



Memorandum

Date: 6/20/2023
Meeting of: City Council

File No. AM No. 23-072
Type: Consent Item

TO: Members of the City Council
FROM: Mayor Angela Birney
DEPARTMENT DIRECTOR CONTACT(S):

Public Works	Aaron Bert	Public Works Director
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DEPARTMENT STAFF:

Public Works	Hidemi Tsuru	Senior Engineer
Public Works	Patty Criddle	Engineering Supervisor
Public Works	Paul Cho	Engineering Manager

TITLE:

Approval of the Puget Sound Regional Council (PSRC) Federal Grant, in the Amount of \$865,000, for the Adaptive Signals Downtown Project and to Add the Project to the 2023-2024 CIP

OVERVIEW STATEMENT:

The Adaptive Signals Downtown project received a grant from the Puget Sound Regional Council (PSRC) in the amount of \$865,000. Council acceptance of this grant is required. The project is not included in the 2023-2024 CIP and Public Works is requesting Council add the project to the approved CIP.

This Adaptive Signals Downtown project will install new traffic control systems in downtown, capable of adjusting signal timings, and operations in real-time. This will reduce travel times through downtown and reduce wait times for pedestrians. With the arrival of light-rail in Downtown Redmond, this updated signal system will be key in responding to the change in traffic conditions expected through downtown.

Additional Background Information/Description of Proposal Attached

REQUESTED ACTION:

Receive Information Provide Direction Approve

REQUEST RATIONALE:

- **Relevant Plans/Policies:**
Transportation Master Plan
- **Required:**
Council approval required for grant acceptance per RCW 35A.11.040
- **Council Request:**

N/A

- **Other Key Facts:**

The project was previously an approved project funded by the City in the amount of \$1,000,000. The project completed preliminary engineering in November 2020. Council decided not to move forward with the project in the 2021-2022 budget to fund other priorities.

Adaptive signal control is a technology that adjusts traffic signal timing based on real-time traffic data, aiming to optimize traffic flow and reduce congestion. It is especially effective for roads that experience variable and unpredictable traffic demand, where conventional signal systems cannot keep up with the changing conditions. Adaptive signal control can also benefit pedestrians and active transportation modes by reducing delays and improving service. Adaptive signal control can also respond to changes in traffic patterns caused by new work commute options and the opening of transit stations, which can affect the demand for different directions and movements at intersections.

OUTCOMES:

The proposed adaptive traffic signal control system will measure real-time traffic fluctuations and automatically adjust signal timings more efficiently than our current system. Other agencies have demonstrated substantial delay reduction, especially when conditions change unexpectedly due to weather, lane closures, or surges in demand.

COMMUNITY/STAKEHOLDER OUTREACH AND INVOLVEMENT:

- **Timeline (previous or planned):**
N/A
- **Outreach Methods and Results:**
N/A
- **Feedback Summary:**
N/A

BUDGET IMPACT:

Total Cost:

Proposed:

2023-2024: \$1,000,000

Previous Costs:

2019-2020: \$79,779: Preliminary Engineering

2023: \$48,730 Design support using Division professional services funds

Approved in current biennial budget:

Yes

No

N/A

Budget Offer Number:

2019-2020 Approved Budget: \$1,000,000

2021-2022 Approved Budget: Not funded

2023-2024 Approved Budget: Seeking Council approval to add project to budget due to PSRC grant award

Budget Priority:
Vibrant and Connected

Other budget impacts or additional costs: Yes No N/A

If yes, explain:

N/A

Funding source(s):
City Business Tax Revenue: \$135,000
Puget Sound Regional Council (PSRC) Grant: \$865,000
Total Funding: \$1,000,000

Budget/Funding Constraints:
The obligation deadline for the grant is July 15, 2023.

Additional budget details attached

COUNCIL REVIEW:

Previous Contact(s)

Date	Meeting	Requested Action
8/18/2020	Business Meeting	Provide Direction

Proposed Upcoming Contact(s)

Date	Meeting	Requested Action
N/A	None proposed at this time	N/A

Time Constraints:
City Council grant acceptance is needed by June 20, 2023, to meet the grant obligation deadline of July 15, 2023.

ANTICIPATED RESULT IF NOT APPROVED:
The \$865,000 in Federal Grants would not be available for use if not approved.

ATTACHMENTS:
Attachment A: Project Area