

PW-R-155 Traffic Computer System Upgrade

Category: **Improved Mobility**
 Department: **Transportation**

Status: **Existing**
 Location: **Citywide**

Programmed Expenditures

Programmed Expenditures	Appropriated To Date	FY 2015 Budget	FY 2016 Budget	FY 2017 Budget	FY 2018 Budget	FY 2019 Budget	FY 2020 Budget	FY 2021 Budget
5,693,019	5,143,019	550,000	-	-	-	-	-	-

Description and Scope

This project replaces the City's traffic signal computer system with the Sydney Coordinated Adaptive Traffic System (SCATS) to increase system reliability, support multi-modal mobility, and to systematically increase the efficiency of our transportation system. The replacement of the previous computer system software and hardware, located at the City's Traffic Management Center, and upgrading of field communication systems has been completed. Signal equipment at individual intersections and along corridors citywide are being placed onto the new SCATS system in phases. Phases 1 through 3 of the project are completed, and Phases 4 and 5 are scheduled for completion in 2015, which will complete the entire project.

Rationale

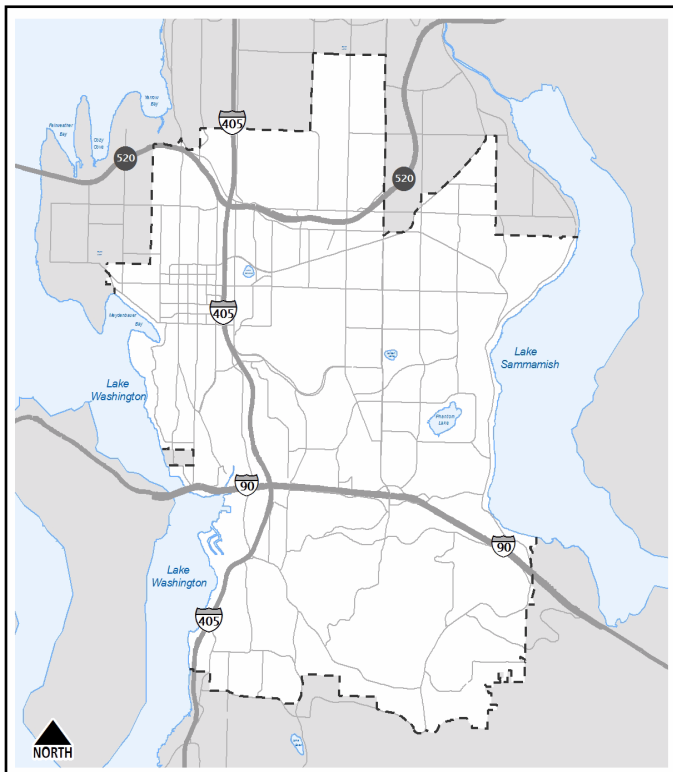
Arterial street congestion and delay occur mostly at traffic signals, thus the more efficiently traffic signals work, the less delay and congestion experienced along the arterial. Replacement of the existing signal system with new "traffic adaptive" technology will allow signalized intersections to adjust their timing cycle by cycle instead of just a few times per day, increasing efficiency and incrementally reducing delays to motorists and pedestrians. This in turn will help derive more capacity out of the existing roadway network. The new SCATS traffic adaptive signal system is a key piece in the city's Intelligent Transportation Systems (ITS) plan, and replaces an old outdated, unsupported, and obsolete signal system.

Environmental Impacts

Implementation of this project primarily affects existing traffic signals and associated equipment on previously improved rights of way, so environmental issues are minimal and are addressed as appropriate on a location-by-location basis. Implementation of this project will support lower vehicle fuel usage and lower electrical energy production reducing carbon emissions.

Operating Budget Impacts

Operating costs impacts include annual maintenance contracts for the new signal system and annual Electronic Equipment Replacement Fund contributions for the addition or replacement of certain equipment such as Ethernet switches, traffic cameras and signal controllers.

Project Map**Schedule of Activities**

Project Activities	From - To	Amount
Project Costs	2007 - 2015	5,693,019

Total Budgetary Cost Estimate: 5,693,019

Means of Financing

Funding Source	Amount
Federal Grants	631,638
General Taxes	3,602,046
General Taxes & LTGO Bond Proceeds	550,000
Interlocal Contributions	188,288
Miscellaneous Revenue	192
Real Estate Excise Tax	720,855

Total Programmed Funding: 5,693,019

Future Funding Requirements:

Comments