380,780	\$ -	\$ 3,380,780

Annual Operations and Maintenance	
Estimated Costs	\$15,000 per lane mile or \$7,670 annually
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	South



Cain Road and North Street Intersection Improvements

Location	Intersection of North Street and Cain Road
Links to Other Projects or Facilities	N/A
Description	Installation of a compact roundabout and sidewalk modifications in intersection.



Justification (Need/Demand)	Installation of compact roundabout improves motor vehicle safety and flow, particularly during periods of peak traffic. An annual review process prioritizes non-signalized intersections.
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Level of Service (LOS)	LOS D Project Type: Capacity project. Deficient within six years. Functionality project. Functionally deficient.
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Comprehensive Plan and Functional Plan(s) Citations	This project implements the following Olympia Comprehensive Plan goals and policies: PT 1.6 Build intersections that are safe for pedestrians, bicyclists, and motor vehicles. Use minimum dimensions (narrow lanes and crossings) for a human-scale environment, while maintaining vehicle access and safety. PT 28.1 Make it a high funding priority to enhance the operational efficiency of the City's transportation system.
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Capital Costs:	2017	2018-2022	Total
Construction	\$ -	\$265,988	\$ 265,988
Design & Engineering	\$ -	\$114,000	\$ 114,000
Total	\$ -	\$379,988	\$ 379,988



Funding Sources:	2017	2018-2022	Total
Grant	\$ -	\$ 172,695	\$ 172,695
Impact Fees	\$ -	\$ 207,293	\$ 207,293
Total	\$ -	\$ 379,988	\$ 379,988

Annual Operations and Maintenance	
Estimated Costs	\$15,000 per lane mile or \$2,550 annually
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	South



Fones Road—Transportation (Program #0623)

Location	Fones Road from Pacific Avenue on the north to 17th Avenue SE on the south. (S:D7)* *(Quadrant: Map Coordinate)	
Links to Other Projects or Facilities	Transmission and Distribution—Drinking Water section	
Description	Improvements to this corridor are preliminarily defined as installation of a roundabout at the intersection of Fones Road and South Home Depot driveway. Widen Fones Road to five lanes from Pacific Avenue to the south property line of the Home Depot retail store, with a transitional four lanes to the Bellweather apartment complex driveway that intersects Fones Road. From the Bellweather driveway, the roadway will transition to three lanes to 17th Avenue SE. In 2017, prior to any design work, a review of the project scope will be done to balance bicycle and pedestrian improvements with vehicle-capacity improvements. Also, a value engineering evaluation will be done to examine the function and cost of the planned improvements. This is a high priority transportation system project needed to serve increased vehicular, pedestrian, bicycle, and transit traffic in the area. Stormwater improvements are included but are not listed in the project components. Project components include streetlights, paving, roadside planting, sidewalks, signs, striping, pedestrian crossings, bicycle facilities, a roundabout, and overhead utility undergrounding.	
Justification (Need/Demand)	Fones Road needs to be widened due to new development occurring in Southeast Olympia and projections for continued residential and commercial development. Without this proposed widening, Fones Road is expected to fall below the City's acceptable LOS within the next six years.	
Level of Service (LOS)	LOS D Project Type: Capacity project. Deficient within six years without widening. Meets LOS standard when project completed.	
Comprehensive Plan and Functional Plan(s) Citations	This project implements the following Olympia Comprehensive Plan goals and policies: GT 9 The impacts of new land-use development on the transportation system are mitigated appropriately. PT 9.2 Require new development to construct improvements or contribute funds towards measures that will improve the function and safety of the streets, such as installing bike and pedestrian improvements, turn pockets or special lanes for buses, or roundabouts, or modifying traffic signals. GT 28 Transportation facilities and services are funded to advance the goals of the City and the region. PT 28.1 Make it a high funding priority to enhance the operational efficiency of the City's transportation system. This project implements the 2040 Regional Transportation Plan.	

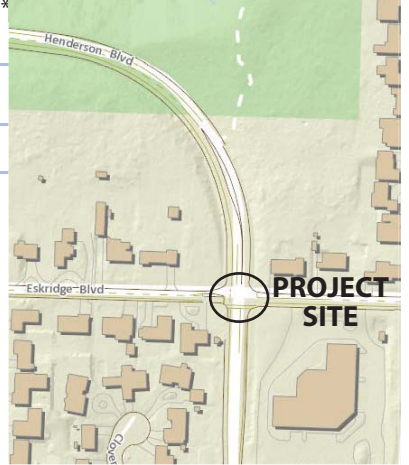
Capital Costs:	2017	2018-2022	Total
Construction	\$ -	\$ 7,873,468	\$ 7,873,468
Design & Engineering	\$ 250,000	\$ 1,324,114	\$ 1,574,114
Land & Right-of-Way	\$ -	\$ 4,847,900	\$ 4,847,900
Total	\$ 250,000	\$ 14,045,482	\$ 14,295,482

Funding Sources:	2017	2018-2022	Total
Grant	\$ -	\$ 6,496,943	\$ 6,496,943
Impact Fees	\$ 250,000	\$ 7,548,539	\$ 7,798,539
Total	\$ 250,000	\$ 14,045,482	\$ 14,295,482

Annual Operations and Maintenance	
Estimated Costs	\$15,000 per lane mile or \$12,000 annually
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	South



Henderson Boulevard and Eskridge Boulevard Intersection Improvements

Location	Intersection of Henderson Boulevard and Eskridge Boulevard (S:E6)* *(Quadrant:Map Coordinate)	
Links to Other Projects or Facilities	N/A	
Description	Install a traffic signal within existing intersection configuration.	
Justification (Need/Demand)	A traffic signal provides better traffic flow during peak periods, reduces the frequency of accidents, and improves the LOS during off peak hours. In the latest annual concurrency review, traffic levels at this intersection will exceed the current LOS standard within the next six years. This improvement will bring the intersection back within the established LOS. If and when widening is needed at this intersection, a roundabout would be considered. Roundabout construction would include sidewalk, street lighting, bike lanes and landscaping within project limits.	
Level of Service (LOS)	LOS D Project Type: Capacity Project. Capacity deficient within six years.	
Comprehensive Plan and Functional Plan(s) Citations	This project implements the following Olympia Comprehensive Plan goals and policies: PT 8.5 Consider roundabouts instead of signals at intersections to maintain traffic flow. GT 9 The impacts of new land-use development on the transportation system are mitigated appropriately. GT 28 Transportation facilities and services are funded to advance the goals of the City and the region. PT 28.1 Make it a high funding priority to enhance the operational efficiency of the City's transportation system.	

Capital Costs:	2017	2018-2022	Total
Construction	\$ -	\$ 524,361	\$ 524,361
Total	\$ -	\$ 524,361	\$ 524,361

Funding Sources:	2017	2018-2022	Total
Grant	\$ -	\$ 238,309	\$ 238,309
Impact Fees	\$ -	\$ 286,052	\$ 286,052
Total	\$ -	\$ 524,361	\$ 524,361



Annual Operations and Maintenance	
Estimated Costs	\$20,630 per lane mile or \$4,750 annually
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	South



Log Cabin Road Extension (Program # 0616)

Location	From Boulevard Road to Wiggins Road.
Links to Other Projects or Facilities	N/A
Description	This project will eventually extend the roadway and create a connection between Boulevard Road and Wiggins Road. The proposed extension of Log Cabin Road crosses through City Parks property. For this reason, the street cross-section has been reduced to two lanes.
Justification (Need/Demand)	Southeast Olympia is one of Olympia's fastest developing areas. The project is needed for regional mobility.
Level of Service (LOS)	LOS D Project Type: Capacity project. Capacity deficient within 15-20 years. After completion of the project, LOS B.
Comprehensive Plan and Functional Plan(s) Citations	This project implements the following Olympia Comprehensive Plan goals and policies: GT 9 The impacts of new land-use development on the transportation system are mitigated appropriately. PT 9.2 Require new development to construct improvements or contribute funds towards measures that will improve the function and safety of the streets, such as installing bike and pedestrian improvements, turn pockets or special lanes for buses, or roundabouts, or modifying traffic signals. GT 28 Transportation facilities and services are funded to advance the goals of the City and the region. GT 4 The street network is a well-connected system of small blocks, allowing short, direct trips for pedestrians, bicyclists, transit users, motorists, and service vehicles. PT 4.2 Build new street connections to reduce travel time and distances for all users of the street system. PT 4.5 Build new street connections so the grid provides other routes in an emergency or major construction blocks travel. PT 4.6 Build new street connections so that emergency vehicles, transit, and other service vehicles have direct and efficient routes. This project implements the 2040 Regional Transportation Plan.

Capital Costs:	2017	2018-2022	Total
Design & Engineering	\$ -	\$ 500,000	\$ 500,000
Land & Right-of-Way	\$ 273,000	\$ -	\$ 273,000
Total	\$ 273,000	\$ 500,000	\$ 773,000

Funding Sources:	2017	2018-2022	Total
Grant	\$ -	\$ 227,238	\$ 227,238
Impact Fees	\$ 273,000	\$ 272,762	\$ 545,762
Total	\$ 273,000	\$ 500,000	\$ 773,000

Annual Operations and Maintenance	
Estimated Costs	\$15,000 per lane mile or \$76,200
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	South



Transportation Master Plan

Location	Citywide
Links to Other Projects or Facilities	All Transportation Projects in the Capital Facilities Plan
Description	The Transportation Master Plan will update and consolidate prioritized project lists for pedestrian, bicycle, transit and motor vehicle improvements. The plan will describe the long-term development of our transportation system for all modes. The plan will be used, in part, for the development and implementation of a multimodal concurrency program. The total cost of developing this plan will be \$300,000. Because projects in this plan will be funded by Transportation Impact Fees, \$200,000 in impact fees will be used to fund the development of this plan. Capital Improvement Program funds of \$100,000 will also be used; these will come from an existing appropriation in the Street Repair and Reconstruction Program.
Justification (Need/Demand)	A Transportation Master Plan describes in more detail the future transportation system we envision in the Comprehensive Plan. It defines long-term priorities which will be used to inform the CFP, as well as future concurrency programs.
Level of Service (LOS)	Levels of service standards will be used to guide the development of the Transportation Master Plan. These standards are not yet defined.
Comprehensive Plan and Functional Plan(s) Citations	GT 9 The impacts of new land-use development on the transportation system are mitigated appropriately. GT 11 System capacity improvements focus on moving people and goods more efficiently, minimizing congestion by replacing car trips with walking, biking and transit trips, and by increasing system operational efficiency and reliability. GT 12 The transportation system provides attractive walking, biking and transit options so that land use densities can increase without creating more traffic congestion.

Capital Costs:	2017	2018-2022	Total
Design & Engineering	\$ 200,000	\$ -	\$ 200,000
Total	\$ 200,000	\$ -	\$ 200,000

Funding Sources:	2017	2018-2022	Total
Impact Fees	\$ 200,000	\$ -	\$ 200,000
Total	\$ 200,000	\$ -	\$ 200,000

Annual Operations and Maintenance	
Estimated Costs	None
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Wiggins Road and 37th Avenue Intersection Improvements

Location	Intersection of Wiggins Road and 37th Avenue
Links to Other Projects or Facilities	N/A
Description	Install a traffic signal within existing intersection configuration.

Justification (Need/Demand)

A traffic signal provides better traffic flow during peak periods, reduces the frequency of accidents, and improves the LOS during off peak hours. In the latest annual concurrency review, traffic levels at this intersection will exceed the current LOS standard within the next six years. This improvement will bring the intersection back within the established LOS.

If and when widening is needed at this intersection, a roundabout would be considered. Roundabout construction would include sidewalk, street lighting, bike lanes and landscaping within project limits.



Level of Service (LOS)	LOS D Project Type: Capacity project. Deficient within six years. Functionality project. Functionally deficient.
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Comprehensive Plan and Functional Plan(s) Citations

This project implements the following Olympia Comprehensive Plan goals and policies:

- PT 8.5 Consider roundabouts instead of signals at intersections to maintain traffic flow.
- GT 9 The impacts of new land-use development on the transportation system are mitigated appropriately.
- GT 28 Transportation facilities and services are funded to advance the goals of the City and the region.
- PT 28.1 Make it a high funding priority to enhance the operational efficiency of the City's transportation system.

Capital Costs:	2017	2018-2022	Total
Construction	\$ -	\$ 405,667	\$ 405,667
Total	\$ -	\$ 405,667	\$ 405,667

Funding Sources:	2017	2018-2022	Total
Grant	\$ -	\$ 184,366	\$ 184,366
Impact Fees	\$ -	\$ 221,301	\$ 221,301
Total	\$ -	\$ 405,667	\$ 405,667

Annual Operations and Maintenance

Estimated Costs	\$15,000 per lane mile or \$2,550
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	South



US 101 / West Olympia Access Project

Location	US 101 at Kaiser Road and the extension of Yaeger Way from the Black Lake Boulevard and US 101 Interchange.
Links to Other Projects or Facilities	N/A
Description	The initial funding for this project will complete the design, environmental permit and mitigation work, and Right-of-way. The project will construct a new westbound off-ramp from US 101 to Kaiser Road and an eastbound on-ramp from Kaiser Road to US 101. The project will also construct a new westbound off-ramp from US 101 to Yaeger Way via an at-grade connection through the existing interchange at US 101 and Black Lake Boulevard. Auxiliary lanes (one eastbound and one westbound) on US 101 will be constructed between Black Lake Boulevard and the new Kaiser Road ramps to facilitate weaving and merge/diverge movements safely.
Justification (Need/Demand)	The intersection of Black Lake Boulevard and Cooper Point Road as well as the Black Lake Boulevard and US 101 Interchange are showing the strain of sustained residential and economic growth. Traffic delays during the p.m. peak period are approaching unacceptable levels and mobility for other travel modes in the area is strained. There is a need for improved access to US 101 to support planned community growth and maintain emergency access, while providing safe and acceptable levels of service on both the Local and State transportation system. Additional information on the project can be found at http://olympiawa.gov/city-services/transportation-services/plans-studies-and-data/west-olympia-access-study.aspx
Level of Service (LOS)	LOS E Project Type: Capacity project. Deficient within six years without improvements. Meets LOS standard when project is complete.
Comprehensive Plan and Functional Plan(s) Citations	GT 9 The impacts of new land-use development on the transportation system are mitigated appropriately. GT 28 Transportation facilities and services are funded to advance the goals of the City and the region. PT 28.1 Make it a high funding priority to enhance the operational efficiency of the City's transportation system. This project implements the 2040 Regional Transportation Plan.

Capital Costs:	2017	2018-2022	Total
Design & Engineering	\$ -	\$ 3,989,675	\$ 3,989,675
Right-of-Way	\$ -	\$ 2,130,000	\$ 2,130,000
Total	\$ -	\$ 6,119,675	\$ 6,119,675

Funding Sources:	2017	2018-2022	Total
Grant	\$ -	\$ 2,781,241	\$ 2,781,241
Impact Fees	\$ -	\$ 3,338,434	\$ 3,338,434
Total	\$ -	\$ 6,119,675	\$ 6,119,675

Annual Operations and Maintenance	
Estimated Costs	\$15,000 per lane mile or \$4,300
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	West







General Capital Facilities

General government facilities are designed to meet a broad spectrum of needs—facilities that directly serve the public, such as libraries, and those that house City staff as they work to assure that public and governmental responsibilities are met. The 17 City-owned buildings provide space for 500 City employees and 4,500 daily visitors. Several community and non-profit organizations operate out of these buildings including:

- Timberland Regional Library
- Washington Center for the Performing Arts
- Hands On Children's Museum
- Senior Services for South Sound
- YMCA
- Junior League
- Thurston County Volunteer Legal Clinic
- The Olympia Free Clinic
- Thurston County Family Justice League

General Government facilities are unique in that the level of service (LOS) may be defined by community preference and standards. Several capital needs of the City may not specifically be included in the City's Comprehensive Plan. Nonetheless, these projects are vital to the quality of life of the community or the operational efficiency of the City and may be included in the Capital Facilities Plan.

The 2017-2022 CFP includes the Building Repair and Replacement program. This project is included in the CFP even though it may not fit neatly into a traditional capital project category, such as parks, transportation or utilities. There are also no established levels of service in the Comprehensive Plan for this project. However, the project adds to the infrastructure or asset base of the community.

In this six-year CFP, Council recognizes that there are long-term maintenance needs that must be addressed. With the inclusion of the Utility tax on cable television, the Council will be able to fully fund building repair and replacement (\$1.4 million per year). Our long-term financial strategy says we will maintain what we have before we add new. For these reasons, we have funded building repair in this plan meeting the long-term maintenance needs of the CFP.

In addition this section includes an Americans with Disabilities Act (ADA) Transition Projects Program to determine what needs to be done to get all City-owned buildings more in compliance with the ADA Plan.

And finally, there are many unmet needs in the CFP. The need for additional library facilities, art center, sidewalk maintenance, Street Tree Master Plan implementation, sea-level rise, and a parking garage. These are all great projects but no funding strategy has been developed. Therefore, these projects are not included in this CFP.

Building Repair and Replacement (Program #029)

Location	City Hall Court Services Family Support Center Hands on Children's Museum Lee Creighton Justice Center Maintenance Center Mark Noble Regional Fire Training Center Olympia Fire – Command Training Center Olympia Fire – Main Olympia Fire – 2 Olympia Fire – 3 Olympia Fire – 4 Olympia Police – Westside Station Police Firing Range The Olympia Center Olympia Timberland Library Washington Center
Links to Other Projects or Facilities	N/A
Description	This program covers major maintenance to building interior and exterior, as well as equipment replacement at the 17 locations listed above. In 2015, the annual debt service for the Washington Center Exterior Repair will be \$235,000 which comes from this programs funding.
Justification (Need/Demand)	Public Works conducted a building assessment of the City's buildings to understand the state of the major systems and equipment, identify repair and replacement needs, prioritize identified needs, and develop planning level cost estimates. An updated building condition assessment, addressing all 17 buildings, was completed in 2013. This updated evaluation provides information on the current state of major systems and equipment and their associated cost. Projects supported by this fund must be \$50,000 or more and the repair/replacement must have a life expectancy of five or more years. General repairs and maintenance are not made from this fund, but instead from the City's operating budget. Over the next six years, the City's facility repair/replacement costs are estimated to exceed \$1.6 Million per year. The City does maintain a reserve fund, but it has never been adequately funded. It remains a priority for the City.
Level of Service	N/A
Comprehensive Plan and Functional Plan(s) Citations	Although not included specifically in the Comprehensive Plan, the City's Long Term Financial Strategy (LTFS) states that we should maintain what we have before we add new.

Capital Costs:	2017	2018-2022	Total
Major Maintenance	\$ 1,330,000	\$ 7,000,000	\$ 8,330,000
Total	\$ 1,330,000	\$ 7,000,000	\$ 8,330,000

Funding Sources:	2017	2018-2022	Total
CIP	\$ 1,330,000	\$ 7,000,000	\$ 8,330,000
Total	\$ 1,330,000	\$ 7,000,000	\$ 8,330,000

Annual Operations and Maintenance

Estimated Costs	Not yet determined
Estimated Revenues	None
Anticipated Savings Due to Project	Not yet determined
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



ADA Transition Plan and Projects

Location Various City-owned buildings and facilities

Links to Other Projects or Facilities Transportation currently includes ADA modifications in street repairs and reconstruction. This project focuses on non-transportation related projects.

Description Transition or modification of existing buildings/facilities to ensure accessibility.

Justification (Need/Demand) Compliance with American with Disabilities Act (ADA) provides accessibility to City buildings and facilities.

Level of Service N/A

Comprehensive Plan and Functional Plan(s) Citations This CFP reflects the goals and policies of the 2016 Parks, Arts and Recreation Plan and the Olympia Comprehensive Plan.

Capital Costs:	2017	2018-2022	Total
ADA Transition	\$ 180,000	\$ 500,000	\$ 680,000
Total	\$ 180,000	\$ 500,000	\$ 680,000

Funding Sources:	2017	2018-2022	Total
CIP	\$ 180,000	\$ 500,000	\$ 680,000
Total	\$ 180,000	\$ 500,000	\$ 680,000

Annual Operations and Maintenance

Estimated Costs There are no additional costs associated with increasing accessibility.

Estimated Revenues N/A

Anticipated Savings Due to Project None

Department Responsible for Operations Public Works and Parks

Quadrant Location Citywide





Drinking Water

The mission of the Drinking Water Utility is to ensure a safe and sustainable supply of drinking water for the community. Four key influencing factors drive the development of the nine water capital project programs identified in the Capital Facilities Plan (CFP):

- 1. **Regulation/Compliance:** Achieve legal compliance with the Federal Safe Drinking Water Act (SDWA), Washington State Department of Health (DOH) regulations, and the Uniform Fire Code (UFC) fireflow criteria.
- 2. **Adopted Sustainability Philosophy:** Manage the water in sustainable ways and to develop integrated solutions that solve more than one problem at a time.
- 3. **Growth:** Accommodate growth as defined by Olympia’s Comprehensive Plan and to continue to provide and improve service to existing customers.
- 4. **Operational and System Delivery Strategies:** Manage water as a limited resource, meet water regulation objectives using approaches that limit human influence on the naturally good quality of water Olympia has, and implement system changes for cost-effective delivery.

Drinking Water capital facilities are designed and built to provide citizens with safe and sustainable drinking water. Drinking Water capital program activities acknowledge the importance of managing the water as a limited, precious resource that needs to be protected, conserved, and managed responsibly.

The 2015-2020 Water System Plan serves as the basis for the development of the Drinking Water Capital Facilities Plan. The projects contained in the CFP are funded annually through Drinking Water Utility rates and General Facilities Charges (GFCs). Low interest state loans and grants are pursued as available. The 2015-2020 Water System Plan includes a financial strategy for planned capital improvements that involves a combination of cash and debt financing.

Growth-Related Projects

Projects that fall under this category are associated with work needed to accommodate new development and are funded by GFC revenue. When a project serves both new and existing development, a portion of the project cost will also be funded through Drinking Water Utility rates.

Project	Percent Growth-Related
Kaiser Road Water main	25%
McAllister Wellfield Mitigation - Deschutes River	50%
McAllister Wellfield Mitigation - Woodland Creek	50%
Olympia Brewery Water Engineering Analysis	100%
Olympia Brewery Wellfield Well Decommissioning	100%
Water System Plan	50%

Level of Service (LOS) Determinations

Level of Service I

The first level of service (LOS I) involves maintaining the current system as-is and addressing the need to remain in regulatory compliance for water quality and quantity requirements.

- Meet minimal standards for water pressure (30 psi) and UFC fireflow criteria.
- Addressing new State and Federal Safe Drinking Water Act requirements.
- Addressing existing system deficiencies due to growth or infrastructure failure.

Level of Service II

The second level of service (LOS II) focuses on more proactive system maintenance and anticipating future regulatory needs.

- Anticipates future water quality regulations and develops facilities that will accommodate the increased requirements prior to the system becoming deficient.
- Goes beyond the required minimum of 30 psi average water pressure for residents and strives to improve the minimum to 40 psi. The higher standard is the most cost-effective approach to anticipating and meeting system growth needs. LOS II also strives to eventually eliminate areas within the system that do not meet UFC fireflow criteria.

Level of Service III

The final level of service (LOS III) recognizes Olympia's commitment to sustainability and to the approach of managing water as a limited resource. LOS III projects and programs address DOH regulations to a further extent, with the underlying driver to be a responsible water steward and purveyor.

- To comply with DOH regulations, there must be some form of conservation activity within an adopted Water Plan. The degree to which the City of Olympia approaches a conservation program is a component of managing a limited resource.

Capital Facilities Projects by Level of Service

LOS I

- Asphalt Overlay Adjustments

LOS II

- Small Diameter Water Pipe replacement
- Transmission and Distribution Projects
- Water Source Development & Protection
- Water System Planning
- Water Storage Systems

LOS III

- Groundwater Protection/Land Acquisition
- Infrastructure Pre-Design & Planning
- Reclaimed Water

Level of Service Standards

Municipal utilities in the United States and elsewhere commonly use LOS standards to evaluate whether the physical systems or operations are functioning to an adequate level. LOS can be defined in terms of the customer's experience of utility service and/or technical standards based on the professional expertise of Utility staff.

These LOS standards can help guide investments in maintenance and repair and replacement. New assets can be used to establish design criteria and prioritize needs. Using a structured decision process that incorporates LOS standards can help a utility achieve desired service outcomes while minimizing life-cycle costs.

The Drinking Water Utility has developed a set of formal LOS standards. Utility staff used the following criteria in selecting LOS:

- Specific goal or expectation
- Customer and community focus
- Quantifiable and measurable
- Relatively simple to understand and apply
- Available budget constraints for maintenance, repair and replacement

The selected LOS standards are in the following areas:

- System performance (including service interruption due to breakage, pressure, system reliability)
- Sustainability (energy efficiency)
- Customer service (response to water quality and service-related complaints)

These LOS standards have been incorporated in the development of this Capital Facilities Plan. Since regulatory compliance is considered a given, these LOS standards address issues of concern for customers beyond regulatory minimums and those that have an influence on decisions regarding infrastructure investments.

The LOS standards are:

System Performance

- Service interruption due to line breaks—During a three year period, no customer will experience more than two service interruptions due to a line break; such service interruptions will average four hours or less.
- Pressure—Water will be delivered to new construction at a minimum pressure of 40 psi at the service meter.
- System reliability with largest water source off-line—Utility will meet winter-time demands (inside use only) with the loss of our largest water source (McAllister Wellfield). This would require complete curtailment of all outside and non-essential water use, but would maintain service for critical needs such as drinking, cooking, sanitation and firefighting.

Sustainability

- Energy efficiency—All pumps are rated 80% efficient or higher, unless it is not cost-effective to do so (i.e., the value of energy savings would not pay back the cost of the improvement within five years).

Customer Service

- The Utility responds to main breaks within 15 minutes during business hours and within one hour outside business hours.
- The Utility responds to low pressure and water quality complaints by the end of the following business day.

Annual Operations and Maintenance

The water supplied to Olympia flows through concrete, cast iron, galvanized, asbestos cement (AC), ductile iron, and PVC pipe. These lines, in general, have a life expectancy of at least 50 years. New water lines are typically replaced with ductile iron, ductile iron cement lined, or high density polyethylene (HDPE) pipes. Currently,

most maintenance work involves repairs to the older asbestos cement water lines and non-ductile iron connections, and valves within the City. Breaks within these lines are usually caused by age, geological shifts within the ground or from construction work. Replacing these aging facilities will help to reduce operations and maintenance costs.

The annual operations and maintenance costs for both potable water and reclaimed water represent an overall average that is subject to change due to unique circumstances that may be encountered at each location. For new infrastructure, initial operations and maintenance costs for repairs, replacements, and cleaning are minimal. As the infrastructure ages, maintenance costs will increase.

Annual Operations and Maintenance Costs

Repair service leak (3/4"–1").....	\$ 850 per repair
Install service (meter) on a 3/4" –1" line.....	\$ 1,800 per install
Install small main (2" line).....	\$ 69 per linear foot
Install 6" or larger main.....	\$ 115 per linear foot
Main line valve installation and replacement.....	\$ 4,000 per install
Main line (2"–8" line) leak repair.....	\$ 2,700 per repair
Fire hydrant installation or replacement.....	\$ 3,800 per install
Fire hydrant repair.....	\$ 400 per repair
Reservoir maintenance (e.g. Meridian).....	\$ 32,000 annually
Pump station maintenance.....	\$ 49,000 per station

Note: The project components commonly used in Drinking Water Projects are defined in the Glossary section of this document.



Asphalt Overlay Adjustments—Water (Program #9021)

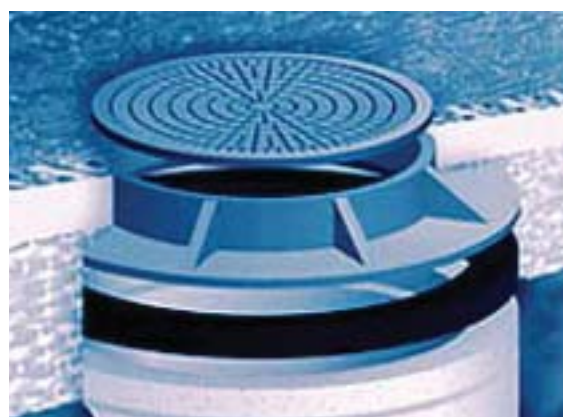
Location	Various locations Citywide
Links to Other Projects or Facilities	Street Repair and Reconstruction Projects—Transportation section Asphalt Overlay Adjustments—Wastewater section
Description	Make necessary adjustments to raise water system components to street level in conjunction with the annual asphalt overlay/street reconstruction process. This is a pass-through amount that is used by the Transportation Street Repair and Reconstruction Project for water facilities.
Justification (Need/Demand)	Asphalt overlay and street reconstruction projects require the adjustment of water system structures and equipment (e.g., castings, manholes, inlets, and covers) during construction as part of the paving process.
Level of Service (LOS)	LOS I – See program overview for LOS definitions.
Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GU3: Utilities are developed and managed efficiently and effectively. PU 3.1: Utilities are developed and managed efficiently and effectively. PU7.7: Develop and maintain adequate storage, transmission, and distribution facilities.

Capital Costs:	2017	2018-2022	Total
Construction	\$ 11,000	\$ 55,000	\$ 66,000
Total	\$ 11,000	\$ 55,000	\$ 66,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 11,000	\$ 55,000	\$ 66,000
Total	\$ 11,000	\$ 55,000	\$ 66,000

Annual Operations and Maintenance

Estimated Costs	None (Work conducted by transportation crew.)
Estimated Revenues	None
Anticipated Savings Due to Project	Decreases likelihood of system failure
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Groundwater Protection (Program #9701)

Location	Various locations Citywide see Project List.		
Links to Other Projects or Facilities	Critical Habitat Land Acquisition—Storm and Surface Water section Open Space Expansion—Parks, Arts and Recreation section		
Description	This program is targeted towards the purchase of land and other activities that will monitor and protect the groundwater that Olympia relies on for its drinking water supply.		
Project List	YEAR	PROJECT DESCRIPTION	COST ESTIMATE
	2017-2018	Groundwater Monitoring Wells—This project will drill 12 additional groundwater monitoring wells within the capture zones to provide advance warning of any water quality issues that could impact the City’s drinking water sources.	\$ 428,000
	2017-2018	Wellhead Protection Program—This is an annual program (\$215,000) to refine the capture zones for the City’s wells (areas around the wells that capture stormwater which contribute to the aquifers).	\$ 429,000
	2018-2022	Groundwater Protection (Easements, Appraisals, etc.)—This project is needed for installation of groundwater monitoring wells. Depending on the location of the wells, the City may have to obtain easements on property outside of the right-of-way and pay for those easements. The appraisals will determine the cost of the easements.	\$ 49,000
Justification (Need/Demand)	The acquisition of land within the City’s designated groundwater protection areas represents the ultimate groundwater protection strategy. By owning land or easements, the City can control land uses and associated activities on land near its water sources and help prevent contamination of critical groundwater resources.		
Level of Service (LOS)	LOS III – See program overview of LOS definitions.		
Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GU6: Groundwater in the City’s Drinking Water (Wellhead) Protection Areas is protected from contamination so that it does not require additional treatment. PU 6.1: Monitor groundwater quality to detect contamination, evaluate pollution reduction efforts, and to understand risks to groundwater. PU 5.3: Monitor water levels in aquifers and maintain numerical groundwater models.		

Capital Costs:	2017	2018-2022	Total
Construction	\$ 171,200	\$ 171,200	\$ 342,400
Design & Engineering	\$ 310,800	\$ 203,800	\$ 514,600
Land & Right of Way	\$ -	\$ 49,000	\$ 49,000
Total	\$ 482,000	\$ 424,000	\$ 906,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 482,000	\$ 424,000	\$ 906,000
Total	\$ 482,000	\$ 424,000	\$ 906,000

Annual Operations and Maintenance	
Estimated Costs	Minimal
Estimated Revenues	None
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	South, West



Infrastructure Pre-Design and Planning—Water (Program #9903)

Location	City water service area
Links to Other Projects or Facilities	Not yet determined.
Description	Perform pre-design evaluation and analysis of water project alternatives in order to recommend projects identified in the Water System Plan and support other City project planning requirements that occur outside of the annual CFP process.

Project List	YEAR	PROJECT DESCRIPTION	COST ESTIMATE
	2017-2022	Pre-Design and Planning	\$ 132,000

Justification (Need/Demand)	The City's Water System Plan and six-year Capital Facilities Plan identify projects from a planning level perspective based on detected deficiencies in a specific portion of the system. They also include planning level cost estimates done at the time the plan was developed and may not include enough detail in the scope to accurately assess project costs. This program evaluates these projects prior to their appropriation in the annual Capital Facilities Plan. It ensures accurate scope of work and cost estimates and a full evaluation of project alternatives. Other uses for this information include project scheduling, assessment of rate impacts ,and cash flow planning.
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Level of Service (LOS)	LOS III – See program overview of LOS definitions.
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Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GU 7: The drinking water system is reliable and is operated and maintained so that high quality drinking water is delivered to customers. PU 7.3: Design Olympia's water supply system to achieve the most favorable and practical fire insurance rating, consistent with adopted service levels. PU 7.7: Develop and maintain adequate storage, transmission, and distribution facilities.
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Capital Costs:	2017	2018-2022	Total
Engineering	\$ 22,000	\$ 110,000	\$ 132,000
Total	\$ 22,000	\$ 110,000	\$ 132,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 22,000	\$ 110,000	\$ 132,000
Total	\$ 22,000	\$ 110,000	\$ 132,000

Annual Operations and Maintenance

Estimated Costs	N/A
Estimated Revenues	N/A
Anticipated Savings Due to Project	N/A
Department Responsible for Operations	Public Works
Quadrant Location	Citywide

Reclaimed Water—Water (Program #9710)

Location Various Locations Citywide see Project List.

Links to Other Projects or Facilities N/A

Description This program is targeted towards delivery of reclaimed water. Reclaimed water is delivered through a completely separate distribution system that consists of purple colored pipes, connections, and distribution points for easy identification. Reclaimed water is recycled municipal wastewater that has been cleaned and treated in order to remove pollutants and contaminants so that the water can be safely reused for a variety of approved uses, such as irrigation.

Project List

YEAR	PROJECT DESCRIPTION	COST ESTIMATE
2020	Reclaimed Water Filling Stations—Install reclaimed water filling stations at convenient locations for contractors to use on construction projects. This project will reduce the likelihood of cross connections occurring and increase the use of reclaimed water.	\$ 107,000

Justification (Need/Demand)

Given that sources of potable water are limited, State law and Olympia's Water System Plan strongly encourage the use of reclaimed water as a resource to help meet current and future water needs. The LOTT Sewer Plan calls for the use of reclaimed water by each of the LOTT partner cities. LOTT is now producing reclaimed water at its Budd Inlet Reclaimed Water Plant and Martin Way Reclaimed Water Plant to help meet Federal and State water quality discharge standards to protect Budd Inlet. Water treated at the Budd Inlet Reclaimed Water Plant is now being used for irrigation at the Port of Olympia, the City's Percival Landing Park, and near Capitol Lake by the State's General Administration building.

Level of Service (LOS) LOS III – See program overview of LOS definitions.

Comprehensive Plan and Functional Plan(s) Citations

This program implements the following Olympia Comprehensive Plan goals and policies:

GU 4: Use Olympia's water resources efficiently to meet the needs of the community, reduce demand on facilities, and protect the natural environment.

PU 4.1: Encourage and allow re-use techniques, including rainwater collection, greywater systems, and use of Class A reclaimed water as alternatives to use of potable water, in order to enhance stream flows or recharge aquifers, while also protecting water quality.

PU 4.6: Advance the use of reclaimed water as defined in Council-adopted policies.

Capital Costs:	2017	2018-2022	Total
Construction	\$ -	\$ 85,500	\$ 85,500
Design and Engineering	\$ -	\$ 21,500	\$ 21,500
Total	\$ -	\$ 107,000	\$ 107,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ -	\$ 107,000	\$ 107,000
Total	\$ -	\$ 107,000	\$ 107,000

Annual Operations and Maintenance

Estimated Costs N/A

Estimated Revenues N/A

Anticipated Savings Due to Project N/A

Department Responsible for Operations Public Works

Quadrant Location Citywide

Small Diameter Water Pipe Replacement (Program #9408)

Location Various locations based on the Utility's Small Diameter Water Pipe Upgrade Plan. Projects selected are based on service complaints, and operation and maintenance records of leaks and main breaks.

Links to Other Projects or Facilities N/A

Description Replace small diameter substandard water pipes within the existing system. Project components may include hydraulic modeling, valves, vaults, and water lines.

Project List

2017-2022 Small Diameter Water Pipe Replacement Location

LOCATION - Street	FROM	TO
7th Avenue	Central Street	Boundary Street
Boundary Street	9th Avenue	8th Avenue
Fir Street	4th Avenue	State Avenue
Giles Street	Thomas Street	Division Street
Percival Street	Harrison Avenue	Jackson Avenue
Puget Street	4th Avenue	State Avenue
Union Avenue	Central Street	Fir Street
7th Avenue	Boundary Street	Central Street
Thurston Avenue	Tullis Street	Puget Street
Amhurst Street	18th Avenue	20th Avenue
Clar Mar Lane	To End	To End
Brown Street	18th Avenue	22nd Avenue
Eastside Circle	To End	To End
End of Rogers Court	South of 11th Court	End of Street
McCormick Street	13th Avenue	Union Avenue
13th Avenue	Fir Street	Fairview Street
Fir Street	14th Avenue	13th Avenue
Evergreen Park Lane	At Cul-de-sac	At Cul-de-sac
Water Street	22nd Avenue	24th Avenue

Justification (Need/Demand) The City is responsible for providing domestic and firefighting water flows at minimum pressures as established by the Department of Health. This program implements the improvements outlined in the 2015-2020 Water System Plan. The Plan identifies location, size, and timing of major and minor water main distribution line improvements. The Plan also identifies deficient areas that require looping or upgrading to improve flows and pressures. This project provides improvements to the basic system to assure adequate pressure and flow for domestic and firefighting situations. Maintenance records and service complaints are used to identify the lines needing replacement.

Level of Service (LOS) LOS II – See program overview of LOS definitions.

Comprehensive Plan and Functional Plan(s) Citations This program implements the following Olympia Comprehensive Plan goals and policies:

GU 7: The drinking water system is reliable and is operated and maintained so that high quality drinking water is delivered to customers.

PU 7.3: Design Olympia's water supply system to achieve the most favorable and practical fire insurance rating, consistent with adopted service levels.

PU 7.7: Develop and maintain adequate storage, transmission, and distribution facilities.

Small Diameter Water Pipe Replacement (Program #9408) (continued)

Capital Costs:	2017	2018-2022	Total
Construction	\$ 429,000	\$ 2,145,000	\$ 2,574,000
Design and Engineering	\$ 107,000	\$ 536,000	\$ 643,000
Total	\$ 536,000	\$ 2,681,000	\$ 3,217,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 536,000	\$ 2,681,000	\$ 3,217,000
Total	\$ 536,000	\$ 2,681,000	\$ 3,217,000

Annual Operations and Maintenance	
Estimated Costs	None (pipe replacements)
Estimated Revenues	N/A
Anticipated Savings Due to Project	Decreases cost of line breaks — estimated at \$1,400 per repair. Some main breaks also require extensive road restoration costs.
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Transmission and Distribution Projects—Water (Program #9609)

Location	Various locations within the existing system as service complaints and operation and maintenance records indicate. See Project List.
Links to Other Projects or Facilities	Sewer Pipe Extensions—Sewer Program Boulevard Road Intersection—Transportation Impact Fee section Fones Road—Transportation Impact Fee section Thurston County CFP
Description	This program includes projects necessary to rehabilitate and replace existing transmission and distribution facilities, including water mains, valves, fire hydrants, service meters and booster pump stations. These projects are targeted to respond to identified capacity problems (related to flow, pressure, firefighting) as well as to replace infrastructure that is beyond its useful life. This program also includes installation of new transmission mains to connect new key facilities to the system. Projects are often coordinated with other public works projects (e.g., road improvements), to take advantage of cost efficiencies and to minimize inconvenience to citizens. Specific components covered under this program include hydrants, hydraulic modeling, valves, vaults, water lines, and water system structures and equipment.

Project List

YEAR	PROJECT DESCRIPTION (Quadrant:Map Coordinate)	COST ESTIMATE
2017-2022	Aging Pipe Replacement—This is an annual project to replace substandard pipe throughout the City. Each year based on maintenance records and asset management scores, the City will choose which pipes to replace based on age and material. The primary focus is on Asbestos Cement (AC) pipe. Currently 40% of the City's water system is comprised of AC pipe which is prone to leaking and breaks.	\$ 3,216,000
2017-2022	Asset Management Program—This project will begin the process to provide an asset management plan to replace, rehabilitate, and maintain the City's water system to ensure it is reliable.	\$ 324,000
2017	Capital Village Water Main Replacement—The PVC water main near Capital Village has broken multiple times in recent years. This project will design and install a new water main intended to replace the problematic pipe, enhancing system reliability and mitigating the risk of additional breaks.	\$ 750,000
2017-2022	Corrosion Control Aeration Tower Condition Assessment & Upgrades—The City has three corrosion control towers that will need periodic large scale maintenance that is beyond the normal day to day maintenance. This project will assess the work that is needed and perform the upgrades.	\$ 162,000
2017-2022	Cross Country Mains—This project will identify water mains that are located outside of roadways and cross through neighborhoods. The project will determine if the water mains have easements and if they should be relocated to areas that have easier access for maintenance.	\$ 162,000
2017-2022	Distribution and Transmission Main Condition Assessment—This project is a part of the asset management program to assess the condition and reliability of the distribution mains to prioritize repair or replacement.	\$ 1,050,000
2017-2022	Distribution System Oversizing— This project funds oversizing of distribution pipeline projects associated with development-related improvement to provide additional capacity to meet anticipated future needs that may be greater than at the time of development.	\$ 174,000
2017	Kaiser Road Water Main Extension to Evergreen Park Way (W:B2)—This project will install a new 12-inch water main from the LOTT sewer lift station to Evergreen Park Drive, increasing service reliability to the Evergreen State College area. This project is partially funded by GFCs.	\$ 814,000
2017	McCormick Valve House—This will replace the original pipes and valves installed when the Fir Street tanks were constructed in 1935.	\$ 200,000

Transmission and Distribution Projects—Water (Program #9609) (continued)

Project List (continued)	YEAR	PROJECT DESCRIPTION (Quadrant:Map Coordinate)	COST ESTIMATE
	2017-2022	On-site Generator Replacement Plan—This project sets aside money to enable replacement of on-site generators located at the water pumping facilities. The generators will be replaced as their useful life nears an end.	\$ 486,000
	2017-2022	Security and Remote Systems Program—This project will provide enhancements to the security and remote monitoring systems of Drinking Water Utility sites.	\$ 300,000
	2018-2022	Booster Station Upgrade/Rehabilitation—This is a project to upgrade pumps, electrical and other associated upgrades and rehabilitation necessary to keep the system running and reliable. Construction will occur approximately every five years at sites identified by operations staff as requiring the most upgrades.	\$ 805,000
	2018-2022	Water Meter Replacement Program—This project will provide for a systematic replacement of water meters and AMR radios.	\$ 1,250,000
	2019	Fones Road Water Main Design—This project will design a new water main to replace the existing AC water main in Fones Road from Pacific Ave to 18th Avenue, to be coordinated with planned roadway reconstruction.	\$ 300,000
	2019	Park Drive Booster Pump Station Design—This project will design a new booster pump station to increase residential pressure and fire flows in a small portion of Zone 298 just west of Ken Lake in the Park Drive area.	\$ 250,000
	2019	Pressure Reducing Valve (PRV) (N:C6)—East Bay Drive: Installation of PRV stations to reduce high pressures in the waterlines along East Bay Drive and allow water to flow from Zone 247 to Zone 226.	\$ 265,000
	2020	Fones Road Water Main Construction (N:C7)—This project installs a new water main to replace an existing AC water main in Fones Road from Pacific Avenue to 18th Avenue, to be coordinated with a planned roadway reconstruction.	\$ 2,163,000
	2020	Park Drive Booster Pump Station Construction—This project will install a new booster pump station to increase residential pressure and fire flows in a small portion of Zone 298 just west of Ken Lake in the Park Drive area.	\$ 750,000

**Justification
(Need/Demand)**

This program will ensure that existing distribution and transmission facilities are rehabilitated and replaced as needed in order to continue to secure a safe and sustainable water supply. Priority projects are targeted to those areas of the water system that fall short of meeting DOH standards for water pressure and UFC fire flow criteria or have ongoing maintenance problems (e.g., a history of repeated main breaks). This program also provides funding for the installation of new transmission mains to connect new critical source and storage facilities to the water system.

Level of Service (LOS)

LOS II – See program overview of LOS definitions.

**Comprehensive Plan
and Functional Plan(s)
Citations**

This program implements the following Olympia Comprehensive Plan goals and policies:

GU 7: The drinking water system is reliable and is operated and maintained so that high quality drinking water is delivered to customers.

PU 7.3: Design Olympia's water supply system to achieve the most favorable and practical fire insurance rating, consistent with adopted service levels.

PU 7.4: Continue and improve maintenance management, including preventive maintenance, repairs and replacements.

PU 7.6: Continue to improve operations and maintenance program management, including safety, asset management and meter replacement.

PU 7.7: Develop and maintain adequate storage, transmission and distribution facilities.

Transmission & Distribution Projects—Water (Program #9609) (continued)

Capital Costs:	2017	2018-2022	Total
Construction	\$ 1,995,400	\$ 7,690,000	\$ 9,685,400
Design and Engineering	\$ 747,600	\$ 2,988,000	\$ 3,735,600
Total	\$ 2,743,000	\$10,678,000	\$ 13,421,000

Funding Sources:	2017	2018-2022	Total
General Facility Charges	\$ 232,500	\$ 962,000	\$ 1,194,500
Rates	\$ 2,510,500	\$ 9,716,000	\$ 12,226,500
Total	\$ 2,743,000	\$10,678,000	\$ 13,421,000

Annual Operations and Maintenance

Estimated Costs	Minimal maintenance on new transmission main.
Estimated Revenues	N/A
Anticipated Savings Due to Project	Decreases cost of line breaks — estimated at \$2,700 per repair. Some main breaks also require extensive road restoration costs.
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Water Source Development and Protection (Program 9700)

Location	Various locations Citywide see Project List.
Links to Other Projects or Facilities	N/A
Description	The overall goal of this project is to develop and maintain a water source system that provides adequate water source and water quality in compliance with Federal and State safe drinking water standards. It would also ensure that storage reservoirs are sized sufficiently to have reserve water for fire fighting. Specific project types include water source reliability, water quality and treatment, water system structures, and equipment.

Project List:

YEAR	PROJECT DESCRIPTION (Quadrant:Map Coordinate)	COST ESTIMATE
2017-2022	McAllister Mitigation (Smith Property Restoration)–This is an annual project to restore the Smith farm located near the Deschutes River as part of the mitigation plan related to the operations of the new McAllister Wellfield. Improvements include the construction of an engineered wetland, reforestation of a riparian zone along the Deschutes River, and also river bank stabilization to prevent erosion and improve fish habitat. This project is partially funded by GFCs.	\$ 1,260,000
2017-2022	McAllister Wellfield Mitigation (Woodland Creek Infiltration Facility) O&M Costs– This is a joint project with Lacey. Olympia will participate in the operations and maintenance costs as part of the mitigation for the McAllister Wellfield project. This project is partially funded by GFCs.	\$ 60,000
2017	Olympia Brewery Wellfield Well Decommissioning– The Cities of Olympia, Tumwater, and Lacey are joint owners of the former Olympia Brewery wells and water rights. Approximately 30 of the wells are not suitable for use as future municipal water sources and therefore need to be decommissioned. State law requires wells to be properly decommissioned when no longer in use to enhance safety and protect against groundwater contamination. This project will be a joint effort with all three Cities contributing equally to the effort.	\$ 150,000
2020	Olympia Brewery Water Engineering Analysis–This project continues the study to determine the best way to develop this new source in conjunction with Tumwater and Lacey. This project is partially funded by GFCs.	\$ 54,000

Justification (Need/Demand)	The Safe Drinking Water Act (SDWA) of 1974 signaled the beginning of a new age in public water supply. The detection of organic contaminants in drinking water throughout the United States spurred the passage of the SDWA. The 2015–2020 Water System Plan calls for additional source water quality treatment in various areas of the City to meet State drinking water requirements.
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Level of Service (LOS)	LOS II – See program overview of LOS definitions.
Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GU 5: Adequate supplies of clean drinking water are available for current and future generations and instream flows and aquifer capacity are protected. PU 5.1: Reserve water supply rights for at least 50 years in advance of need, so that supplies can be protected from contamination and they are not committed to lower priority uses. PU 5.2: Develop and maintain multiple, geographically-dispersed sources of water supply to increase the reliability of the system. GU 7: The drinking water system is reliable and is operated and maintained so that high quality drinking water is delivered to customers. PU 7.2: Maintain 100 percent compliance with all state and federal requirements, and continually improve our water quality management program. PU 7.3: Design Olympia's water supply system to achieve the most favorable and practical fire insurance rating, consistent with adopted service levels. PU 7.7: Develop and maintain adequate storage, transmission, and distribution facilities.

Water Source Development and Protection (Program 9700) (continued)

Capital costs:	2017	2018-2022	Total
Construction	\$ 896,000	\$ 280,000	\$ 1,176,000
Design & Engineering	\$ 224,000	\$ 124,000	\$ 348,000
Total	\$ 1,120,000	\$ 404,000	\$ 1,524,000

Funding Sources:	2017	2018-2022	Total
General Facility Charges	\$ 635,000	\$ 229,000	\$ 864,000
Rates	\$ 485,000	\$ 175,000	\$ 660,000
Total	\$ 1,120,000	\$ 404,000	\$ 1,524,000

Annual Operations and Maintenance	
Estimated Costs	N/A
Estimated Revenues	N/A
Anticipated Savings Due to Project	N/A
Department Responsible for Operations	Public Works
Quadrant Location	N/A

Water Storage Systems (Program #9610)

Location Various locations Citywide see Project List.

Links to Other Projects or Facilities N/A

Description The overall goal of this project is to develop and maintain a water reservoir system that provides adequate water storage and “chlorine contact time” in compliance with Federal and State safe drinking water standards. It would also ensure that storage reservoirs are sized sufficiently to have reserve water for firefighting. Specific project types include reservoirs, water lines, seismic upgrades, water quality and treatment, water system structures, and equipment.

Project List:

YEAR	PROJECT DESCRIPTION (Quadrant:Map Coordinate)	COST ESTIMATE
2017	Boulevard Reservoir Coatings (Interior/Exterior)—This project will recoat the inside and outside of the Boulevard Reservoir in order to prolong service life by preventing rust and corrosion.	\$ 650,000
2017-2018	Elliot Reservoir – Seismic Retrofit (W:B3)—This project will complete recommended seismic retrofits to the Elliot Reservoir. Improvements will include interior column wrapping, dowels to tie roof slab to perimeter walls, and perimeter retaining wall.	\$ 1,339,000
2017-2018	Fir Street #1 and #2 Reservoirs – Seismic Retrofit (N:C6)—This project will complete recommended seismic retrofits to Fir Street Reservoirs. Improvements will include the addition of perimeter walls with reinforcing cables and the addition of collars on the interior columns.	\$ 1,071,000
2019	Hoffman Court Reservoir (Interior/Exterior) Coating Replacement (S:E7)—This project will recoat the inside and outside of the Hoffman Reservoir in order to prolong service life by preventing rust and corrosion.	\$ 643,000
2019-2022	Storage Reservoir Coatings (Interior/Exterior)—This project provides for the recoating of existing steel storage reservoirs on the inside and outside to prolong their life by preventing rust and corrosion.	\$ 644,000

Justification (Need/Demand)

The Safe Drinking Water Act (SDWA) of 1974 signaled the beginning of a new age in public water supply. The detection of organic contaminants in drinking water throughout the United States spurred the passage of the SDWA.

One of the federally-mandated standards of the SDWA is adequate “chlorine contact time.” When added to drinking water, chlorine is a disinfecting agent. The chlorine needs time, however, to react with the water to provide adequate disinfection. Water reservoirs provide the safest and most effective method to ensure that chlorine levels and contact times are adequate to meet disinfection levels. Reservoirs also provide water storage to allow for proper domestic and firefighting flows.

The 2015-2020 Water System Plan calls for additional storage in the southeast area of the City to meet State drinking water requirements. This new reservoir in the 417 Zone will provide adequate storage for at least the next 25 years.

Updated evaluations of the Fir Street and Elliot reservoirs completed in 2011 call for seismic upgrades to improve the structural integrity of the reservoirs.

Level of Service (LOS)

LOS II – See program overview of LOS definitions.

Comprehensive Plan and Functional Plan(s) Citations

This program implements the following Olympia Comprehensive Plan goals and policies:

GU 7: The drinking water system is reliable and is operated and maintained so that high quality drinking water is delivered to customers.

PU 7.3: Design Olympia’s water supply system to achieve the most favorable and practical fire insurance rating, consistent with adopted service levels.

PU 7.7: Develop and maintain adequate storage, transmission, and distribution facilities.

Water Storage Systems (Program #9610) (continued)

Capital costs:	2017	2018-2022	Total
Construction	\$ 1,002,000	\$ 2,475,600	\$ 3,477,600
Design & Engineering	\$ 250,500	\$ 618,900	\$ 869,400
Total	\$ 1,252,500	\$ 3,094,500	\$ 4,347,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 1,252,500	\$ 3,094,500	\$ 4,347,000
Total	\$ 1,252,500	\$ 3,094,500	\$ 4,347,000

Annual Operations and Maintenance

Estimated Costs	\$50,000. In addition, Log Cabin Reservoir requires \$3,300 annually.
Estimated Revenues	N/A
Anticipated Savings Due to Project	None
Department Responsible for Operations	Public Works
Quadrant Location	South, West



Water System Planning (Program 9906)

Location N/A (Planning activities)

Links to Other Projects or Facilities N/A

Description Various types of planning efforts are needed on an on-going basis to ensure that the Utility is able to meet future growth needs, maintain regulatory compliance, and invest money wisely in infrastructure. Planning efforts under this program are targeted towards the comprehensive Water System Plan, updated every six years per State requirements. The 2015 Water System Plan was adopted in 2015. Work on the 2015-2020 Water System Plan began in 2013. Other smaller-scale planning efforts to evaluate project alternatives may also be conducted under this program. This program is partially funded by GFCs.

Project List:

YEAR	PROJECT DESCRIPTION	COST ESTIMATE
2020	Update of six-year Water System Plan	\$ 321,000

Justification (Need/Demand) Under State drinking water requirements, the City must complete a comprehensive Water System Plan update every six years. The Water System Plan outlines capital improvements, program efforts, and financial strategies that are necessary to ensure that the Water Utility can meet growth demands, be in regulatory compliance and maintain existing facilities over a 20-year horizon. For the first time, the 2015-2020 Water System Plan also included a 50-year planning horizon for water demand and water supply.

Level of Service (LOS) LOS II – See program overview of LOS definitions.

Comprehensive Plan and Functional Plan(s) Citations This program implements the following Olympia Comprehensive Plan goals and policies:

PU 3.2: Regularly revise the Olympia Municipal Code and Engineering Development and Design Standards to give detailed guidance on how utility services should be delivered and paid for in accordance with the principles established in this Comprehensive Plan.

PU 3.3: Update all utility master plans regularly and in accordance with state law.

PU 7.1: Maintain and update the Water System Plan, Engineering Design and Development Standards and Olympia Municipal Code to ensure drinking water utility facilities meet the requirements of the Growth Management Act, North Thurston County Coordinated Water System Plan, Washington State Department of Health, and Olympia Fire Code.

Capital Costs:	2017	2018-2022	Total
Pre-Design & Planning	\$ -	\$ 321,000	\$ 321,000
Total	\$ -	\$ 321,000	\$ 321,000

Funding Sources:	2017	2018-2022	Total
General Facility Charges (GFCs)	\$ -	\$ 160,500	\$ 160,500
Rates	\$ -	\$ 160,500	\$ 160,500
Total	\$ -	\$ 321,000	\$ 321,000

Annual Operations and Maintenance

Estimated Costs	N/A
Estimated Revenues	N/A
Anticipated Savings Due to Project	N/A
Department Responsible for Operations	Public Works
Quadrant Location	N/A





Wastewater

Effective wastewater system management is essential to public and environmental health. The challenges of effective management continue as the Olympia area population grows, land use densities increase, and development occurs in outlying areas distant from the LOTT Clean Water Alliance treatment facility. Responding to these challenges necessitates proactive management of our public and private wastewater infrastructure.

Capital facility funding is important to the heavily infrastructure-dependent Wastewater Utility. The public system maintained by Olympia is comprised of approximately 185 miles of gravity pipe and 33 regional lift stations. The Utility is also responsible for the operation and maintenance of approximately 1,730 residential and 20 commercial Septic Tank Effluent Pumping (STEP) sewer systems that utilize individual effluent pumps at residences and 28 miles of associated STEP pressure mains. Additionally, the continued use of over 4,140 septic systems in Olympia and its Urban Growth Area creates long-term public health and water quality concerns. Conversion of septic systems to the municipal system is encouraged.

The pipes making up the wastewater infrastructure vary in age, materials, and structural integrity. Ongoing work to systematically televise and evaluate the condition of the individual pipes helps

prioritize repair and replacement needs. Considerable work has been completed in recent years. However, this work effort will continue in the years to come with subsequent inclusion of repair and replacement projects in the CFP.

The Olympia City Council adopted the most recent Wastewater Management Plan in 2013. The Plan supports the continuation and refinement of current practices; the repair and replacement of existing pipes and pumps, extensions of major trunk lines, and conversions of onsite sewage systems to public sewer service. This new plan begins to evaluate wastewater needs for a 20-year planning horizon. It also provides for the review of existing policies related to the use of onsite sewage systems and STEP systems.

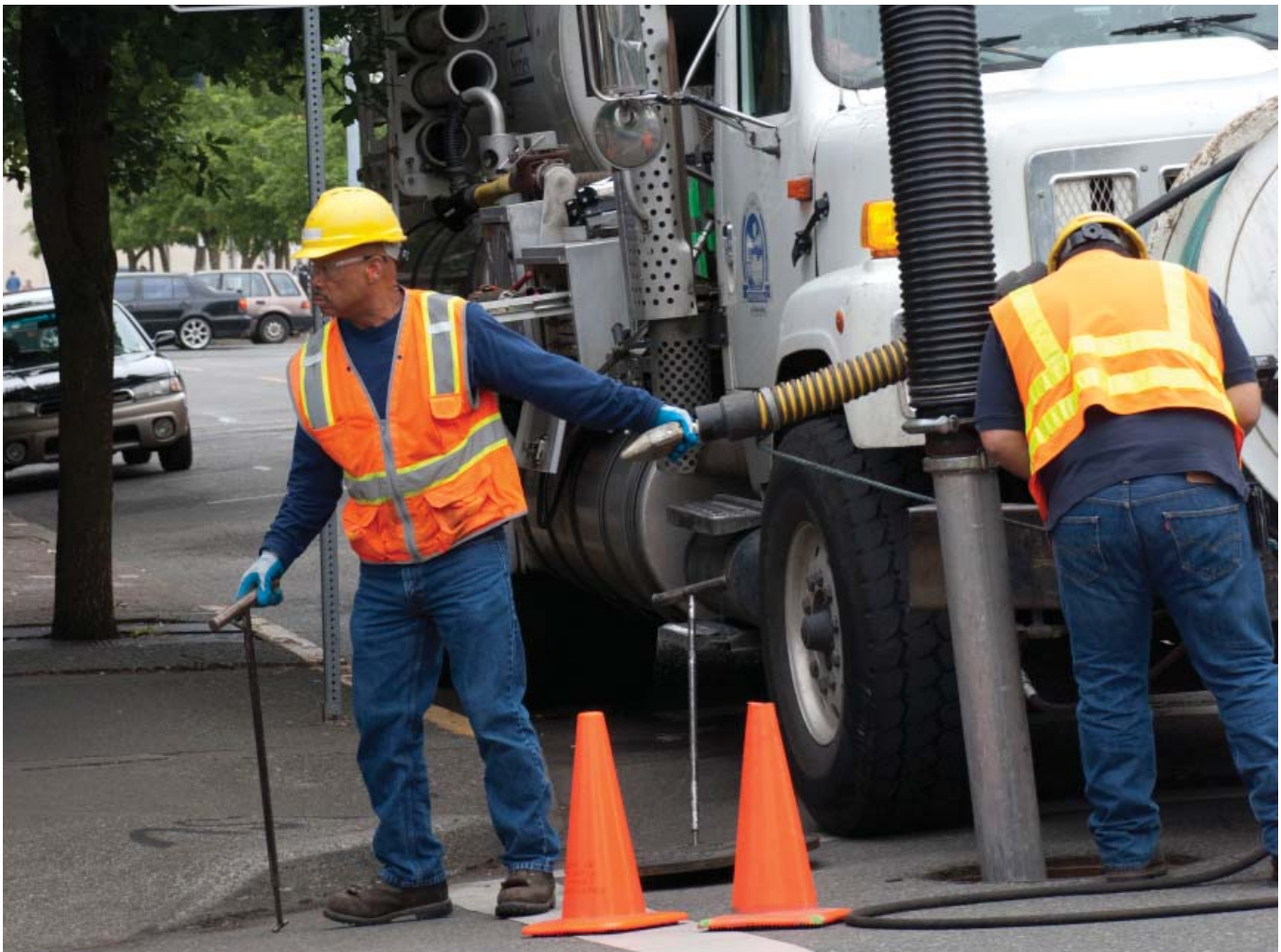
The projects contained in the Wastewater CFP are funded annually through Utility rates and General Facilities Charges. State low interest loans and grants are pursued as needed. The 2013 Wastewater Management Plan includes a financial strategy that relies primarily on cash financing of capital projects.

There are currently no projects identified in the CFP under the pipe capacity upgrade program of the Wastewater Program. Additional capacity upgrade projects may be developed and incorporated into future CFPs.

Growth-Related Projects

Projects that fall under this category are associated with work accommodating customer base expansion and are therefore funded by General Facility Charges (GFC) revenue. When an upgrade project serves both new and existing development, a portion of the project cost is funded by GFCs. This CFP identifies numerous lift station upgrades and sewer extensions that are appropriate for GFC funding. These projects will often accommodate both existing and future needs:

- Miller and Central lift station upgrade – 50% growth-related
- Water Street lift station force main – 25% growth-related
- Old Port II lift station upgrades – 75% growth-related
- Annual sewer extensions - 100% expansion-related
- Neighborhood sewer program - 100% expansion-related
- Roosevelt and Yew lift station upgrade - 75% growth-related



Asphalt Overlay Adjustments—Sewer (Program #9021)

Location Citywide as determined by the Transportation Program's six-year Transportation Improvement Program (TIP).

Links to Other Projects or Facilities Street Repair and Reconstruction Projects—Transportation Section
Asphalt Overlay Adjustments—Drinking Water and Storm and Surface Water Sections

Description The work of the City's annual overlay and street reconstruction projects includes replacing and adjusting wastewater utility castings within streets. These wastewater funds are passed-through to transportation street repair and reconstruction projects for incidental wastewater upgrades.

Justification (Need/Demand) Asphalt overlay and street reconstruction projects often require the adjustment/replacement of wastewater system structures (e.g., manhole frames and lids) as part of the paving process. The goal of this work is to replace damaged castings and to ensure that all castings are adjusted to the new pavement level.

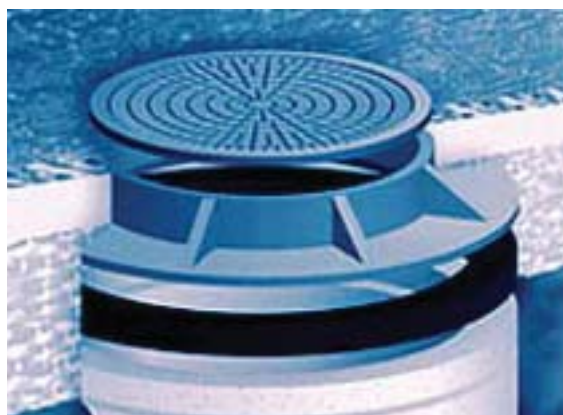
Comprehensive Plan and Functional Plan(s) Citations This program implements the following Olympia Comprehensive Plan goals and policies:
GU 3: Utilities are developed and managed efficiently and effectively.
PU 3.1: Utilities are developed and managed efficiently and effectively.

Capital Costs:	2017	2018-2022	Total
Construction	\$ 11,000	\$ 55,000	\$ 66,000
Total	\$ 11,000	\$ 55,000	\$ 66,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 11,000	\$ 55,000	\$ 66,000
Total	\$ 11,000	\$ 55,000	\$ 66,000

Annual Operations and Maintenance

Estimated Costs	None
Estimated Revenues	None
Anticipated Savings Due to Project	Efficient upgrades to existing infrastructure
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Infrastructure Pre-Design and Planning—Sewer (Program #9903)

Location	City sewer service area
Links to Other Projects or Facilities	Not defined at this time
Description	These funds support pre-design conceptual evaluation of wastewater projects and potential alternatives in order to refine complex projects prior to launching full permitting and design. Additionally, the funds are used to expediently respond to emergencies and other unanticipated needs.

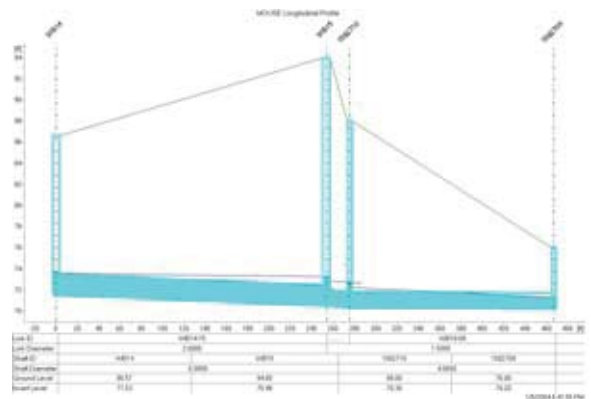
Project List	YEAR	PROJECT DESCRIPTION	COST ESTIMATE
	2017-2022	Pre-design and planning—Develops project scopes and cost estimates. Responds to emergencies.	\$ 240,000

Justification (Need/Demand)	The City's Wastewater Management Plan and six-year Capital Facilities Plan identify projects from a planning-level perspective based on detected deficiencies in specific portions of the system. They also include planning-level cost estimates completed at the time the Plan was developed. These estimates may not include enough detail in the scope to accurately assess project costs. This program evaluates complex projects prior to full initiation of design and permitting. It ensures accurate scope of work, cost estimates and a full evaluation of project alternatives. Other uses for this information include timely staff response to unanticipated public or environmental risks while long-term funding is secured.
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Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GU8: The City and its growth area are served by a City-owned wastewater collection and transmission system that is designed to minimize leakage, overflows, infiltration and inflows so as to provide sufficient capacity for projected demand. PU8.8: Evaluate the structural integrity of aging wastewater facilities, and repair and maintain as needed.
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Capital Costs:	2017	2018-2022	Total
Pre-Design & Planning	\$40,000	\$200,000	\$240,000
Total	\$40,000	\$200,000	\$240,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 40,000	\$ 200,000	\$ 240,000
Total	\$ 40,000	\$ 200,000	\$ 240,000



Annual Operations and Maintenance	
Estimated Costs	None
Estimated Revenues	None
Anticipated Savings Due to Project	Project specific savings
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Lift Stations—Sewer (Program #9806)

Location Various locations Citywide

Links to Other Projects or Facilities N/A

Description Aging pumps and associated systems in our lift stations need to be upgraded or reconstructed in order to provide dependable service while meeting increasing wastewater flows. Projects include providing needed increased pumping capacity, providing backup power generators and upgrading facilities to current Department of Ecology sewage pump station design criteria.

Project List	PROJECT DESCRIPTION (Quadrant:Map Coordinate)			COST ESTIMATE
	YEAR			
	2017	East Bay Marina Force Main Relocation—Install a new section of force main to relocate all or a portion of the existing 4-inch PVC sewer force main currently threatened by bank erosion, in order to mitigate the potential for a wastewater spill into the Puget Sound.		\$ 300,000
	2017	Ensign Road Generator (N:B6)—Install an onsite emergency generator for the lift station.		\$ 330,000
	2017	Miller and Central Lift Station Upgrade Design—Design of upgrades to the existing lift station to enhance system reliability for current and future flows. This project is partially funded by GFCs.		\$ 160,000
	2017	Water Street Lift Station Force Mains Upgrade Design—This project will design new 18-inch and 30-inch force mains to replace the existing concrete force mains serving the Water Street Lift Station. This project is partially funded by GFCs.		\$ 200,000
	2017	Water Street Soil Investigation and Cleanup—This project funds soil investigation and cleanup efforts associated with the Water Street Lift Station.		\$ 60,000
	2017–2022	Onsite Generator Replacement Program—This project funds future replacement of emergency generators that serve wastewater lift stations.		\$ 486,000
	2018	Miller and Central Lift Station Upgrade Construction (N:B6)—Upgrade the existing lift station for existing and future flows. This project is partially funded by GFCs.		\$ 644,000
	2018	Old Port II Lift Station Upgrade Design—Design of upgrades to the existing lift station to enhance system reliability for current and future flows. This project is partially funded by GFCs.		\$ 130,000
	2018	Water Street Lift Station Force Mains Upgrade Construction (DT:C5)—Replace the existing 18- and 30-inch concrete sewer force mains serving the Water Street lift station. This project is partially funded by GFCs.		\$ 764,000
	2019	Old Port II Lift Station Upgrade Construction (W:B4)—Upgrade the existing lift station for existing and future flows. This project is partially funded by GFCs.		\$ 515,000
	2020	Roosevelt and Yew Lift Station Upgrade Design—Design of upgrades to the existing lift station to enhance system reliability for current and future flows. This project is partially funded by GFCs.		\$ 130,000
	2021	Roosevelt and Yew Lift Station Upgrade Construction (N:C6)—Upgrade the existing lift station for existing and future flows. This project is partially funded by GFCs.		\$ 515,000

Justification (Need/Demand) Pumps are an integral element of our sewer infrastructure. Lift stations pose critical risks for spills and associated public and environmental health impacts. Unlike gravity sewer pipes, pump stations are complex mechanical and electrical systems susceptible to chronic or acute failure. The lift stations must operate well in order to prevent sewer overflows.

Lift Stations—Sewer (Program #9806) (continued)

Comprehensive Plan and Functional Plan(s) Citations

This program implements the following Olympia Comprehensive Plan goals and policies:

GU 8: The City and its growth area are served by a City-owned wastewater collection and transmission system that is designed to minimize leakage, overflows, infiltration and inflows so as to provide sufficient capacity for projected demand.

PU 8.1: Extend the wastewater gravity collection system through both public and private development projects.

PU 8.8: Evaluate the structural integrity of aging wastewater facilities and repair and maintain as needed.

Capital Costs:	2017	2018-2022	Total
Construction	\$ 676,800	\$ 2,762,000	\$ 3,438,800
Design & Engineering	\$ 454,200	\$ 341,000	\$ 795,200
TOTAL	\$ 1,131,000	\$ 3,103,000	\$ 4,234,000

Funding Sources:	2017	2018-2022	Total
General Facility Charges (GFCs)	\$ 130,000	\$ -	\$ 130,000
Rates	\$ 1,001,000	\$ 3,103,000	\$ 4,104,000
TOTAL	\$ 1,131,000	\$ 3,103,000	\$ 4,234,000

Annual Operations and Maintenance

Estimated Costs	Not yet determined
Estimated Revenues	Several projects support future growth
Anticipated Savings Due to Project	Projects decrease likelihood of system failure
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Onsite Sewage System Conversions—Sewer (Program #9813)

Location	Various Locations Citywide											
Links to Other Projects or Facilities	N/A											
Description	Supporting the conversion of existing onsite sewage systems to municipal sewer services is a City priority. Efforts to pursue conversions rely on both mandatory regulations and financial incentives. This program provides funding for both minor sewer extensions typically along a short section of street and coordinated neighborhood sewer extensions covering larger areas.											
Project List	<table><tr><th>YEAR</th><th>PROJECT DESCRIPTION</th><th>COST ESTIMATE</th></tr><tr><td>2017-2022</td><td>Annual Sewer Extensions—As part of the onsite sewer conversion program, this project funds minor extensions of the public pipe systems for new conversions. This project is funded by GFCs.</td><td>\$ 966,000</td></tr><tr><td>2017-2022</td><td>Neighborhood Sewer Program—Similar to Annual Sewer Extensions, but focused on larger neighborhood-scale projects. This project is funded by GFCs.</td><td>\$ 1,080,000</td></tr></table>			YEAR	PROJECT DESCRIPTION	COST ESTIMATE	2017-2022	Annual Sewer Extensions—As part of the onsite sewer conversion program, this project funds minor extensions of the public pipe systems for new conversions. This project is funded by GFCs.	\$ 966,000	2017-2022	Neighborhood Sewer Program—Similar to Annual Sewer Extensions, but focused on larger neighborhood-scale projects. This project is funded by GFCs.	\$ 1,080,000
YEAR	PROJECT DESCRIPTION	COST ESTIMATE										
2017-2022	Annual Sewer Extensions—As part of the onsite sewer conversion program, this project funds minor extensions of the public pipe systems for new conversions. This project is funded by GFCs.	\$ 966,000										
2017-2022	Neighborhood Sewer Program—Similar to Annual Sewer Extensions, but focused on larger neighborhood-scale projects. This project is funded by GFCs.	\$ 1,080,000										
Justification (Need/Demand)	In increasingly densely developed urban settings, onsite septic systems pose long-term threats to public and environmental health. City goals and policies provide various resources, including CFP funding, for the conversion to municipal sewer.											
Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GU 8: The City and its growth area are served by a City-owned wastewater collection and transmission system that is designed to minimize leakage, overflows, infiltration and inflows so as to provide sufficient capacity for projected demand. PU 8.1: Extend the wastewater gravity collection system through both public and private development projects. PU 8.4: Encourage septic system owners to connect to the City wastewater system by offering incentives, cost-recovery mechanisms, pipe extensions, and other tools.											

Capital Costs:	2017	2018-2022	Total
Construction	\$ 272,800	\$ 1,364,000	\$ 1,636,800
Design & Engineering	\$ 68,200	\$ 341,000	\$ 409,200
Total	\$ 341,000	\$ 1,705,000	\$ 2,046,000

Funding Sources:	2017	2018-2022	Total
General Facility Charges (GFCs)	\$ 341,000	\$ 1,705,000	\$ 2,046,000
Total	\$ 341,000	\$ 1,705,000	\$ 2,046,000

Annual Operations and Maintenance	
Estimated Costs	Not yet determined
Estimated Revenues	Supports new wastewater customer through conversion program
Anticipated Savings Due to Project	Facilitates gradual expansion of sewer system
Department Responsible for Operations	Public Works
Quadrant Location	Citywide

Replacements and Repairs —Sewer (Program #9703)

Location City sewer service area

Links to Other Projects or Facilities N/A

Description Provide funds for scheduled repairs, as well as unexpected repairs, replacements and rehabilitation of existing pipe systems and manholes. When possible, trenchless technologies are used to minimize disruptions and costs. Projects include work to abandon several high-maintenance STEP systems and provide gravity service through newly-installed gravity systems.

YEAR	PROJECT DESCRIPTION	COST ESTIMATE
2017	Southeast Area Odor and Corrosion Control—Evaluate, design, and install facilities to control odor and corrosion in the southeast Olympia sewers.	\$ 204,000
2017-2022	Allocation of Prioritized Repairs—Citywide—Funds major pipe repairs and replacements.	\$ 1,704,000
2017-2022	Spot Repairs—Repairs and replaces small sections of sewer pipe.	\$ 642,000
2018	Manhole Repair and Replacement—Address structural deficiencies, leaks, and/or corrosion needs.	\$ 214,000

Justification (Need/Demand) This program provides improvements to the sewer pipe system to assure adequate service and prevent catastrophic system failure and sewage release. An annual list of priority projects is developed based on the results of televising inspections of the sewer lines and implementation of the condition rating program. Planned repairs include major prioritized work, minor spot repairs, manhole repairs, and manhole lining to address corrosion in manholes associated with STEP system effluent gases. Reducing maintenance needs is also a priority.

Comprehensive Plan and Functional Plan(s) Citations This program implements the following Olympia Comprehensive Plan goals and policies:
 GU 8: The City and its growth area are served by a City-owned wastewater collection and transmission system that is designed to minimize leakage, overflows, infiltration and inflows so as to provide sufficient capacity for projected demand.
 PU 8.8: Evaluate the structural integrity of aging wastewater facilities and repair and maintain as needed.
 GU 9: The Utility will facilitate the implementation and use of new technology and management systems.

Capital Costs:	2017	2018-2022	Total
Construction	\$ 476,000	\$ 1,735,200	\$ 2,211,200
Design & Engineering	\$ 119,000	\$ 433,800	\$ 552,800
Total	\$ 595,000	\$ 2,169,000	\$ 2,764,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 595,000	\$ 2,169,000	\$ 2,764,000
Total	\$ 595,000	\$ 2,169,000	\$ 2,764,000

Annual Operations and Maintenance

Estimated Costs	Decreases maintenance and emergency response costs
Estimated Revenues	None
Anticipated Savings Due to Project	Decreases likelihood of system failure, sewage release and emergency repair
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Sewer System Planning—Sewer (Program #9808)

Location Within the City's Urban Growth Area

Links to Other Projects or Facilities N/A

Description Planning and evaluation efforts necessary to address long-term infrastructure and program needs. At this point in time, projects are limited to ongoing televising and condition rating evaluations.

Project List			
	YEAR	PROJECT DESCRIPTION	COST ESTIMATE
	2017-2022	Sewer System Televising and Condition Rating Program—The ongoing work effort provides pipe condition monitoring support to planning and operations staff. Repair and replacement projects stem from the condition rating program.	\$ 138,000
	2017-2022	Sewer Force Main Condition Assessment Program—This project provides ongoing funding for collection of force main condition assessment data to support planning of future force main rehabilitation and/or replacement projects.	\$ 180,000

Justification (Need/Demand) Funds are contributed annually for investigation of pipe structural conditions and overall troubleshooting. This work supports repairs of existing infrastructure.

Comprehensive Plan and Functional Plan(s) Citations This program implements the following Olympia Comprehensive Plan goals and policies:

GU 8: The City and its growth area are served by a City-owned wastewater collection and transmission system that is designed to minimize leakage, overflows, infiltration and inflows so as to provide sufficient capacity for projected demand.

PU 8.8: Evaluate the structural integrity of aging wastewater facilities and repair and maintain as needed.

GU 9: The Utility will facilitate the implementation and use of new technology and management systems.

Capital Costs:	2017	2018-2022	Total
Construction	\$ 47,700	\$ 238,500	\$ 286,200
Design & Engineering	\$ 5,300	\$ 26,500	\$ 31,800
Total	\$ 53,000	\$ 265,000	\$ 318,000

Funding Sources:	2017	2018-2022	Total
Rates	\$ 53,000	\$ 265,000	\$ 318,000
Total	\$ 53,000	\$ 265,000	\$ 318,000

Annual Operations and Maintenance

Estimated Costs None

Estimated Revenues None

Anticipated Savings Due to Project Proactive investigation of potential infrastructure problems

Department Responsible for Operations Public Works

Quadrant Location Citywide







Storm and Surface Water

Storm and surface water management is a key environmental service provided by the City. Capital projects funded by the Storm and Surface Water Utility reflect a local responsibility to correct flooding problems, protect water quality, and enhance aquatic habitat in local creeks, wetlands, and marine waters. Typical projects include:

- Stormwater pipe systems
- Regional stormwater storage ponds
- Neighborhood stormwater treatment facilities
- Storm and surface water planning
- Culvert replacements
- Stream bank stabilization
- Forest and wetland revegetation
- Demonstration projects using new technologies
- Environmental land purchase and stewardship

The effectiveness of the City's stormwater system at managing flooding and protecting the natural environment varies depending on location. Private developments and City capital projects constructed prior to the mid-1980s were required to provide modest stormwater conveyance capacity, no water quality treatment, and very minimal storage of runoff in constructed

ponds. Numerous complex flooding problems and irreversible habitat loss were caused by these early developments. Until recently, the majority of stormwater project funding has been spent addressing these historical concerns. Community expectations and regulations for managing stormwater have improved dramatically in recent years, resulting in a more holistic look at stormwater management.

The Storm and Surface Water program's success at resolving flooding problems during the last fifteen years has provided the City an opportunity to focus on water quality improvement, habitat protection, and scheduled replacement of aging pipe systems. The Storm and Surface Water Master Plan (2003) and its 2010 refinements emphasize the role of the Utility in environmental protection. The Plan provides guidance on Utility goals, implementation strategies, and expected outcomes. Capital projects, in concert with other elements of the Storm and Surface Water program, help meet these Utility goals:

- **Flooding**

Reduce the frequency and severity of flooding so hazards are eliminated, except during major storm events. The Utility will minimize potential flooding associated with new development through regulations for on site stormwater systems. Flooding arising from existing inadequate public infrastructure will be addressed in a timely manner.

- **Water Quality**

Improve water quality Citywide, while focusing infrastructure upgrades to reduce stormwater contaminant loads from untreated areas of the City. Improving water quality in Budd Inlet by retrofitting older high-traffic arterials and adjacent areas for stormwater treatment is a high priority.

- **Aquatic Habitat**

Improve aquatic habitat functions Citywide, while focusing on protecting intact habitat, improving Budd Inlet and managing riparian area vegetation. The relationship between aquatic habitat conditions and land-use impacts in urbanizing basins is scientifically complex and managerially challenging. Efforts include protecting high quality habitats while providing tangible improvements to other systems. Work to better quantify opportunities for land acquisition and stewardship is underway. This work will help prioritize future efforts.

Several new capital needs are facing the Utility including new State and Federal regulations and long-term infrastructure replacement. Regulations stemming from the Federal Clean Water Act (e.g., Total Maximum Daily Loads, National Pollution Discharge Elimination System) have led to new areas of water quality work. Equally significant from a financial perspective is the acknowledgement that numerous major stormwater conveyance systems are reaching, or have exceeded, their life expectancy. Efforts are underway to evaluate and document aging pipe systems. Prioritized pipe repairs and upgrades have become a regular component of the CFP.

The projects contained in the plan are financed annually through Storm and Surface Water Utility rates and General Facilities Charges. Loans and grants are used, especially for water quality projects. Debt financing has been only nominally used by the Utility.

Growth-Related Projects

Projects that fall under this category are associated with work to accommodate new development and are funded by General Facility Charge revenue. When a project serves both new and existing development, a portion of the project cost will also be funded through Stormwater Utility rates.

- Coleman, Bing and Walnut Conveyance Project – 25% expansion and upgrade-related
- Cooper Point and Black Lake Conveyance Project – 50% expansion-related
- Ken Lake Flood Conveyance Project addresses both existing and future flows – 50% expansion-related
- Indian Creek Culverts Modification Project – 25% expansion-and upgrade-related
- Division and Scammel Conveyance Project – 25% expansion-and upgrade-related

Following a cost-sharing policy approved by City Council in 2009, the Storm and Surface Water Utility allocates funding annually to the Transportation Program to cover a portion of stormwater mitigation costs on transportation projects. In recent years, these funds have been directed to the Parks and Pathways sidewalk program to offset stormwater mitigation costs associated with sidewalk projects.

PROJECT	2017	2018-2022	TOTAL
Sidewalks and Pathways	\$ 186,500	\$ 932,500	\$ 1,119,000
Total	\$ 186,500	\$ 932,500	\$ 1,119,000



Aquatic Habitat Improvements (Program #9024)

Location	Various locations Citywide
Links to Other Projects or Facilities	Critical Habitat Land Acquisition and Stewardship —Storm and Surface Water Section Water Quality Improvements—Storm and Surface Water Section Open Space Expansion—Parks, Arts and Recreation Section
Description	Implement habitat restoration strategies that protect and enhance aquatic and associated terrestrial habitat in Olympia.

Project List	YEAR	PROJECT	COST ESTIMATE
	2017-2022	Habitat Improvement – This project will protect and enhance aquatic and associated terrestrial habitat by implementing stewardship strategies as identified and prioritized in the Habitat and Stewardship Strategy developed by the Storm and Surface Water Utility.	\$2,160,000

Justification (Need/Demand)	The quality of aquatic habitat within Olympia continues to be challenged as land is developed for urban uses. The Storm and Surface Water Utility has a responsibility to help manage and enhance our aquatic habitats. The Planning Commission and Utility Advisory Committee have recently encouraged the Utility to increase emphasis on, and funding for, aquatic habitat land acquisition and stewardship.
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Comprehensive Plan and Functional Plan(s) Citations	This program implements the following Olympia Comprehensive Plan goals and policies: GN 6: Healthy aquatic habitat is protected and restored. PN 6.1: Restore and manage vegetation next to streams, with an emphasis on native vegetation, to greatly improve or provide new fish and wildlife habitat. PN 6.3: Establish and monitor water quality and aquatic habitat health indicators based on the best scientific information available. PN 6.6: Preserve and restore the aquatic habitat of Budd Inlet and other local marine waters. PN 6.7: Partner with other regional agencies and community groups to restore aquatic habitat through coordinated planning, funding, and implementation.
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Capital Costs:	2017	2018-2022	Total
Construction	\$140,000	\$700,000	\$840,000
Planning & Design	\$220,000	\$1,100,000	\$1,320,000
Total	\$360,000	\$1,800,000	\$2,160,000

Funding Sources:	2017	2018-2022	Total
Rates	\$360,000	\$1,800,000	\$2,160,000
Total	\$360,000	\$1,800,000	\$2,160,000

Annual Operations and Maintenance	
Estimated Costs	N/A
Estimated Revenues	N/A
Anticipated Savings Due to Project	Not yet determined
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Flood Mitigation and Collection—Stormwater (Program #9028)

Location Various locations Citywide

Links to Other Projects or Facilities Infrastructure Pre-Design and Planning—Storm and Surface Water Section

Description Stormwater pipe systems collect and convey runoff to appropriate locations in order to prevent or mitigate flooding. Some projects identified in the program anticipate or correct flooding; others provide for the timely replacement of old, problematic pipe systems.

The replacement of aging and deteriorating pipe systems is an increasingly important financial responsibility of the Utility. Problematic pipes are identified through ongoing Citywide pipe televising and condition rating programs. Several pipes have been identified that are currently failing or are expected to fail within five years. Some of the problems involve long sections of pipes; others involve only isolated spot repairs. These pipes are prioritized and repaired.

Project List Project list and prioritization are subject to change. Priority is based on a condition rating system.

YEAR	PROJECT DESCRIPTION (Quadrant:Map Coordinate)	COST ESTIMATE
2017-2022	City-Owned Stormwater Pond Rehabilitation – These projects rehabilitate City-owned stormwater facilities including removing sediments, amending soils, establishing attractive low maintenance landscaping and modifying the structures within the facility as needed. Rehabilitation involves more work than is typically performed during routine maintenance, and is intended to enhance the function of the facility. This project will provide for the rehabilitation of one facility per year, on average.	\$300,000
2017-2022	Condition Rating of Existing Conveyance – Television inspection and condition rating is provided for existing stormwater conveyance systems. Condition rating outcomes are used to determine replacement and repair schedules. There are approximately 172 miles of storm sewer owned and operated by the Storm and Surface Water Utility.	\$853,200
2017-2022	Conveyance Spot Repairs (Pipe Replacement) –This project provides for relatively minor spot repairs to the stormwater conveyance system at locations determined by the condition-rating database. Repairs to the worst portions of the storm sewer system are typically accomplished within two years of problem identification.	\$474,000
2017	Cooper Point and Black Lake Conveyance Design (W:C3) – This project will evaluate the feasibility of and present a cost effective design for increasing the capacity of an extensive Westside stormwater conveyance system serving approximately 700 acres of development. The project builds on recent work to improve the capacity of Yauger Park. The project will reduce the potential for flooding of the Cooper Point Road and Black Lake Boulevard intersection. This project is partially funded by General Facility Charges (GFCs).	\$500,000
2017-2022	Downtown Flood Mitigation (DT:C5) – Olympia's downtown is currently vulnerable to tidal flooding. In the years to come, the problem could be exacerbated by sea level rise. The project will install tidal gates on key stormwater out falls to Budd Inlet thereby preventing tides from flowing up the pipes and discharging to low lying downtown streets.	\$735,000
2018	Ascension and 4th Avenue Pond Construction (W:C4)–This project will construct a stormwater facility on City-owned land between 4th and Ascension Avenues. It will provide flow control and water quality treatment to flows generated from existing developed areas that discharge to the downstream stormwater conveyance system.	\$276,700
2018	Cooper Point and Black Lake Conveyance Construction (W:C3) – This project will construct the conveyance improvements to the stormwater system south of Yauger Park. Specific construction goals will be identified in prior year analysis and design. This project is partially funded by General Facility Charges (GFCs).	\$4,700,000
2018	Ken Lake Flood Conveyance Design (W:D3)–This project will design a stormwater conveyance system which will eliminate historical overland flooding associated with the Gruen Swale and Stonewall Swale tributary to Ken Lake. This project is partially funded by GFCs.	\$160,700

Flood Mitigation and Collection—Stormwater (Program #9028) (continued)

Project List (continued)

Project list and prioritization are subject to change. Priority is based on a condition rating system.

YEAR	PROJECT DESCRIPTION (Quadrant:Map Coordinate)	COST ESTIMATE
2019	Indian Creek Culverts and Conveyance Modifications Design (N:C5) – This project will evaluate and design modifications to the streambeds at the confluence of Indian and Moxlie Creeks to reduce culvert maintenance and prevent plugging and potential flooding. This project is partially funded by GFCs.	\$119,200
2019	Ken Lake Flood Conveyance Construction (W:D3) – This project will construct the stormwater conveyance system identified and designed in the prior year design phase. This project is partially funded by GFCs.	\$482,000
2020	Coleman, Bing and Walnut Conveyance Design (W:B3) – This project will evaluate and design the replacement of an existing regional conveyance system in the vicinity of Coleman Avenue, Bing Street and Walnut Road. The current stormwater system was installed by private properties over a period of many years. Due to increasing regional flows using the system, the City took over its maintenance and operation. This project is partially funded by GFCs.	\$124,000
2020	Indian Creek Culverts and Conveyance Modifications Construction (N:C5) – This project will construct improvements to the culverts and stormwater conveyance system identified in prior year design project. This project is partially funded by GFCs.	\$357,500
2021	Coleman, Bing and Walnut Conveyance Construction (W:B3) – This project will construct improvements identified in prior year design phase. This project is partially funded by GFCs.	\$372,200
2021	Division and Scammel Conveyance Design (W:C4) – The project will correct deficiencies in the stormwater conveyance system capacity and reduce the potential for flooding along Division Street. This project is partially funded by GFCs.	\$141,000
2022	Division and Scammel Conveyance Construction (W:C4) – The project will construct stormwater infrastructure improvements identified in prior year design phase. This project is partially funded by GFCs.	\$423,000

Justification (Need/Demand)

The stormwater infrastructure needs repairs and upgrade to prevent flooding and update aging components. This program replaces parts of the existing system based on televising and a condition pipe rating system. Flooding problems have been reduced in recent years through capital development. However, some regional and localized problems still exist.

Comprehensive Plan and Functional Plan(s) Citations

This program implements the following Olympia Comprehensive Plan goals and policies:

GU 10: The frequency and severity of flooding are reduced and hazards are eliminated, except during major storm events.

PU 10.1: Improve stormwater systems in areas that are vulnerable to flooding.

PU 10.3: Evaluate the structural integrity of aging stormwater pipes and repair as needed.

PU 10.6: Ensure that private pipe and pond systems are maintained.

Capital Costs:	2017	2018-2022	Total
Construction	\$343,325	\$7,380,175	\$7,723,500
Design & Engineering	\$550,375	\$1,744,625	\$2,295,000
Total	\$893,700	\$9,124,800	\$10,018,500

Funding Sources:	2017	2018-2022	Total
General Facility Charges	\$250,000	\$3,055,575	\$3,305,575
Rates	\$643,700	\$6,069,225	\$6,712,925
Total	\$893,700	\$9,124,800	\$10,018,500

Annual Operations and Maintenance	
Estimated Costs	Not yet determined
Estimated Revenues	N/A
Anticipated Savings Due to Project	Decreases likelihood of system failure
Department Responsible for Operations	Public Works
Quadrant Location	Citywide

Infrastructure Pre-Design & Planning - Stormwater (Program #9903)

Location City stormwater service area

Links to Other Projects or Facilities Flood Mitigation and Collection—Storm and Surface Water Section

Description This program provides funds for specific pre-design and planning efforts associated with the stormwater system construction, including emergency projects. Additional funding is provided under the program for pervious pavement contingency/repair work. Funding for pre-design is not needed at the present time, but could be requested in future CFPs.

Project List

YEAR	PROJECT DESCRIPTION (Quadrant:Map Coordinate)	COST ESTIMATE
2017-2022	Infrastructure Predesign and Planning – This project provides the means for the Storm and Surface Water utility to contract with consultants for professional services such as soils and geotechnical investigations, hydraulic modeling and computer simulations of the storm network, and project feasibility analyses for capital projects.	\$300,000
2017-2022	Pervious Pavement Contingency Fund—This project provides a means for the City to manage one of its key innovative technologies, pervious pavement in sidewalks. In the long run, the technology is seen as an effective means for managing stormwater runoff. However, in the short-term, some level of problems or failures can be expected. The contingency fund is jointly funded by the General Fund and Stormwater as pervious pavement projects are built. The fund builds over time and is used to repair or mitigate the impacts of a potential failure of pervious pavement projects.	\$ 170,400
2017	Wiggins Road Roadway and Storm Drainage Pre-design - This project will collaborate with Transportation to investigate and evaluate various roadway safety improvements and storm drainage conveyance alternatives.	\$100,000

Justification (Need/Demand) New technologies for stormwater management are needed. This program supports applied research in the area of pervious pavement. The work is supported by City policy decisions.

Other potential projects in this program evaluate future projects prior to their appropriation in the annual Capital Facilities Plan to ensure accurate scope of work, cost estimates, and a full evaluation of project alternatives. Initial work on emergencies and other unanticipated needs can be funded at a limited level under this program.

Comprehensive Plan and Functional Plan(s) Citations This program implements the following Olympia Comprehensive Plan goals and policies:

PU 3.9: Ensure consistent maintenance, asset management, and emergency management practices for all utilities.

Water Quality Improvements

This program implements the following Olympia Comprehensive Plan goals and policies:

GN 4: The waters and natural processes of Budd Inlet and other marine waters are protected from degrading impacts and significantly improved through upland and shoreline preservation and restoration.

Infrastructure Pre-Design & Planning - Stormwater (Program #9903) (continued)

Capital Costs:	2017	2018-2022	Total
Pre-Design & Planning	\$ 178,400	\$ 392,000	\$ 570,400
Total	\$ 178,400	\$ 392,000	\$ 570,400

Funding Sources:	2017	2018-2022	Total
Rates	\$ 178,400	\$ 392,000	\$ 570,400
Total	\$ 178,400	\$ 392,000	\$ 570,400

Annual Operations and Maintenance	
Estimated Costs	N/A
Estimated Revenues	N/A
Anticipated Savings Due to Project	N/A
Department Responsible for Operations	Public Works
Quadrant Location	Citywide



Water Quality Improvements (Program #9027)

Location Various locations Citywide see Project List.

Links to Other Projects or Facilities N/A

Description Continue to improve water quality in Olympia's creeks, wetlands, lakes, and marine environments through projects that treat contaminated stormwater runoff. Projects are identified and prioritized based on Citywide needs. Water quality projects are subject to grant and/or loan funding.

Project List

YEAR	PROJECT DESCRIPTION (Quadrant:Map Coordinate)	COST ESTIMATE
2017	Harrison Avenue Water Quality Retrofit (W:C4)–A water quality treatment facility \$523,500* would be constructed to treat runoff from Harrison Avenue between West Bay Drive and Milroy Street. The Harrison Avenue drainage basin is tributary to Budd Inlet and comprises more than 20 acres zoned predominately high-density corridor.	\$534,000*
2017	Neighborhood Low-Impact Development Design Grant (multiple locations) – This project is subject to predesign grant funding from Ecology. Several locations will be evaluated for stormwater retrofit using low impact development best management practices such as bioretention/rain gardens. Focus will be given to neighborhood centers identified in the City's Comprehensive Plan such as Rogers Street, San Francisco Street, and Capitol Way near the Farmers Market.	\$150,000*
2019	Capitol Way Water Quality Retrofit (DT:C5)–The project would construct a water quality treatment facility to treat runoff from an area roughly bounded by Capitol Way, Adams Street, 7th Avenue, and Union Avenue. The drainage basin is tributary to Capitol Lake and comprises approximately 20 fully developed acres.	\$482,300*
2020	Evergreen Park Drive Treatment Facility (W:D4) – This project would create a stormwater treatment facility for currently untreated runoff from Evergreen Park Drive. The project shall evaluate different treatment technologies and locations for the project. It shall also evaluate providing water quality treatment for water that currently discharges directly to Capital Lake or to Percival Cove.	\$367,800*
2021	Martin Way at Mary Elder Water Quality Retrofit (E:C7) - The project would construct water quality facilities providing treatment of stormwater runoff on Martin Way from Mary Elder Road to Sleater Kinney Road. Martin Way is an arterial roadway located in a High Density Corridor zone. Polluted street runoff from over eight acres of street right-of-way currently flows untreated to Woodard Creek just west of Mary Elder Road.	\$550,000*
2022	Plum Street Water Quality Retrofit (DT:D5) – The project would construct water quality facilities providing treatment of stormwater runoff from Plum Street and areas east to Quince Street, zoned Downtown Business, Professional Office, High Density Commercial Service, and Residential Mixed Use. The Plum Street arterial and adjacent areas are tributary to Moxlie Creek and comprise approximately 42 acres of untreated high use area.	\$ 800,000*
* These projects, if qualified, will be 75% funded with available stormwater grants and loans.		

Justification (Need/Demand) Managing water quality problems associated with stormwater runoff is a primary responsibility of the Storm and Surface Water Utility. Increasingly stringent Federal and State requirements (e.g., National Pollutant Discharge Elimination System) necessitate increased efforts to manage water quality.

Comprehensive Plan and Functional Plan(s) Citations This program implements the following Olympia Comprehensive Plan goals and policies:

GN 4: The waters and natural processes of Budd Inlet and other marine waters are protected from degrading impacts and significantly improved through upland and shoreline preservation and restoration.

GN 5: Ground and surface waters are protected from land uses and activities that harm water quality and quantity.

PN 5.3: Retrofit existing infrastructure for stormwater treatment in areas with little or no treatment.

Water Quality Improvements (Program #9027) (continued)

Capital Costs:	2017	2018-2022	Total
Construction	\$ 400,500	\$ 1,650,075	\$ 2,050,575
Design & Engineering	\$ 283,500	\$ 550,025	\$ 833,525
Total	\$ 684,000	\$ 2,200,100	\$ 2,884,100

Funding Sources:	2017	2018-2022	Total
Rates	\$ 171,000	\$ 550,025	\$ 721,025
Storm Water Utility Grant	\$ 513,000	\$ 1,650,075	\$ 2,163,075
Total	\$ 684,000	\$ 2,200,100	\$ 2,884,100



Annual Operations and Maintenance

Estimated Costs Harrison Ave Treatment Facility:.....\$ 10,000 annually
 Capitol Way Treatment Facility:.....\$ 6,000 annually
 Evergreen Park Dr Treatment Facility:.....\$ 4,000 annually

Estimated Revenues N/A

Anticipated Savings Due to Project N/A

Department Responsible for Operations Public Works

Quadrant Location Citywide



The projects contained in this plan exceed available resources in the capital fund, and anticipated School Impact and Mitigation Fee revenue. The Board of Directors sold bonds in June 2012, allowing an additional \$82 million in available revenue for construction projects.

Further, the amount of the requested 2012 bond will not fully cover the anticipated projects through 2019, described above. The Board of Directors will likely submit an additional Bonding Authority request during the period covered by this CFP, but as of September 2015, the Board has not yet finalized action on a February 2016 request to voters. As of this drafting, the finance plan assumes that the Board will request voter approval of \$161 million in construction bond authority for the February 2016 election.

Current Balance in Capital Fund

The finance plan for this schedule of capital plan is heavily dependent on the current balance in the district's Capital Fund. The balance of \$42.2 million is made up of many sources, but 2 main sources. First, in 2012 voters approved bond resources for construction of an Intermediate School. Construction of the school has not been undertaken due to a lag in enrollment and listing of an endangered species on the property. The district is working through a Habitat Conservation Plan, to gain the ability to build on the property. However, the most recent citizen's planning committee (FAC discussed earlier) has recommended that this school not be built. Therefore, the \$28 million in bond resources have been preserved and are available to be devoted to this project. Second, the district successfully qualified for state construction assistance of \$10 million for the construction of ORLA and remodel of Garfield. These resources are preserved. The balance of resources are a combination of impact fees, mitigation fees, and a small amount of capital levy funds.

Finance Plan Summary

The following Table L represents preliminary estimates of revenue associated with each group of projects.

Table L: Preliminary Revenue Estimates

Item Description	Project Amount	Cumulative Total
1. New Classrooms (Minis at Pioneer, Hansen, Centennial, Roosevelt, McLane, + 1 additional)	\$37,063,000	\$37,063,000 ³
2. Phase II of 2011 Master Plan (Multiple Items Above)	\$136,559,394	\$173,622,394
3. Capital High School Theater	\$12,665,000	\$186,287,394
4. Small Works Projects, Categorized as Immediate Need	\$10,733,848	\$197,021,242
5. John Rogers Demolition and Re-seed	\$520,000	\$197,541,242
6. Security-Access Control Systems	\$2,000,000	\$199,541,242
7. Heating/ Ventilation Improvements and Energy Savings	\$8,484,000	\$208,025,242
Item Description	Project Amount	Cumulative Total
8. Field and Playground Renovations	\$6,873,845	\$214,899,087
Subtotal of Planned Investments	\$214,899,087	
Existing Resources (Capital Fund Balance)	- \$42,200,000	
Estimated New State Construction Funding	- \$12,000,000	
New Construction Bond Authority Request to Voters	= \$160,699,087	

³ The 2016 plan to build 5 mini-buildings of 10 classrooms instead of a combination of 11 classroom buildings and 7 classroom buildings will cost an additional \$3.1 million. However, this is a preliminary number, and may be lower if the district builds all five at once by bidding for construction with one contractor. Further, the district will save resources by designing 1 building of 10 classroom instead of designing 1 building of 11 and 1 building of 7 classrooms. If the district does experience the \$3.1 million in costs, the district has several other financing options: Invest in fewer portables with impact fee revenue, reduce the scope of the extra mini-building (currently budgeted at \$7.7 million), pursue savings in the 3 main remodel project (Roosevelt, Centennial, and McLane), remodel the 3 schools sooner (to avoid escalation costs), and spend less in the mini-buildings for furnishings. (Given that the district will construct 50 classrooms in the mini-buildings, instead of 47, the district has more flexibility to reduce expenditures for portables, has portables to sell/surplus, and has the flexibility to reduce the scope of the final mini-building.)

Appendix A - Inventory of Unused District Property

Future School Sites

The following is a list of potential future school sites currently owned by the district. Construction of school facilities on these sites is not included in the six-year planning and construction plan.

- ***Mud Bay Road Site***

This site is a 16.0 acre parcel adjacent to Mud Bay Road and Highway 101 interchange. The site is currently undeveloped. Future plans include the construction of a new school depending on growth in the student enrollment of adjoining school service areas.

- ***Muirhead Site***

This is a 14.92 acre undeveloped site directly adjacent to Centennial Elementary School, purchased in 2006. Future plans include the construction of a new Intermediate/Middle school.

Other District Owned Property

- ***Henderson Street and North Street (Tree Farm) Site***

This site is a 2.25 acre parcel across Henderson Street from Pioneer Elementary School and Ingersoll Stadium. The site is currently undeveloped. Previously, the site was used as a tree farm by Olympia High School's vocational program. The district has no current plans to develop this property.

Future Site Acquisition

The district is seeking additional properties for use as future school sites. Construction of school facilities for these sites is not included in the six year planning and construction plan. The district has identified the following priorities for acquisition:

- New west side elementary school site - approximately 10 acres
- New east side elementary school site—approximately 10 acres

Appendix B - Detail of Capital Facilities Projects**Elementary School Modernization****Grades K-4**

ProjectName:	Centennial Elementary School Modernization
Location:	2637 45 th Ave SE, Olympia
Site:	11.8 acres
Capacity: (New Lower Utilization Standard)	357 students (189 seats new student capacity)
Square Footage:	45,345 s.f.
Cost:	Total project: \$27.9 million, including a \$6.5 million mini-building of 10 classrooms and a \$800,000 field renovation.
ProjectDescription:	Major modernization of existing school facility. Modernization work will include all new interior finishes and fixtures, furniture and equipment, as well as exterior finishes.
Status:	Subject to bond approval, the district anticipates this facility will be available in 2019.

Elementary School Modernization**Grades K-5**

ProjectName:	McLane Elementary School Modernization
Location:	200 Delphi Road SW, Olympia
Site:	8.2 acres
Capacity: (New Lower Utilization Standard)	310 students (189 seats new student capacity)
Square Footage:	45,715 s.f.
Cost:	Total project: \$23.5 million, including a \$6.5 million mini-building of 10 classrooms and a \$700,000 field renovation.
ProjectDescription:	Major modernization of existing school facility. Modernization work will include all new interior finishes and fixtures, furniture and equipment, as well as exterior finishes.
Status:	Subject to bond approval, the district anticipates this facility will be available in 2019.

Elementary School Modernization**Grades K-5**

ProjectName:	Roosevelt Elementary School Modernization
Location:	1417 San Francisco Ave NE , Olympia
Site:	6.4 acres
Capacity: <i>(New Lower Utilization Standard)</i>	386 students (189 seats new student capacity)
Square Footage:	47,616 s.f.
Cost:	Total project: \$22.4 million, including a \$6.5 million mini-building of 10 classrooms and \$800,000 field renovation.
ProjectDescription:	Major modernization of existing school facility. Modernization work will include all new interior finishes and fixtures, furniture and equipment, as well as exterior finishes.
Status:	Subject to bond approval, the district anticipates this facility will be available in 2020.

High School Modernization**Grades 9-12**

Project Name:	Capital High School Modernization
Location:	2707 Conger Ave NW, Olympia
Site:	40 acres
Capacity: <i>(Current Utilization Standard)</i>	1,496 students (new student capacity not yet determined)
Square Footage:	254,772 s.f.
Cost:	Total project: \$20.6 million
ProjectDescription:	Modify classroom pod areas and other portions of the existing school in order to support educational trends and students matriculating from the Jefferson Advanced Math and Science program. Replace older failing exterior finishes and roofing.
Status:	Subject to bond approval, the district anticipates this facility will be available in 2021.

High School Addition

Grades 9-12

ProjectName:	Olympia High School Addition / portable replacement
Location:	1302 North Street SE, Olympia
Site:	40 acres
Capacity: (Current Utilization Standard)	will limit to 1,811 students; adds 280 permanent seats, which is 70 new seating/student capacity
Square Footage:	233,960 s.f.
Cost:	Total project: \$24.3 million
ProjectDescription:	Provide additional permanent building area to replace ten portable classrooms. Support educational trends with these new spaces.
Status:	Subject to bond approval, the district anticipates this facility will be available in 2020.

Elementary School Expansion

Grades K-5

ProjectName:	Pioneer and Hansen Elementary Schools
Capacity:	Replace portables with new two-story structures at each school. Adds 189 student seats to each school to address new capacity of 82 students needed at Pioneer and 67 students needed at Hansen.
Cost:	Each structure will cost \$6.5 million. Pioneer costs associated with growth and therefore, impact fees, total \$2.1 million; Hansen growth costs total \$700,000.
Status:	Subject to bond approval, the district anticipates this facility will be available in 2019.

High School Addition/Admin. Center

Grades 9-12

ProjectName:	Avanti High School Addition & Modernization & Re-location of district Administrative Center
Location:	<u>Avanti HS:</u> 1113 Legion Way SE, Olympia (currently located on 1 st floor of district Administrative Center) <u>District Administrative Center:</u> To be determined
Site:	<u>Avanti HS:</u> 7.5 acres
Capacity: (Current Utilization Standard)	<u>Avanti HS:</u> Will limit to 250 students <u>District Administrative Center:</u> To be determined
Square Footage:	<u>Avanti HS:</u> 78,000 s.f. <u>District Administrative center:</u> To be determined
Cost:	<u>Avanti HS:</u> Total project: \$9.9 million <u>District Administrative Center:</u> Estimated \$7.8 million
ProjectDescriptions:	<u>Avanti HS:</u> Expand Avanti High School by allowing the school to occupy all three floors of the District Administrative Center. Expanding the school will allow additional programs and teaching and learning options that might not be available at the comprehensive high schools. <u>District Administrative Center:</u> Provide a new location for administrative offices somewhere in the downtown vicinity.
Status:	Subject to bond approval, the district anticipates this facility will be available in 2020.

Appendix C - SF and MF Impact Fee Calculations

SCHOOL IMPACT FEE CALCULATIONS							
DISTRICT	Olympia School District						
YEAR	2017 - SF and MF Residence						
School Site Acquisition Cost:							
((AcresxCost per Acre)/Facility Capacity)xStudent Generation Factor							
				Student	Student		
	Facility	Cost/	Facility	Factor	Factor	Cost/	Cost/
	Acreage	Acre	Capacity	SFR	MFR	SFR	MFR
Elementary	10.00	\$ -	400	0.309	0.119	\$0	\$0
Middle	20.00	\$ -	600	0.127	0.059	\$0	\$0
High	40.00	\$ -	1,000	0.158	0.057	\$0	\$0
					TOTAL	\$0	\$0
School Construction Cost:							
((Facility Cost/Facility Capacity)xStudent Generation Factor)x(permanent/Total Sq Ft)							
				Student	Student		
	%Perm/	Facility	Facility	Factor	Factor	Cost/	Cost/
	Total Sq.Ft.	Cost	Capacity	SFR	MFR	SFR	MFR
Elementary	95.00%	\$ 10,377,922	339	0.309	0.119	\$8,987	\$3,461
Middle	95.00%		210	0.127	0.059	\$0	\$0
High	95.00%	\$ 7,581,451	176	0.096	0.039	\$3,929	\$1,596
					TOTAL	\$12,915	\$5,057
Temporary Facility Cost:							
((Facility Cost/Facility Capacity)xStudent Generation Factor)x(Temporary/Total Square Feet)							
				Student	Student	Cost/	Cost/
	%Temp/	Facility	Facility	Factor	Factor	SFR	MFR
	Total Sq.Ft.	Cost	Size	SFR	MFR		
Elementary	5.00%	\$ 250,000	25	0.309	0.119	\$155	\$60
Middle	5.00%	\$ -	0	0.127	0.059	\$0	\$0
High	5.00%	\$ -	0	0.096	0.039	\$0	\$0
						\$155	\$60
State Matching Credit:							
Boeckh Index X SPI Square Footage X District Match % X Student Factor							
				Student	Student		
	Boeckh	SPI	District	Factor	Factor	Cost/	Cost/
	Index	Footage	Match %	SFR	MFR	SFR	MFR
Elementary	\$ 206.76	90	52.24%	0.309	0.119	\$3,004	\$1,157
Middle	\$ 206.76	108	0.00%	0.127	0.059	\$0	\$0
High	\$ 206.76	130	0.00%	0.096	0.039	\$0	\$0
						\$3,004	\$1,157
Tax Payment Credit:						SFR	MFR
Average Assessed Value						\$298,580	\$77,512
Capital Bond Interest Rate						3.71%	3.71%
Net Present Value of Average Dwelling						\$2,457,095	\$637,867
Years Amortized						10	10
Property Tax Levy Rate						\$1.5600	\$1.5600
	Present Value of Revenue Stream					\$3,833	\$995
	Fee Summary:			Single	Multi-		
				Family	Family		
	Site Acqisition Costs			\$0	\$0		
	Permanent Facility Cost			\$12,915	\$5,057		
	Temporary Facility Cost			\$155	\$60		
	State Match Credit			(\$3,004)	(\$1,157)		
	Tax Payment Credit			(\$3,833)	(\$995)		
	FEE (AS CALCULATED)			\$6,233	\$2,964		
	FEE (AS DISCOUNTED 15%)			\$5,298	\$2,520		



RESOLUTION 552
CAPITAL FACILITIES PLAN 2017-2022

WHEREAS, the Olympia School District No. 111 (the "District") is responsible for providing public educational services at the elementary, middle and high school levels to students now residing or who will reside in the District, and;

WHEREAS, new residential developments have major impacts on the public school facilities in the District, and;

WHEREAS, the District is often unable to fund and construct permanent school facilities to keep pace with the rate residential developments are constructed, and;

WHEREAS, the intent of the Legislature in enacting the Growth Management Act (the "GMA") is to ensure that adequate facilities are available to serve new growth and development, and;

WHEREAS, the GMA authorizes impact fees in order to provide an additional source of revenue for financing public facilities, and;

WHEREAS, the GMA authorizes counties, cities and towns to impose school impact fees on behalf of school districts, and;

WHEREAS, the District desires to cooperate with the cities of Olympia and Tumwater (the "cities") and with Thurston County in the implementation of the GMA and in the assessment and collection of school impact fees, and;

WHEREAS, the GMA requires impact fees to be imposed through established procedures and criteria, and;

WHEREAS, the GMA requires a schedule of fees for each type of development activity and requires that the schedule be based upon a formula or other method of calculating such impact fees, and;

WHEREAS, the GMA permits local jurisdictions to provide for an exemption from the payment of impact fees for low-income housing and other development activities with broad public purposes; and

WHEREAS, the Board of Directors supports such an exemption for low-income housing located within the District; and

WHEREAS, the District has studied the need for additional school facilities to serve new developments and has developed a Capital Facilities Plan, and;

WHEREAS, the District has reviewed the cost of providing school facilities and evaluated the need for new revenues to finance additional facilities, and;

WHEREAS, the District has developed, after extensive study and analysis, a methodology for calculating school impact fees, and;

Resolution No. 552
Capital Facilities Plan 2017-2022
Page Two

WHEREAS, the results of the study are set forth in the *Olympia School District Capital Facilities Plan (the "CFP") 2017-2022*, and;

WHEREAS, the CFP provides a schedule of fees for each type of development activity in compliance with the GMA;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Olympia School District No. 111, Thurston County, Washington, as follows:

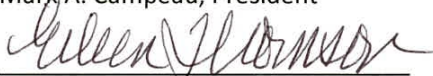
1. That the Board of Directors of the Olympia School District No. 111, hereby adopts the *Olympia School District Capital Facilities Plan 2017-2022*, which sets forth, among other components, the need for district capital projects, the cost of providing school facilities, the need for new revenues to finance additional facilities, the methodology for calculating school impact fees, and a schedule of fees for each type of development activity as required by the GMA; and,
2. That the Board of Directors of the Olympia School District No. 111 requests the cities of Olympia and Tumwater, and Thurston County, to adopt the CFP as the basis for imposing school impact fees within the cities of Olympia and Tumwater, and in Thurston County; and,
3. That the Board of Directors of the Olympia School District No. 111 requests the cities of Olympia and Tumwater to provide for an exemption from the payment of school impact fees for low-income housing, and that Thurston County include such an exemption in a County ordinance adopting school impact fees.

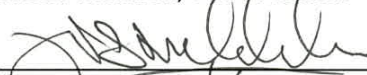
ADOPTED by the Board of Directors of the Olympia School District No. 111, Thurston County, Washington, at an open public meeting thereof, notice of which was given as required by law, held the 1st day of August, 2016, the following Directors being present and voting therefore:

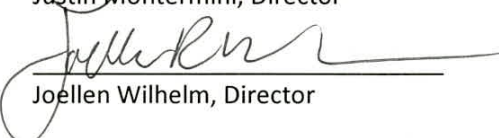
OLYMPIA SCHOOL DISTRICT NO. 111

A municipal corporation of the State of Washington


Mark A. Campeau, President


Eileen Thomson, Vice President


Justin Montermini, Director


Joellen Wilhelm, Director


Frank L. Wilson, Director

Attest:


Dominic G. Cvitanich, Secretary



Communication-Achievement-Professional Growth-Safety

DETERMINATION OF NONSIGNIFICANCE

Issued with a 14 day comment and appeals period

Description of Proposal:

This threshold determination analyzes the environmental impacts associated with the following actions, which are so closely related to each other that they are in effect a single course of action:

1. The adoption of the Olympia School District's Capital Facilities Plan 2017-2022 by the Olympia School District No. 111 for the purposes of planning for the facilities needs of the District;
2. The amendment of the Comprehensive Plans of Thurston County, and the Plans of the Cities of Tumwater and Olympia to include the Olympia School District's Capital Facilities Plan 2017-2022 as part of the Capital Facilities Element of these jurisdictions' Comprehensive Plans; and

Proponent: Olympia School District No. 111

Location of the Proposal:

The Olympia School District includes an area of approximately 80 square miles. The City of Olympia and parts of the City of Tumwater and parts of unincorporated Thurston County fall within the District's boundaries.

Lead Agency:

Olympia School District No. 111

The lead agency for this proposal has determined that the proposal does not have a probable significant adverse environmental impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after a review of the completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

This Determination of Nonsignificance (DNS) is issued under WAC 197-11-340(2). The lead agency will not act on this proposal for 14 days from the date of issue. Comments must be submitted before 12:01 p.m., July 27, 2016. The responsible official will reconsider the DNS based on timely comments and may retain, modify, or, if significant adverse impacts are likely, withdraw the DNS. If the DNS is retained, it will be final after the expiration of the comment deadline.

Responsible Official: Ms. Jennifer Priddy,
Assistant Superintendent
Olympia School District No. 111

Telephone: (360) 596-6120

Address: 1113 Legion Way S.E.
Olympia School District, Room 210
Olympia, WA 98501

You may appeal this determination in writing before 12:01 p.m., July 27, 2016, to Ms. Jennifer Priddy, Assistant Superintendent, Olympia School District No. 111, 1113 Legion Way S.E., Olympia, WA, 98501.

Date of Issue: July 7, 2016
Date Published: July 14, 2016

WAC 197-11-960 - Environmental checklist.**ENVIRONMENTAL CHECKLIST – OLYMPIA SCHOOL DISTRICT - CAPITAL FACILITIES PLAN 2017-2022*****Purpose of checklist:***

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for Non-project proposals:

Complete this checklist for Non-project proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS (part D).

For Non-project actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

The adoption of the Olympia School District's (OSD) 2017-2022 Capital Facilities Plan (CFP) for the purposes of planning for the District's facility needs. The City of Olympia and the City of Tumwater will incorporate the District's CFP into their Comprehensive Plans. Thurston County will also incorporate this Plan into the County's Comprehensive Plan. A copy of the District's CFP is available for review in the District's offices.

2. Name of applicant: **Olympia School District No. 111**

3. Address and phone number of applicant and contact person:
Jennifer Priddy, Assistant Superintendent
Olympia School District
1113 Legion Way SE
Olympia, WA 98501

4. Date checklist prepared: **July 7, 2016**

5. Agency requesting checklist: **Olympia School District is Lead Agency**

6. Proposed timing or schedule (including phasing, if applicable):

The CFP is scheduled to be adopted by the District on November 2, 2015. After adoption, the District will forward the CFP to the City of Olympia and the City of Tumwater for inclusion in the Comprehensive Plans for these jurisdictions. The District will also forward the CFP to Thurston County for inclusion in the County's Comprehensive Plan. The District will continue to update the CFP annually. The projects included in the CFP have been or will be subject to project-level environmental review when appropriate.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

The CFP sets forth the capital improvement projects that the District plans to implement over the next six years. Some of these plans will be dependent upon the passage of a construction bond proposal to be presented to voters for the February 2016 election. The construction projects proposed include the construction of multiple new classrooms (mini-buildings) district-wide to reduce reliance on the use of portables, and implement state policy to reduce class sizes; modernization and renovation of Centennial, Roosevelt, and McLane Elementary Schools, including construction of an auxiliary gym at Centennial Elementary School; modernization and renovations of portions of the school, including windows, roofing, and exterior siding, and partial flooring and finishes at Capital High School; construction of a theater/performance center at Capital High School; construction of a building of approximately 22 classrooms to reduce reliance on portables and respond to enrollment growth at Olympia High School; renovation and modernization of the Knox Administrative Building for expanded enrollment and/or additional educational uses or programming at Avanti High School; upgrade and improve heating, ventilation and finishes for the Administration; acquire and update land and/or real estate; acquire, construct and/or renovate athletic fields at ten schools for school and community use; install energy saving equipment and/or improve heating and ventilation at thirteen sites; acquire, construct and install parking lots and paving at five schools; acquire, construct and install drainage and controls, and/or repair foundations at five schools/sites; acquire, construct and install electrical service and new fire or intrusion alarm systems at four schools, security cameras at multiple schools, access controls at multiple schools and perimeter fencing at five schools; acquire, construct and install roofing at three schools, install roof tie-off safety equipment at multiple sites, and caulk and/or paint and renovate siding at four sites; acquire and replace gutter systems at two schools; acquire, construct and install systems to control access to schools; acquire, construct and install interior and classroom capital improvements at twelve sites; acquire, construct and install upgraded wiring and electrical systems at two sites; provide for emerging emergency repairs; decommission and/or demolish one building; and acquire, construct and equip portables as necessary to construct and renovate schools and respond to capacity needs.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

The projects included in the CFP have undergone or will undergo additional environmental review, when appropriate, as they are developed.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known of.

10. List any government approvals or permits that will be needed for your proposal, if known.

The District anticipates that the City of Olympia and the City of Tumwater will adopt the CFP into the Comprehensive Plans for these jurisdictions. Thurston County will also adopt the CFP into its Comprehensive Plan.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

This is a non-project action. This proposal involves the adoption of the OSD CFP 2017-2022 for the purpose of planning the District's facility needs. The District's CFP will be incorporated into the Comprehensive Plans of the City of Olympia and the City of Tumwater. Thurston County will also incorporate the CFP into its Comprehensive Plan. The projects included in the CFP have been or will be subject to project-level environmental review when appropriate. A copy of the CFP may be viewed at the District's offices.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The CFP will affect the OSD. The District includes an area of approximately 80 square miles. The City of Olympia and parts of the City of Tumwater and unincorporated Thurston County fall within the District's boundaries. A detailed map of the District's boundaries can be viewed at the District's offices.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.

The OSD is comprised of a variety of topographic land forms and gradients. Specific topographic characteristics of the sites at which the projects included in the CFP are located have been or will be identified during project-level environmental review when appropriate.

b. What is the steepest slope on the site (approximate percent slope)?

Specific slope characteristics at the sites of the projects included in the CFP have been or will be identified during project-level environmental review.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Specific soil types found at the sites of the projects included in the CFP have been or will be identified during project-level environmental review when appropriate.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Unstable soils may exist within the OSD. Specific soil limitations on individual project sites have been or will be identified at the time of project-level environmental review when appropriate.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation and grading proposed. Indicate source of fill.

Individual projects included in the CFP have been or will be subject, when appropriate, to project-level environmental review and local approval at the time of proposal. Proposed grading projects, as well as the purpose, type, quantity, and source of any fill materials to be used have been or will be identified at that time.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

It is possible that erosion could occur as a result of the construction projects currently proposed in the CFP. The erosion impacts of the individual projects have been or will be evaluated on a site-specific basis at the time of project-level environmental review when appropriate. Individual projects have been or will be subject to local approval processes.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The construction projects included in the CFP have required or will require the construction of impervious surfaces. The extent of any impervious cover constructed will vary with each project included in the CFP. This issue has been or will be addressed during project-level environmental review when appropriate.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The erosion potential of the projects included in the CFP and appropriate control measures have been or will be addressed during project-level environmental review when appropriate. Relevant erosion reduction and control requirements have been or will be met.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Various emissions, many construction-related, may result from the individual projects included in the CFP. The air-quality impacts of each project have been or will be evaluated during project-level environmental review when appropriate. Please see the Supplemental Sheet for Non-project Actions.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Any off-site sources of emissions or odor that may affect the individual projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The individual projects included in the CFP have been or will be subject to project-level environmental review and relevant local approval processes when appropriate. The District has been or will be required to comply with all applicable air regulations and air permit requirements. Proposed measures specific to the individual projects included in the CFP have been or will be addressed during project-level environmental review when appropriate. Please see the Supplemental Sheet for Non-project Actions.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If

appropriate, state what stream or river it flows into.

There is a network of surface water bodies within the OSD. The surface water bodies that are in the immediate vicinity of the projects included in the CFP have been or will be identified during project level environmental review when appropriate. When necessary, the surface water regimes and flow patterns have been or will be researched and incorporated into the designs of the individual projects.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The projects included in the CFP may require work near the surface waters located within the OSD. Applicable local approval requirements have been or will be satisfied.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Information with respect to the placement or removal of fill and dredge material as a component of the projects included in the CFP has been or will be provided during project-level environmental review when appropriate. Applicable local regulations have been or will be satisfied.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Any surface water withdrawals or diversions required in connection with the projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Each project included in the CFP, if located in a floodplain area, has been or will be required to meet applicable local regulations for flood areas.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Specific information regarding the discharge of waste materials that may be required as a result of the projects included in the CFP has been or will be provided during project-level environmental review when appropriate. Please see the Supplemental Sheet for Non-project Actions.

b. Ground:

- 1) Will ground water be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Individual projects included in the CFP may impact groundwater resources. The impact of the individual projects included in the CFP on groundwater resources has been or will be addressed during project-level environmental review when appropriate. Each project has been or will be subject to applicable local regulations. Please see the Supplemental Sheet for Non-project Actions.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural;

etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The discharges of waste material that may take place in connection with the projects included within the CFP have been or will be addressed during project-level environment review.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Individual projects included in the CFP may have stormwater runoff consequences. Specific information regarding the stormwater impacts of each project has been or will be provided during project-level environmental review when appropriate. Each project has been or will be subject to applicable local stormwater regulations.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

The projects included in the CFP may result in the discharge of waste materials into ground or surface waters. The specific impacts of each project on ground and surface waters have been or will be identified during project-level environmental review when appropriate. Each project has been or will be subject to all applicable regulations regarding the discharge of waste materials into ground and surface waters. Please see the Supplemental Sheet for Non-project Actions.

- 2) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Individual projects included in the CFP may alter or otherwise affect drainage patterns. Specific information regarding the alternation or impact to drainage patterns has been or will be provided during project-level environmental review when appropriate.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impact if any:

Specific measures to reduce or control runoff impacts associated with the projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

4. Plants

a. Check or circle types of vegetation found on the site:

- _____ deciduous tree: alder, maple, aspen, other
- _____ evergreen tree: fir, cedar, pine, other
- _____ shrubs
- _____ grass
- _____ pasture
- _____ crop or grain
- _____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- _____ water plants: water lily, eelgrass, milfoil, other
- _____ other types of vegetation

A variety of vegetative zones are located within the OSD. Inventories of the vegetation located on the sites of the projects proposed in the CFP have been or will be developed during project-level environmental review when appropriate.

- b. What kind and amount of vegetation will be removed or altered?

Some of the projects included in the CFP may require the removal or alteration of vegetation. The specific impacts on vegetation of the projects included in the CFP have been or will be identified during project-level environmental review when appropriate.

- c. List threatened or endangered species known to be on or near the site.

The specific impacts to these species from the individual projects included in the CFP have been or will be determined during project-level environmental review when appropriate.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Measures to preserve or enhance vegetation at the sites of the projects included in the CFP have been or will be identified during project-level environmental review when appropriate. Each project is or will be subject to applicable local landscaping requirements.

5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other:

An inventory of species that have been observed on or near the sites of the projects proposed in the CFP has been or will be developed during project-level environmental review when appropriate.

- b. List any threatened or endangered species known to be on or near the site.

Inventories of threatened or endangered species known to be on or near the sites of the projects included in the CFP have been or will be developed during project-level environmental review when appropriate.

- c. Is the site part of a migration route? If so, explain.

The impacts of the projects included in the CFP on migration routes have been or will be addressed during project-level environmental review when appropriate.

- d. Proposed measures to preserve or enhance wildlife, if any:

Appropriate measures to preserve or enhance wildlife have been or will be determined during project-level environmental review when appropriate.

- e. List any invasive animal species known to be on or near the site.

Inventories of invasive known to be on or near the sites of the projects included in the CFP have been or will be developed during project-level environmental review when appropriate.

6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The State Board of Education requires the completion of a life-cycle cost analysis of all heating, lighting, and insulation systems before it will permit specific school projects to proceed. The energy needs of the projects included in the CFP have been or will be determined at the time of specific engineering and site design planning when appropriate. Please see the Supplemental Sheet for Non-project Actions.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The impacts of the projects included in the CFP on the solar potential of adjacent projects have been or will be addressed during project-level environmental review when appropriate

- c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any:

Energy conservation measures proposed in connection with the projects included in the CFP have been or will be considered during project-level environmental review when appropriate.

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Please see the Supplemental Sheet for Non-project Actions.

- 1) Describe any known or possible contamination at the site.

Please see the Supplemental Sheet for Non-project Actions.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Please see the Supplemental Sheet for Non-project Actions.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Please see the Supplemental Sheet for Non-project Actions.

- 4) Describe special emergency services that might be required.

Please see the Supplemental Sheet for Non-project Actions.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

The projects included in the CFP comply or will comply with all current codes, standards, rules, and regulations.

Individual projects have been or will be subject to project-level environmental review and local approval at the time they are developed, when appropriate.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

A variety of noises from traffic, construction, residential, commercial, and industrial areas exists within the OSD. The specific noise sources that may affect the projects included in the CFP have been or will be identified during project-level environmental review when appropriate.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The projects included in the CFP may create normal construction noises that will exist on short-term bases only. The construction projects could increase traffic around the construction sites on a short-term basis. Because the construction of additional high school capacity will increase the capacity of the District's school facilities, this project may create a slight increase in traffic-related or operations-related noise on a long-term basis. Similarly, the placement of portables at school sites will increase the capacity of school facilities and may create a slight increase in traffic-related or operations-related noise. Neither of these potential increases is expected to be significant. Please see the Supplemental Sheet for Non-project Actions.

- 3) Proposed measures to reduce or control noise impacts, if any:

The projected noise impacts of the projects included in the CFP have been or will be evaluated and mitigated during project-level environmental review when appropriate. Each project is or will be subject to applicable local regulations.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect the current land uses on nearby or adjacent properties? If so, describe.

There are a variety of land uses within the OSD, including residential, commercial, industrial, institutional, utility, open space, recreational, etc.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest uses? .

The known sites for the projects included in the CFP have not been used recently for agriculture.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?
- c. Describe any structures on the site.

The structures located on the sites for the projects included in the CFP have been or will be identified and described during project-level environmental review when appropriate.

- d. Will any structures be demolished? If so, what?

The structures located on the sites for the projects included in the CFP have been or will be identified and described during project-level environmental review when appropriate.

- e. What is the current zoning classification of the site?

The sites that are covered under the CFP have a variety of zoning classifications under the applicable zoning

codes. Site-specific zoning information has been or will be identified during project-level environmental review when appropriate.

f. What is the current comprehensive plan designation of the site?

Inventories of the comprehensive plan designations for the sites of the projects included in the CFP have been or will be completed during project-level environmental review when appropriate.

g. If applicable, what is the current shoreline master program designation of the site?

Shoreline master program designations of the sites of the projects included in the CFP have been or will be identified during project-level environmental review when appropriate.

h. Has any part of the site been classified as a critical area by the city or the county? If so, specify.

Any environmentally sensitive areas located on the sites of the projects included in the CFP have been or will be identified during project-level environmental review.

i. Approximately how many people would reside or work in the completed project?

The OSD currently serves over 9,000 full-time equivalent (FTE) students. Enrollment is expected to continue to increase over the next 20 years. The District employs approximately 1,200 people.

j. Approximately how many people would the completed project displace?

Any displacement of people caused by the projects included in the CFP has been or will be evaluated during project-level environmental review when appropriate. However, it is not anticipated that the CFP, or any of the projects contained therein, will displace any people.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Individual projects included in the CFP have been or will be subject to project-level environmental review and local approval when appropriate. Proposed mitigating measures have been or will be developed at that time, when necessary.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The compatibility of the specific projects included in the CFP with existing uses and plans has been or will be assessed as part of the comprehensive planning process and during project-level environmental review when appropriate.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

The compatibility of the specific projects included in the CFP with existing uses and plans has been or will be assessed as part of the comprehensive planning process and during project-level environmental review when appropriate.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

No housing units would be provided in connection with the completion of the projects included in the CFP.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

It is not anticipated that the projects included in the CFP will eliminate any housing units. The impacts of the projects included in the CFP on existing housing have been or will be evaluated during project-level environmental review when appropriate.

- c. Proposed measures to reduce or control housing impacts, if any:

Measures to reduce or control any housing impacts caused by the projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The aesthetic impacts of the projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

- b. What views in the immediate vicinity would be altered or obstructed?

The aesthetic impacts of the projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

Appropriate measures to reduce or control the aesthetic impacts of the projects included in the CFP have been or will be determined on a project-level basis when appropriate.

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The light or glare impacts of the projects included in the CFP have been or will be addressed during project-level environmental review, when appropriate.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

The light or glare impacts of the projects included in the CFP have been or will be addressed during project level environmental review when appropriate.

- c. What existing off-site sources of light or glare may affect your proposal?

Off-site sources of light or glare that may affect the projects included in the CFP have been or will be evaluated during project-level environmental review when appropriate.

- d. Proposed measures to reduce or control light and glare impacts, if any:

Proposed measures to mitigate light and glare impacts have been or will be addressed during project level environmental review when appropriate.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

There are a variety of formal and informal recreational facilities within the OSD.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

The recreational impacts of the projects included in the CFP have been or will be addressed during project-level environmental review when appropriate. The projects included in the CFP, including proposed new school facilities, may enhance recreational opportunities and uses.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Adverse recreational effects of the projects included in the CFP have been or will be subject to mitigation during project-level environmental review when appropriate. School facilities usually provide recreational facilities to the community in the form of play fields and gymnasiums.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

There are no known places or objects listed on, or proposed for, such registers for the project sites included in the CFP. The existence of historic and cultural resources on or next to the sites has been or will be addressed in detail during project-level environmental review when appropriate.

- b. Generally are there any landmarks, features, or other evidence of Indian or historic use of occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

An inventory of historical sites at or near the sites of the projects included in the CFP has been or will be developed during project-level environmental review when appropriate.

- c. Describe the methods used to assess the potential impact to cultural and historic resources on or near the project site.
Examples include consultation with tribes and the department of archeology and historic preservation, archeological surveys, historic maps, GIS data, ect.
- d. Proposed measures to avoid, minimize or compensate for the loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Appropriate measures will be proposed on a project-level basis when appropriate.

14. Transportation

- a. Identify public streets and highways serving the site, or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

The impact on public streets and highways of the individual projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The relationship between the specific projects included in the CFP and public transit has been or will be addressed during project-level environmental review when appropriate.

- c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?

Inventories of parking spaces located at the sites of the projects included in the CFP and the impacts of specific projects on parking availability have been or will be conducted during project-level environmental review when appropriate.

- d. Will the proposal require any new improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

The need for new streets or roads, or improvements to existing streets and roads has been or will be addressed during project-level environmental review when appropriate.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Use of water, rail, or air transportation has been or will be addressed during project-level environmental review when appropriate.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

The traffic impacts of the projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

- g. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The impact of the transportation of agricultural and forest products in relation to projects included in the CFP have been or will be addressed during project-level environmental review when appropriate.

- h. Proposed measures to reduce or control transportation impacts, if any:

The mitigation of traffic impacts associated with the projects included in the CFP has been or will be addressed during project-level environmental review when appropriate.

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

The District does not anticipate that the projects identified in the CFP will significantly increase the need for public services.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

New school facilities have been or will be built with automatic security systems, fire alarms, smoke alarms, heat sensors, and sprinkler systems.

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Electricity, natural gas, water, refuse service, telephone, and sanitary sewer utilities are available at the known sites of the projects included in the CFP. The types of utilities available at specific project sites have been or will be addressed in more detail during project-level environmental review when appropriate.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Utility revisions and construction needs have been or will be identified during project-level environmental review when appropriate.

- d. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature _____

Date Submitted _____

D.SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

To the extent the CFP makes it more likely that school facilities, as well as several small works projects, will be constructed, some of these environmental impacts will be more likely. Additional impermeable surfaces, such as roofs, access roads, and sidewalks could increase stormwater runoff, which could enter surface or ground waters. Heating systems, emergency generators, and other school equipment that is installed pursuant to the CFP could result in air emissions. The projects included in the CFP should not require the production, storage, or

release of toxic or hazardous substances, with the possible exception of the storage of diesel fuel or gasoline for emergency generating equipment. The District does not anticipate a significant increase in the production of noise from its facilities, although the projects included in the CFP will increase the District's student capacities.

Proposed measures to avoid or reduce such increases are:

Proposed measures to mitigate any such increases described above have been or will be addressed during project-level environmental review when appropriate. Stormwater detention and runoff will meet applicable County and/or City requirements and may be subject to National Pollutant Discharge Elimination System (NPDES) permitting requirements. Discharges to air will meet applicable air pollution control requirements. Fuel oil will be stored in accordance with local and state requirements.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The CFP itself will have no impact on these elements of the environment. The projects included in the CFP may require clearing plants off of the project sites and a loss to animal habitat. These impacts have been or will be addressed in more detail during project-level environmental review when appropriate. The projects included in the CFP are not likely to generate significant impacts on fish or marine life.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Specific measures to protect and conserve plants, animals, and fish cannot be identified at this time. Specific mitigation proposals will be identified, however, during project-level environmental review when appropriate.

3. How would the proposal be likely to deplete energy or natural resources?

The construction of the projects included in the CFP will require the consumption of energy.

Proposed measures to protect or conserve energy and natural resources are:

The projects included in the CFP will be constructed in accordance with applicable energy efficiency standards.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The CFP and individual projects contained therein should have no impact on these resources.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Appropriate measures have been or will be proposed during project-level environmental review when appropriate. Updates of the CFP will be coordinated with Thurston County and the Cities of Tumwater and Olympia as part of the Growth Management Act process, one of the purposes of which is to protect environmentally sensitive areas. To the extent the District's facilities planning process is part of the overall growth management planning process, these resources are more likely to be protected.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The CFP will not have any impact on land or shoreline use that is incompatible with existing comprehensive plans, land use codes, or shoreline management plans. The District does not anticipate that the CFP or the projects contained therein will directly affect land and shoreline uses in the area served by the District.

Proposed measures to avoid or reduce shoreline and land use impacts are:

No measures to avoid or reduce land use impacts resulting from the CFP or the projects contained therein are proposed at this time.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The construction projects included in the CFP may create temporary increases in the District's need for public services and utilities. The new school facilities will increase the District's demands on transportation and utilities. These increases are not expected to be significant.

Proposed measures to reduce or respond to such demand(s) are:

No measures to reduce or respond to such demands are proposed at this time.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The CFP will not conflict with any laws or requirements for the protection of the environment.