

# S-24 Sewer System Pipeline Repairs and Replacement

Category: **High Quality Built & Natural Env** Status: **Ongoing**  
 Department: **Utilities** Location: **Sewer Service Area**

## Programmed Expenditures

Programmed Expenditures	Appropriated To Date	FY 2021 Budget	FY 2022 Budget	FY 2023 Budget	FY 2024 Budget	FY 2025 Budget	FY 2026 Budget	FY 2027 Budget
51,255,785	25,545,785	2,720,000	3,310,000	3,480,000	3,310,000	3,180,000	4,540,000	5,170,000

## Description and Scope

This program funds major repairs to sewer pipes where there is a cost-effective solution to extend the pipe's service life. Most defects are identified from the Utility's infrastructure condition assessment (video) program. Pipes are prioritized for repair based on risk of failure (likelihood and consequence), failure history, and to coordinate with other construction such as planned street overlays, which reduces restoration costs.

## Rationale

Sewer infrastructure rehabilitation and replacement is based on asset criticality and business risk, per industry best practices. In the short term, this program reduces the likelihood of catastrophic system failures, damage claims, and sharp rate increases to react to failures rather than proactively managing the system. In the long term, timely replacement or repair of wastewater facilities keeps customer rates as low as practical by managing the system at the lowest life-cycle cost, while maintaining service levels and meeting regulatory requirements.

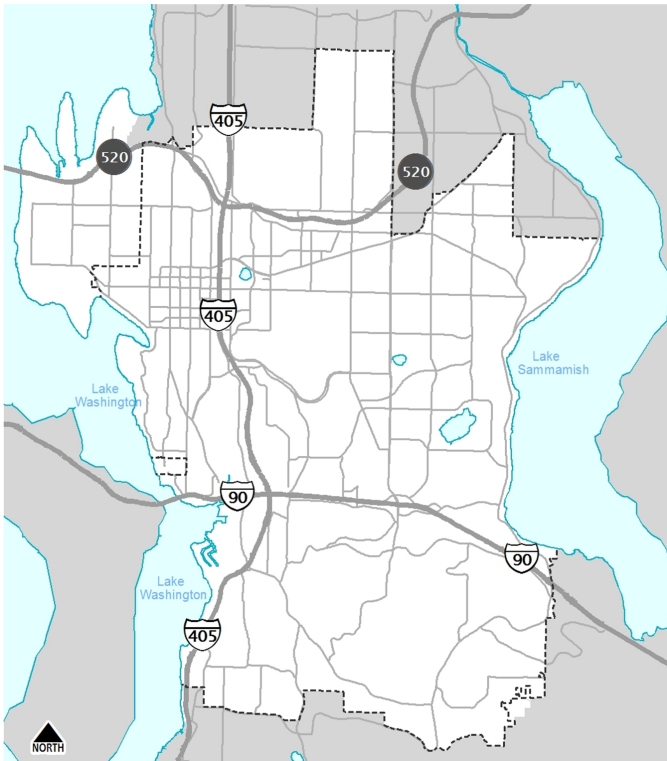
## Environmental Impacts

This program will have no significant impact on operating revenues and/or expenditures.

## Operating Budget Impacts

Estimated Annual M&O Costs: 0

## Project Map



## Schedule of Activities

Project Activities	From - To	Amount
Project Costs	Ongoing	51,255,785

**Total Budgetary Cost Estimate:** 51,255,785

## Means of Financing

Funding Source	Amount
Utility Rates/Fees	51,255,785

**Total Programmed Funding:** 51,255,785  
**Future Funding Requirements:** 0

## Comments

**W-16 Small Diameter Water Main Replacement**

Attachment B

Category: **High Quality Built & Natural Env** Status: **Ongoing**  
 Department: **Utilities** Location: **Water Service Area**

**Programmed Expenditures**

<b>Programmed Expenditures</b>	<b>Appropriated To Date</b>	<b>FY 2021 Budget</b>	<b>FY 2022 Budget</b>	<b>FY 2023 Budget</b>	<b>FY 2024 Budget</b>	<b>FY 2025 Budget</b>	<b>FY 2026 Budget</b>	<b>FY 2027 Budget</b>
<b>189,686,885</b>	<b>108,396,885</b>	<b>6,320,000</b>	<b>12,820,000</b>	<b>9,860,000</b>	<b>12,680,000</b>	<b>12,730,000</b>	<b>12,770,000</b>	<b>14,110,000</b>

**Description and Scope**

This program focuses primarily on replacing small diameter asbestos cement (AC) pipe that has reached its useful life. A secondary benefit is increasing the emergency fireflow available to neighborhoods. This investment will ramp up water pipeline replacement to 5 miles/year by 2018, and then be adjusted with inflation to maintain the 5 miles per year replacement rate. At that rate, water pipe will need to last on average 100-125 years. Pipes are selected for replacement based on risk of failure (likelihood and consequence), failure history, and coordination with other construction, such as planned street overlays (which reduce restoration costs). Project costs include a 2.8 percent cost increase reflecting actual bid experience for pipe replacement.

**Rationale**

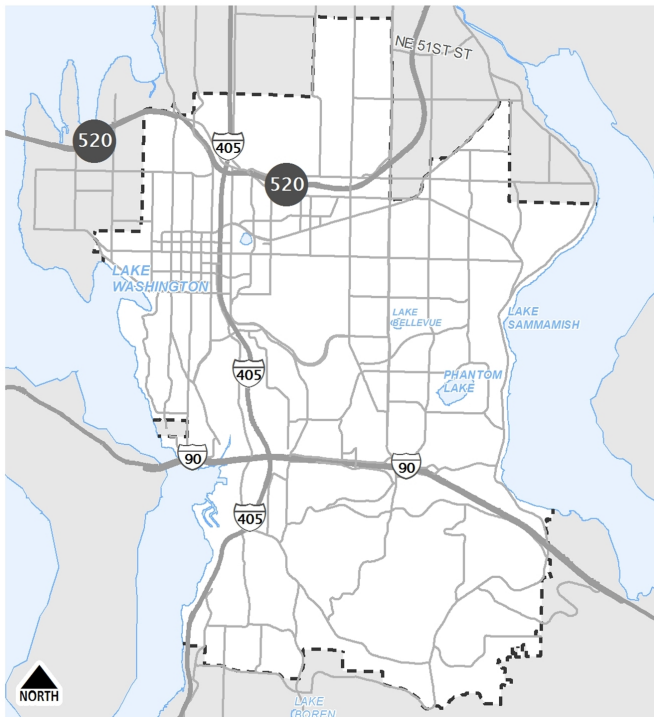
In the short term, this program reduces the likelihood of catastrophic system failures, unplanned service interruptions, damage claims to the city, and sharp rate increases to react to system failures rather than proactively managing the system. In the long term, timely replacement or repair of water system assets keeps customer rates as low as practical by managing the system at the least life-cycle cost while maintaining target service levels and meeting regulatory requirements.

**Environmental Impacts**

This program will have no significant impact on operating revenues and/or expenditures.

**Operating Budget Impacts**

Estimated Annual M&O Costs: 0

**Project Map****Schedule of Activities**

<b>Project Activities</b>	<b>From - To</b>	<b>Amount</b>
Project Costs	Ongoing	189,686,885

**Total Budgetary Cost Estimate:** 189,686,885

**Means of Financing**

<b>Funding Source</b>	<b>Amount</b>
Utility Rates/Fees	189,686,885

**Total Programmed Funding:** 189,686,885  
**Future Funding Requirements:** 0

**Comments**

# PW-R-156 Smart Mobility Plan Implementation Program

Category: **Transportation and Mobility**  
 Department: **Transportation**

Status: **Ongoing**  
 Location: **Citywide**

## Programmed Expenditures

Programmed Expenditures	Appropriated To Date	FY 2021 Budget	FY 2022 Budget	FY 2023 Budget	FY 2024 Budget	FY 2025 Budget	FY 2026 Budget	FY 2027 Budget
6,481,004	3,103,002	478,002	453,000	453,000	453,000	453,000	537,000	551,000

## Description and Scope

This program will systematically implement the recommendations of the City's Smart Mobility Plan completed in 2018. The effort matches City's effort to deliver a Smart Transportation system by moving people smarter, safer and faster. The funding provides the resources to plan and implement Smart Mobility tech. in 5 areas: shared-user mobility; data management & integration; autonomous, connected electric vehicles; real-time traveler information & traffic management. Projects will be selected to provide cost effective measures to reduce traffic congestion, improve safety, limit impact to neighborhoods from cut-through traffic and increase the availability of real time traffic information to users of the transportation systems. Possible projects include, but are not limited to, additional traffic cameras for motorist information and investigation of collisions; neighborhood radar speed feedback signs; flood location monitoring; real time snowplowing information, real-time traveler information enhancements; network communication expansion; system performance measure, roadway weather stations; curbside & parking management; emergency vehicle preempt upgrades; and street light monitoring systems. Network management is a significant function of this program. Repairs, upgrades & new installations are partially funded through R-156. This fiber optic network supports the communication to every traffic signal in the city and every facility owned by the city of Bellevue. Public WiFi and WiFi installed for low income housing is also run on this network. In addition, many of the fiber cables are shared with a consortium of users which increases the importance of maintaining the functionality of this network.

## Rationale

This program is a key strategy in transitioning from a transportation system focused on the drive-alone trip, to one that focuses on actively managing the transportation system to systematically improve traffic capacity, enhance and promote multi-modal transportation and safety, effectively address emergency management and events, promote neighborhood safety, and providing improved motorist information for better transportation decision making by users. Funded projects provide cost-effective solutions to help reduce traffic congestion and increase the capacity of the transportation system through efficiency gains and the provision of an alternative to costly roadway and intersection expansion projects. With the completion of the SCAT adaptive signal control system deployment, this program is crucial for funding on-going expenditures for support, system maintenance, network communication, software licensing and performance measure.

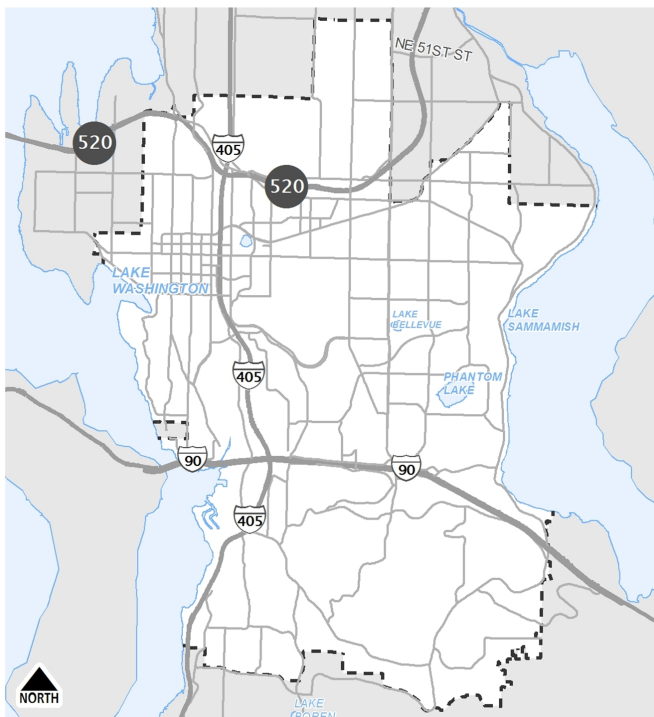
## Environmental Impacts

This program funds projects that are primarily safety oriented and implemented on previously improved rights of way, so environmental issues are minimal and are addressed as appropriate on a location-by-location basis. The efforts will support lower vehicle fuel usage, lower electrical energy production, reducing carbon emissions and better transportation system efficiency.

## Operating Budget Impacts

Operating costs for this program will determined on a project specific basis as required.

## Project Map



## Schedule of Activities

Project Activities	From - To	Amount
Project Costs	Ongoing	6,481,004

**Total Budgetary Cost Estimate:** 6,481,004

## Means of Financing

Funding Source	Amount
Federal Grants	25,002
General Taxes & LTGO Bond Proceeds	1,196,944
Real Estate Excise Tax	4,865,058
State Grants	394,000

**Total Programmed Funding:** 6,481,004  
**Future Funding Requirements:** 0