Puget Sound Regional Council

Funding Application

Competition	Regional FHWA
Application Type	Corridors Serving Centers
Status	submitted
Submitted:	April 10th, 2022 1:53 PM
Prepopulated with screening form?	No

Project Information

1. **Project Title**
   Metro Route 36 Improvements
2. **Regional Transportation Plan ID**
   5073
3. **Sponsoring Agency**
   King County Metro
4. **Cosponsors**
   N/A
5. **Does the sponsoring agency have "Certification Acceptance" status from WSDOT?**
   Yes
6. **If not, which agency will serve as your CA sponsor?**
   N/A

Contact Information

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Project Description

1. **Project Scope**
   Design and construct transit speed, reliability and access improvements along Metro Route 36, an electric trolley bus route operating between Othello Link Light Rail Station and Downtown Seattle (12th Ave S and S Jackson St) via Beacon Hill.

   The proposed project includes preliminary design, final design, and construction of improvements such as transit signal priority, intersection/roadway modifications (bus- only lanes, signage, bus zone bulb-outs), bus stop consolidation and optimization, and other treatments. The project will also design and implement trolley Overhead Contact System (OCS) modifications as needed to accommodate the proposed improvements and maintain Route 36 operations. These OCS modifications include new infrastructure such as poles or switches in addition to shifting the contact wires. The project may also include design and construction of Real-Time Information Signs (RTIS) and ORCA fare card readers at bus zones to speed passenger boarding.

Proposed bus stop access upgrades include adding bus bulbs, improved lighting, high visibility crosswalks, and sidewalk and bike connection reconstruction adjacent to new bus stops or bus bulbs to improve customer access and safety. See Attachment 4 for a preliminary list of improvements.

Project outcomes:

- Travel time savings averaging 2-5 minutes per trip , improving Route 36 travel time by up to 10%.

- Increase ridership between 2-4% adding an estimated 200-400 new weekday riders or up to 80,000 new transit riders per year.

- Improve access and mobility for 19,528 people (2021 ESRI - US Census) living within ¼ mile of the route's bus stops, including historically dependent transit populations.

- Increase transit speed, reliability, safety, and access within the corridor, which has a higher proportion of Black and Indigenous people of color (BIPOC) than King County or the region, helping address social equity.

- Improve access to 10,560 jobs (2020 PSRC) within ¼ mile of the route's bus stops.

- Improve transit service connecting regional and local centers.

- Support adopted land use development and zoning goals for housing and employment growth; and

- Eliminate greenhouse gas emissions by approximately 12,000 kg CO2 and reduce an estimated 8,000 gallons annual fuel use from improved traffic operations and transit mode shift from single occupant vehicle (SOV) trips.

Metro will work in partnership with the City of Seattle to make these improvements in coordination with other planned and ongoing capital projects along the route. The project is expected to be substantially complete in 2026.

2. **Project Justification, Need, or Purpose**
   The project's purpose is to increase transit speed, reliability, and ridership on Route 36, and provide improved access to regional and local centers with major residential, employment, service, and educational facilities, and Sound Transit (ST) Link light rail stations. The route is one of Metro's highest ridership routes with 5,400 weekday daily boardings (Oct. 2021). However, Route 36 is one of Metro's least reliable in Seattle, with 40% of afternoon peak hour trips running late, resulting in slow bus speed and bus bunching which reduces actual service frequency.

   Project Needs:

   1) Reduce traffic congestion and improve transit service speed and reliability
   Traffic congestion and delay on Route 36 create a slow, unreliable transit experience for thousands of daily riders, presenting challenges in meeting the growing demand for transit service in the corridor. Some corridor sections suffer at LOS F, while others operate in free flow. As part of project development, segments were identified where buses travel less than 50% of the posted speed limit.

   2) Provide better service to designated regional and local centers
   Route 36 provides high-frequency service connecting the Seattle Downtown and First Hill/Capitol Hill Regional Growth Centers as well as Seattle's designated Beacon Hill and Othello Urban Villages. It connects to the Beacon Hill and Othello ST Link Stations, two Metro designated Transit Activity Centers. Route 36 also travels within ½ mile walking distance of Seattle's North Rainier Hub Urban Center and the Columbia City Residential Urban Village.

   3) Help meet Metro's commitment to support the growing region
   By 2050, PSRC forecasts an additional 1.8 million residents (5.8 million total) and 1.2 million jobs (3.4 million total) with the goal of locating 65% of the region's population growth and 75% of employment growth in regional centers and within walking distance of high-capacity transit. To meet these growth targets and goals, transit ridership is expected to more than double.

   4) Address the transportation and social equity needs within historically underserved communities
   Route 36 serves significant numbers of priority, transit dependent populations including BIPOC, low-income households, seniors, people with a disability, and households without access to a vehicle. The corridor is home to dense residential neighborhoods, employment clusters, consolidated medical and social services, shopping areas, restaurants, numerous parks and other destinations in dense use patterns and designs which support high-frequency transit service.

5) Improve air quality and reduce greenhouse gas emissions
Regional, King County, and City of Seattle air pollution and climate change goals, policies, and plans set reduction targets for air pollution, greenhouse gas emissions and climate change impacts. These documents prioritize transit investment strategies that improve community health outcomes, particularly within disproportionately impacted communities of color and lower income communities.

Project Location

1. **Project Location**
   Metro Route 36 corridor between the Othello LINK Light Rail Station and the intersection of 12th Ave. S and S. Jackson Street
2. **Please identify the county(ies) in which the project is located. (Select all that apply.)**
   King
3. **Crossroad/landmark nearest the beginning of the project**
   Othello LINK Light Rail Station: Martin Luther King Junior Way South and S. Othello Street
4. **Crossroad/landmark nearest the end of the project**
   Downtown Seattle/International District: 12th Avenue S. and S. Jackson Street
5. **Map and project graphics**
   Attachment_1.pdf

Plan Consistency

1. **Is the project specifically identified in a local comprehensive plan?**
   Yes
2. **If yes, please indicate the (1) plan name, (2) relevant section(s), and (3) page number where it can be found.**
   The project is consistent with the King County Comprehensive Plan and the King County Metro Strategic Plan for Public Transportation which is adopted by the King County Council and included in the King County Comprehensive Plan by reference. It is also included in King County Metro's METRO CONNECTS long-range plan. The project is recommended in the City of Seattle Transit Master Plan, adopted as part of the Seattle 2035 Comprehensive Plan which also recommends investments in support of high frequency transit service in the corridor.

   King County Comprehensive Plan (2020) goals -
   • T-101 The Strategic Plan for Public Transportation 2011-2021 and King County Metro Service Guidelines, or successor plans, shall guide the planning, development and implementation of the public transportation system and services operated by the King County Metro Transit Division. (p. 8-9)

   • T-103 In striving to meet the growing need for transportation services, King County shall seek to maximize the efficiency and effectiveness of its services, infrastructure and facilities. (p 8-9)

   • T-204 King County should support local and regional growth plans and policies by focusing transit services on centers and other areas of concentrated activity. (p. 8-13)
   Metro Strategic Plan for Public Transportation (2021) goals, objectives and strategies -

   • Goal: Provide fast, reliable, and integrated mobility services (SERVICE QUALITY).
   • Objective: Make improvements to enhance transit speed and reliability, and support jurisdictions in doing so.
   • Strategy: Improve speed and reliability consistent with Metro Connects. (p. 11)

   • Goal: Invest upstream and where needs are greatest (INVESTMENTS)
   • Objective: Invest in and measure the outcomes of services, programs, and improvements in geographic areas, at times of day, and within priority populations where there are unmet needs. Lead with racial justice.
   • Strategies: Prioritize service in geographic areas that have highly dense, transit-supportive development; a high proportion of priority populations; and limited midday and evening service. (p. 6)

   • Goal: Address the climate crisis and environmental justice (SUSTAINABILITY)
   • Objective: Reduce demand for SOV and high-emissions transportation modes and increase transit ridership.
   • Strategies: Prioritize investments that reduce greenhouse gas emissions (GHG), to include providing more frequent service and expanding service areas, as funding allows. (p. 6)

METRO CONNECTS (2021) -
Route 36 is part of a longer corridor (U. District - Othello - Beacon Hill) recommended as RapidRide Candidate service by 2050 highlighting the potential for speed and reliability, station and stop improvements, and transit access investment in the Route 36 corridor. (Figure 15 p.31)

The Seattle Transit Master Plan (2016) -
Adopted as part of the Seattle Comprehensive Plan. Route 36 is identified as part of Priority Bus Corridor 1 or PB1 (Othello – U-District via Beacon Ave and Broadway) recommended for capital investments including a series of transit speed, reliability and access improvements and specifically calls for transit signal priority, trolleybus wire modifications, bus bulbs, and station upgrades, as well as multimodal improvements intended to increase transit ridership on this designated priority corridor. (Figure 3-4 P. 3-7; Figure 3-9 p. Figure 3-10 p. 3-61; p. 3-60 through 3-64)

The Seattle 2035 Comprehensive Plan (2021) –
Recommends the Route 36 as part of a Priority Corridor for Transit Investment to help meet plan goals and policies. (Figures 4 and 5 on p. 80-81)

• Goal: TG 1 Ensure that transportation decisions, strategies, and investments support the City's overall growth strategy and are coordinated with this Plan's land use goals.
• Policy: T 1.1 Provide safe and reliable transportation facilities and services to promote and accommodate the growth this Plan anticipates in urban centers, urban villages, and manufacturing/industrial centers. (p.74)

• Goal: TG 3 Meet people's mobility needs by providing equitable access to, and encouraging use of, multiple transportation options.
• Policies: T 3.5 Prioritize transit investments on the basis of ridership demand, service to populations heavily reliant on transit, and opportunities to leverage funding. T 3.7 Optimize operations of bus rapid transit, RapidRide, and streetcar corridors by adjusting signals and providing exclusive transit lanes to promote faster travel times for transit than for automobile travel. T 3.10 Provide high-quality pedestrian, bicycle, and bus transit access to high-capacity transit stations, in order to support transit ridership and reduce single-occupant vehicle trips. (p. 84)

• Goal: TG 4 Promote healthy communities by providing a transportation system that protects and improves Seattle's environmental quality.
• Policy: T 4.3 Reduce drive-alone vehicle trips, vehicle dependence, and vehicle miles traveled in order to help meet the City's greenhouse gas reduction targets and reduce and mitigate air, water, and noise pollution. (p. 86)

• Goal: TG 7 Engage with other agencies to ensure that regional projects and programs affecting Seattle are consistent with City plans, policies, and priorities.
• Policy: T 7.7 Work with regional transit agencies to encourage them to provide service that is consistent with this Plan's growth goals and strategy. (p. 90)

3. **If no, please describe how the project is consistent with the applicable local comprehensive plan, including specific local policies and provisions the project supports. In addition, please describe how the project is consistent with a transit agency plan or state plan, if applicable.**
   N/A

Federal Functional Classification

1. **Functional class name**
   00 Not applicable (transit, enhancements, Etc.)

Support for Centers

1. **Describe the relationship of the project to the center(s) it is intended to support. Identify the designated regional growth or manufacturing/industrial center(s) and whether or not the project is located within the center or along a corridor connecting to the center(s).**
   The project will increase transit ridership, service reliability, decrease travel time, and improve safe access to bus stops along the corridor. Route 36 provides direct, frequent service to the Seattle Downtown and First Hill/Capitol Hill Regional Growth Centers. The route also provides access to regional transit services within these centers including Metro bus routes, RapidRide and Water Taxi services; Sound Transit LINK, Sounder and Express Bus service; Seattle Streetcar service, Kitsap Fast Ferry service, Washington State Ferry service, and Amtrak intercity rail service. The route also provides direct, frequent service to the ST Othello and Beacon Hill Link Stations located within Seattle's North Beacon Hill and Othello Urban Villages.

The regional transit services connected by Route 36 provide riders access to other Regional Centers including Uptown, South Lake Union, First Hill/Capitol Hill, Northgate, University Community, Bothell, Bothell Canyon Park, Lynnwood, Everett, Kirkland Totem Lake, Redmond Downtown, Bellevue, Issaquah, Renton, Bremerton, Burien, Tukwila, SeaTac, Kent, Auburn, Federal Way, Puyallup Downtown, Tacoma Downtown, and Lakewood, and the thousands of key destinations and transfer points within those centers and along their connecting transit corridors.

Criteria: Benefit to Regional Growth or Manufacturing/Industrial Center

1. **Describe how this project will benefit or support the housing and employment development in a regional growth center(s) and/or employment growth in a manufacturing/industrial center(s). Does it support multiple centers? Please provide a citation of the relevant policies and/or specific project references in a subarea plan or in the comprehensive plan.**
   Land use patterns within the Route 36 corridor are characterized by dense residential, employment, and mixed-use developments. According to US Census and PSRC estimates, Route 36 currently serves 19,528 people, 7,354 households, and 10,560 jobs within ¼ mile of the route's bus stops. By 2050, PSRC forecasts that the corridor's population within ¼ of bus stops will increase 53% to 29,759 and employment will increase over 37% to 14,492 (please see Attachment 3). Transit will play an important role in helping to realize those forecasts.

   By improving service reliability, schedule adherence, and increased transit speed within this high-frequency transit corridor, the project will reinforce the intended function of the Seattle Downtown and First Hill/Capitol Hill Regional Growth Centers to:

   1) Attract residential and employment growth and increase land use densities consistent with local and regional plans and policies, and

   2) Encourage mode split from SOV travel to transit and other more efficient travel modes.

   These two benefits complement each other, extending Route 36 connections to other Regional Centers through multiple transit routes and modes.

   The Seattle Transit Master Plan (TMP) identifies the Route 36 corridor as part of the larger Priority Bus Corridor 1 (PB1) and recommends capital investments to increase ridership and support planned growth targets including a series of transit speed, reliability, and access improvements, specifically recommending transit signal priority installation, trolleybus wire modifications, bus bulbs, station upgrades, and other multimodal improvements. (Figure 3-4 p. 3-7; Figure 3-9 p. Figure 3- 10 p. 3-61; p. 3-60 through 3-64)
2. **Describe how the project will support the development/redevelopment plans and activities (objectives and aims) of the center.**
   As discussed above, the project will support land use development/redevelopment plans and activities within the Seattle Downtown and First Hill/Capitol Hill Regional Growth Centers. The project supports transit-oriented development and other dense, mixed-use designs by reducing the need for private vehicle trips and parking through higher transit usage.

   PSRC's Regional Transportation Plan (RTP) and Seattle's Comprehensive plan rely on significant increases in transit ridership to help meet forecasted transportation demand. PSRC's RTP recommends doubling transit service by 2040 through a catch-up and grow service delivery approach, with the assumption that transit service hours will be delivered at a lower overall cost to help realize the Region's adopted policies that focus significant amounts of population and employment growth in areas served by transit.

   The Seattle 2035 Plan and TMP both recommend investments in Priority Bus Corridor 1 (PB1). The city designates Priority Bus Corridors as "…the city's most important transit corridors that carry high ridership today and have the greatest potential to serve transit needs that will emerge as Seattle's population and job base grows." (p.1-3). Please see Seattle's project letter of support in Attachment 2.
3. **Describe how the project will benefit a variety of user groups, including commuters, residents, and/or commercial users.**
   By increasing Route 36 service reliability, providing faster travel, better roadway channelization, and safer walk/bike access to reconfigured bus stops along the corridor, the project will benefit numerous user groups including commuters, residents, and commercial users and range of travel modes:

   • Commuters will have faster, more reliable transit connections to employment along the corridor, plus many more jobs in the wider, transit connected regional and designated countywide and local growth centers (including over 135,000 jobs within Downtown Seattle)

• Residents, including historically underserved and priority populations within the corridor will have faster, more reliable transit service to their homes, places of employment, health and human service resources, education and training centers, shopping and commercial services, and leisure and recreation destinations. Transit customers will also have faster and more reliable service to the Othello and Beacon Hill ST Link stations and the abundant bus, rail, streetcar, and ferry terminals, stations and stops located in the Seattle Downtown and First Hill/Capitol Hill Regional Growth Centers that extend affordable transit service across the region.

• Commercial users will benefit from improved general-purpose GP traffic flow through reduced conflicts with buses due to improvements to traffic signal timing, optimized corridor bus stop spacing, improved channelization, and safer, marked access to bus stops. These improvements will increase bus travel speeds, reduce bus bunching and conflicts with GP traffic, speed passenger boarding, reduce SOV trips, and increase corridor person throughput capacity.

• The project's transit reliability improvements and increased transit ridership will extend rider benefits beyond the Route 36 corridor, benefitting user groups and modes traveling on other connecting, often congested arterials and highways.

4. **Describe how the project will support the establishment of new jobs/businesses or the retention of existing jobs/businesses including those in the industry clusters identified in the adopted regional economic strategy.**
The proposed project is consistent with strategies and recommendations of the PSRC's Regional Economic Strategy (2021) that "…build on the region's strengths and shore up its weaknesses to expand economic opportunity for all." The plan identifies specific challenges to the continued vitality and expansion of the unique economic clusters established within the region, that also exist within the Route 36 corridor. These challenges include inequities in economic opportunity, addressing the proximity of jobs to housing, the ability to make major investments in transportation, preserving the region's environment & health, and addressing global climate challenges. The plan also presents economic development strategies and recommendations that are realized through the Route 36 project objectives:

   • Support jobs and housing growth in urban areas, regional centers, and cities with investments in infrastructure.

   • Develop land use around transit stations and invest in transit corridors consistent with zoning that maximizes regional transit accessibility for a diverse and equitable mix of residents and businesses.

   • Expand access to affordable transportation options in underserved neighborhoods to connect the underserved populations with jobs.

   • Increase transit ridership and induce mode shift from SOV to transit reducing average daily vehicle miles traveled (VMT), providing customers with more active transportation opportunities that can improve their health, and reducing climate impacting CO2 emissions.

   • Reduce transportation related inequities through expanded mobility, reliability, and safer access to affordable, high-frequency transit service.

   These opportunities for improvement are supported by the proposed project for people who choose to live, work and/or seek services within the corridor. This includes a population that is 81% minority, 17% senior, has 14% of households living below the poverty level, 24% of households with at least 1 person living with a disability, 15% of households without private vehicle access, and 10,560 employees all living/working within ¼ mile of Route 36 bus stops. Transit investments in the corridor will also help realize PSRC forecasts for growth and development. By 2050, the PSRC forecasts that the corridor's population will increase 53% and employment by over 37% (source US Census and PSRC)

Criteria: Circulation, Mobility, and Accessibility

1. **Describe how this project supports a long-term strategy to maximize the efficiency of the corridor, including TDM and activities and ITS improvements that use advanced technologies or innovative approaches to improve traffic flow. Describe the problem and how this project will remedy it.**
The project's transit speed and reliability improvements will help maximize the efficiency and capacity of the corridor by improving signal timing, rationalizing lane channelization, optimizing bus stop spacing, and constructing safer transit access. These improvements will reduce modal conflicts, decrease SOV trips and parking demand, while increasing person throughput capacity and general-purpose (GP) traffic flow.

   Coupled with Metro's extensive TDM programs, the implementation of next-generation transit signal priority (TSP), and the potential installation of real time information signs (RTIS) and off-

board fare collection to speed passenger boardings, the corridor will operate with greater efficiency. These improvements will help residents as well as the estimated 3,300 employees working at 5 CTR worksite currently located along the Routes 36 corridor (source 2021 Commute Seattle TMA).

2. **Describe how this project provides a "logical segment" that links to a regional growth or manufacturing/industrial center.**
   The project improvements will improve mobility and access to destinations in the Downtown Seattle and First Hill/Capitol Hill Regional Growth Centers, Seattle's Othello and North Beacon Hill urban villages, as well as the Othello and Beacon Hill ST Link stations, Metro designated transit Activity Centers. Improvements are targeted along the Route 36 corridor to improve access and mobility to each of those centers.

   In addition, Route 36 connects customers to other regional transit services within the Downtown Seattle and First Hill/Capitol Hill Regional Growth Centers via connecting Metro bus, RapidRide and Water Taxi routes, ST Sounder and Express Bus services, the Seattle Streetcar, the Kitsap Fast Ferry, Washington State Ferry service, and Amtrak intercity rail service with connections to other Regional Growth Centers across the region.

3. **Describe how the project fills in a missing link or removes barriers to/from a center.**
   The project will remove transit mobility and access barriers to Regional and local centers that impact the overall effectiveness of this high-frequency route by implementing the described improvements to increase service speed and reliability, improve bus transfer connections, and enhance safe nonmotorized access to stops. By removing these barriers, the proposed project will improve equitable access to transit for all rider populations.

   It's important to note that increased on time performance will help customers meet needed transfers to high-capacity regional transit services including ST Link, Sounder and Express Bus, and Metro's RapidRide C Line, providing improved transfer experience and higher ridership across the larger regional transit system serving other regional centers.

4. **Describe how this project will relieve pressure or remove a bottleneck on the regional transportation system and how this will positively impact overall system performance.**
   The project will address congested corridor segments by improving intersection and bus stop congestion while removing delay bottlenecks, which will improving traffic flow for all modes using the corridor. The project includes traffic engineering solutions such as updated traffic signal timing plans and transit signal priority, improved channelization, optimized bus stop locations, and improvements to and near bus stops to help reduce vehicle and passenger conflicts with general purpose (GP) traffic flow and facilitate safer and more efficient boarding.

   These improvements will also reduce GP travel delay and increase GP travel reliability, positively impacting overall system performance by increasing the corridor's person and commercial throughput capacity. As transit service reliability and speed improves, ridership will increase through mode shift from SOV travel. These system benefits would extend to connecting transit and other arterial and highway corridors.

5. **Describe how the project provides opportunities for active transportation that can lead to public health benefits.**
   Planned project bus stop and access improvements will result in more people walking, biking, using scooters for point-to-point trips within the corridor and to access Route 36. There is significant nonmotorized activity along this corridor and within its connecting centers, with many trips having a transit link. These improvements would increase nonmotorized mobility within the corridor and extend the range of trip lengths, increasing active transportation health benefits for transit customers.

   Route 36 also provides an important connection to bike routes, the Chief Sealth Trail, the I-90 Trail, many parks and local trails, other nonmotorized system investments, and key destinations. Metro buses can accommodate three bicycles, and folding bicycles and scooters are allowed on the bus, provided they can be safely stowed out of the aisle.

6. **Describe how the project provides or benefits a range of travel modes to users traveling to/from centers, or if it provides a missing mode.**
   The project's proposed improvements will provide benefits to other modes by reducing modal conflicts and congestion delays at problem intersections and bus stops. These benefits include increased nonmotorized travel and safety, increased LINK light rail ridership, improved GP and commercial traffic flow, and increased rideshare mode splits.

Criteria: Equity

1. **Identify the population groups to be served by the project.**
   The Route 36 currently serves 19,528 people and 10,560 jobs within ¼ mile of bus stops within the corridor. The population along the corridor includes 81% BIPOC populations, 17%

seniors, 24% of households living in poverty, and 14% living with a disability. Within the corridor, 15% of households do not having access to a vehicle (2021 ERSI and 2019 US Census ACS). Please see Attachment 3.

As cited in the Plan Consistency section, this project's transit speed and reliability improvements are recommended in Metro Connects and are in support of the plan's emphasis on Metro's core values: safety, equity, and sustainability. As part of the 2021 update of Metro Connects, Metro defined priority populations for service improvements in partnership with the King County Office of Equity and Social Justice and the Equity Cabinet. These include BIPOC populations, people who have low or no-income, immigrants and refugees, and people living with disabilities, and people who are linguistically diverse.

2. **Identify the disparities or gaps in the transportation system / services for these populations that need to be addressed.**
   The project actively addresses racial equity barriers to opportunity by increasing safe access to reliable, high-frequency transit service connecting people to jobs, housing, services, recreation, and regional transit service that places opportunities just a ride away. Unfortunately, Route 36 is one of Metro's least reliable routes in Seattle, with 40% of afternoon peak hour trips running late. From 2017 to 2019, the Route 36 experienced a 12% decline in on-time performance despite minimal ridership change. This worsening of on-time performance is caused by increased corridor traffic congestion.

   Within this densely developed corridor, Route 36 corridor serves major employment centers, residential neighborhoods, education and training facilities, health and other services, grocery stores and shopping districts, parks, and recreation locations, and provides access to multiple local and regional transit services.

   According to Metro's 2020 System Evaluation Report, Route 36 operates at 125% overload capacity during peak periods. Poor service reliability contributes substantially to this problem. Bus stops and access to bus stops require upgrades to facilitate safer and more efficient boarding and to help reduce vehicle and passenger conflicts with general traffic flow.

3. **Describe how the project is addressing those disparities or gaps and providing a benefit to the population groups identified under question 1 above.**
   The project address poor transit reliability by implementing improvements that increase transit speed and reliability while providing safer access, faster boarding, and reduced delays at bus stops. It will directly benefit the significant numbers of priority populations using transit, and those who would use transit including BIPOC, people with low or no-income, immigrants and refugees, and people living with disabilities who work, live, shop, and seek services within the corridor or through connecting transit service.

4. **Describe the public outreach process that led to the development of the project.**
   The project is specifically recommended in the City of Seattle Transit Master Plan, the Seattle 2035 Comprehensive Plan, and Metro CONNECTS (see Plan Consistency section). The development of these planning documents included extensive public outreach and involvement. Special attention was provided by the City and by Metro to involve transit dependent populations as part of King County and the City of Seattle's social justice and equity goals and focus strategies.

5. **Describe how this outreach influenced the development of the project.**
   During the proposed project's development (predesign phase), a communication plan will be developed to engage local communities, including priority and transit dependent populations and stakeholders. These may include strategies such as open houses to share project goals and objectives, proposed improvements, and the project's schedule. Based on involvement and comments received from these communities and stakeholders, project concepts may need to be modified to address concerns received at the meetings, and some concepts may not move forward to design stage. The final concept plans will be shared prior to the design phase.

6. **Is the project in an area of low, medium, or high displacement risk?**
   The project serves areas that are at high displacement risk, determined using PSRC's Displacement Risk Mapping tool.

7. **If the project is in an area of medium or high displacement risk, identify the broader mitigation strategies in place by the jurisdiction to address those risks.**
   The proposed improvements to the Route 36 as part of this project will be made within the City's existing Right of Way, and it is unlikely this project will result in any displacements to the community. The project team will collaborate with SDOT to help minimize any risk of displacement.

Criteria: Safety and Security

1. **Describe how the project addresses safety and security.**
   The project will identify opportunities to improve rider safety and security around bus stop zones by improving pedestrian lighting, nonmotorized access, passenger loading and traffic

channelization in deficient areas.

2. **Describe how the project helps protect vulnerable users of the transportation system, by improving pedestrian safety and addressing existing risks or conditions for pedestrian injuries and fatalities, and/or adding or improving facilities for pedestrian and bicycle safety and comfort.**
   The project will complement the City of Seattle's Vision Zero effort by improving bicyclist and pedestrian safety at bus zones where there are adjacent bicycle facilities. In addition, the project will design and implement higher visibility crosswalk improvements to reduce vehicle conflicts with pedestrians.
3. **Describe how the project reduces reliance on enforcement and/or designs for decreased speeds.**
   The project will evaluate the existing pavement markings and signage in the planning study and collaborate with the SDOT to improve bus operations and discourage high-speed travel along the project corridor.
4. **Does your agency have an adopted safety policy (e.g., Vision Zero, Target Zero, etc.)? How did these policies inform the development of the project?**
   Yes. Project roadway improvements will be designed in alignment with the City of Seattle's Vision Zero plan to prepare designs that achieve the project goals while also enhancing the safety of all roadway users on the corridor. Seattle's Vision Zero Plan (2020): http://www.seattle.gov/transportation/projects-and-programs/safety-first/vision-zero

   In February of this year, Metro began implementation our safety, security, and fare enforcement policies and practice reforms through the SaFE Reform initiative (Safety, Security, and Fare Enforcement Reform) report. In addition, the ongoing work of the King County Traffic Safety Coalition through the King County Target Zero Task Force focuses on reducing traffic crashes and traffic-related injuries in King County and supports the state's Strategic Highway Safety Plan: Target Zero to reduce traffic fatalities and serious injuries to zero by the year 2030. The work of the coalition and the SaFE Reform Initiative informs Metro operations and capital investment planning and decision making.

Criteria: Air Quality and Climate Change

1. **Please select one or more elements in the list below that are included in the project's scope of work, and provide the requested information in the pages to follow.**
   Roadway Improvement, Transit and Ferry Service, Bicycle and Pedestrian Facilities, Intelligent Transportation Systems

Air Quality and Climate Change: Roadway Improvement

1. **What is the length of the project?**
   The project area is approximately 6.5 miles long.
2. **What is the average daily traffic before and after the project?**
   According to the Seattle Department of Transportation's (SDOT) 2019 Traffic Report (Figure 7, which used data from 2018), Average Annual Weekday Traffic volumes within the project area corridor ranged from 2,400 to 15,000. The project is not expected to substantially change AADT levels.
3. **What is the average speed before and after the project?**
   Posted speed limits are 25-30 mph throughout the corridor. Average transit speeds are 12-14 mph. Speed limits are not expected to change as a result of this project, though average transit speeds are expected to increase approximately 5-10%.
4. **What is the average daily transit ridership along the corridor?**
   October 2019 – 9,200 weekday riders October 2020 – 4,500 weekday riders October 2021 – 5,400 weekday riders
5. **How many daily peak period transit trips serve the corridor?**
   AM peak period: 50 trips (13 trips/hour); PM peak period: 73 trips (18 trips/hour). These totals include both directions of travel.
6. **What is the expected increase in transit speed due to the BAT/HOV lanes?**
   BAT/HOV lanes are expected to increase transit speeds by 13.5%, based on the PSRC regional default values from the Air Quality and Climate Change spreadsheet.
7. **What is the expected increase in transit ridership due to the BAT/HOV lanes?**
   BAT/HOV lanes are expected to increase peak period transit ridership by 1.5%, based on the PSRC regional default values from the Air Quality and Climate Change spreadsheet. Using pre-pandemic (2019) ridership, Metro expects ridership to increase (from just the BAT lanes alone) from about 9,200 daily boardings to about 9,300 daily boardings. However, pandemic

recovery may complicate our ability to distinguish ridership gains from the travel time benefits of this project with broader ridership recovery.

8. **What is the percentage of freight truck traffic on the facility?**
   Up to 4%, depending on the location within the corridor.
9. **Will the project result in shorter trips and reduced VMT? If so, please explain.**
   Yes. Increased transit speed and reliability will induce mode shift from SOV to transit reducing average daily VMT by 540 (197,000 annually), reducing CO2 emissions by 12,000 kg per year, and saving approximately 8,000 gallons of fuel annually.
10. **Please describe the source of the project data provided above (e.g., Environmental Impact Statement, EPA/DOE data, traffic study, survey, previous projects, etc.).**
    General traffic and truck data provided from SDOT 2019 Traffic Report, SDOT Freight Master Plan.

    Transit data is based on Metro's Automated Passenger Count and Automated Vehicle Location data systems, which provide estimates on things such as daily boardings and transit trip volume.

    Other statements made based on Metro Speed & Reliability staff experience on past projects of similar scope and scale.

Air Quality and Climate Change: Transit and Ferry Service

1. **What is the current transit ridership for the affected transit stops or routes?**
   October 2019 – 9,200 boardings
   October 2020 – 4,500 boardings
   October 2021 – 5,400 boardings
2. **What is the average transit trip length for the affected routes?**
   The average transit trip length along Route 36 is 2.22 miles.
3. **What is the average transit trip length of the entire system?**
   Average transit trip length along Route 36 is 2.22 miles; system wide average trip length is in line with PSRC default assumption of 8.66 miles. The system wide average Metro trip length is 10.4 miles.
4. **If the project includes a park and ride, how many new stalls are being provided?**
   N/A
5. **Are there other amenities included to encourage new transit ridership? If so, please describe.**
   The project may also include the design and construction of Real-Time Information Signs (RTIS) to provide arrival time estimates to riders and ORCA fare card readers at bus zones to speed up passenger boarding.
6. **What is the expected increase in transit ridership from the project?**
   The expected increase in transit ridership is 2 to 4 percent or approximately 80,000 riders per year.
7. **If a new or expanded ferry service, what is the length of the driving route being replaced?**
   N/A
8. **Please describe the source of the project data provided above (e.g., Environmental Impact Statement, EPA/DOE data, traffic study, survey, previous projects, etc.).**
   Transit data is based on Metro's Automated Passenger Count and Automated Vehicle Location data systems, which provide estimates on things such as daily boardings and transit trip volume.

   Transit ridership estimates due to improved transit travel times are based on the Transit Cooperative Research Program's Project A-39 by Kittleson & Associates (2015).

Air Quality and Climate Change: Bicycle and Pedestrian Facilities

1. **Describe the facilities being added or improved**
   Transit Access improvements at/near bus stop zones. Sidewalk and other non-motorized facility improvements may be implemented in the immediate vicinity of bus zones that are improved (or relocated) to ensure that there is sufficient walk/roll access to the bus zones. This could include treatments such as replacing a short section of sidewalk in poor condition near an improved bus zone to provide a safer surface for people walking or rolling to/from the

bus zone.

Where bike facilities are present on the corridor, improved or relocated bus zones would be designed to minimize conflicts between buses, bikes, and pedestrians accessing the bus zone, such as using a shared bus/bike zone that has the bike lane ramp up/down at the bus zone area. The project team will collaborate with SDOT who is in the early planning stage of Beacon Hill Bike Route project to maximize the opportunity, avoid risks and increase the effectiveness of both projects.

2. **What is the length of the proposed facility?**
   less than 100 ft.
3. **Describe the connections to existing bicycle/pedestrian facilities and transit.**
   The Route 36 bus stops connect with the existing sidewalk network along the corridor, which generally has sidewalks on both sides of the street. The route also parallels or intersects with bike facilities of different levels. There are protected bike lanes along S Myrtle St, S Myrtle Pl, and S Othello St at the southern end of the project area, while most of Beacon Ave has just bicycle “sharrows”. All Metro buses are equipped with bike racks that can hold up to three bikes at a time and folding bicycles and scooters are allowed on the bus, provided they can be safely stowed out of the aisle.
4. **Describe the current bicycle/pedestrian usage in the project area. If known, provide information on the shift from single occupancy vehicles.**
   Use PSRC data
5. **What is the expected increase in bicycle/pedestrian usage from the project? If known, provide information on the shift from single occupancy vehicles**
   Use PSRC data
6. **What is the average bicycle trip length?**
   Use PSRC data
7. **What is the average pedestrian trip length?**
   Use PSRC data
8. **Please describe the source of the project data provided above (e.g., Environmental Impact Statement, EPA/DOE data, traffic study, survey, previous projects, etc.)**
   Use PSRC data

Air Quality and Climate Change: Intelligent Transportation Systems and Corridor Efficiency

1. **What is the existing level of service?**
   The existing vehicular Level of Service along these corridors varies, with certain sections suffering from significant levels of congestion (LOS F) while others operate in free flow (LOS A). As part of the prioritization effort for the proposed improvements, segments were identified where transit vehicles travel at less than 50% of posted speed.
2. **What are the existing number of lanes (in one direction)?**
   The number of lanes varies between one and two with most sections having one and either protected left turn lanes at intersections or a continuous two-way center left turn lane. Most of the corridor has a curbside parking lane in each direction, and some sections have adjacent bike lanes.
3. **What is the existing average daily traffic?**
   AADT ranges from 2,400 to 15,000 along the corridor.
4. **What is the existing average speed?**
   Posted speed limits are 25-30 mph throughout the corridor. Average transit speeds are 12-14 mph.
5. **What are the ITS improvements being provided?**
   Primary ITS improvements are transit signal priority (TSP) and new transit queue jumps at selected intersections. TSP installation will be planned for intersections with level of service C, D and E along the route. The installation will use Next-gen TSP and Next-gen Wireless technologies. Signal controller upgrades may also occur where needed to accommodate signal retiming/queue jumps. Controller upgrades could include accommodating transit signal priority and communication to the City of Seattle's central signal management system. Additional ITS improvements considered include Real Time Information Signs (RTIS) and Next-gen ORCA fare card readers at high-ridership bus stops.
6. **How many intersections are being improved?**
   Up to 30 signalized intersections may be improved with Next-gen TSP, signal queue jumps, modified channelization, or signal modifications.

7. **What is the length of the project?**
   6.5 miles
8. **What is the percentage of freight truck traffic in the project area?**
   Up to 4%.
9. **What is the expected improvement to level of service?**
   This project will improve transit service reliability and reduce bus travel time by approximately 5-10% during peak periods. Transit speed, reliability and access improvements provide benefits to other modes, including pedestrians, bicyclists, and general-purpose traffic by reducing potential safety conflicts and delay at problem locations.
10. **What is the expected improvement to average speed?**
    No specific data on improvements to average bus speeds exists at this time. This project will improve service reliability and reduce bus travel time by approximately 5-10% during peak hours.
11. **What is the expected improvement to average vehicle delay?**
    There is no project-specific analysis available, but a prior evaluation of the RapidRide E-Line documents how much time TSP can save for buses. This study showed 3% to 5% transit travel time reductions in the peaks and 8% to 14% reductions in transit delay during peak hours.
12. **Please describe the source of the project data provided above (e.g., Environmental Impact Statement, EPA/DOE data, traffic study, survey, previous projects, etc.)**
    Past project experience on existing Metro RapidRide BRT lines.

Air Quality and Climate Change: CMAQ Questions

1. **For CMAQ projects: PSRC will utilize the "Useful Life" table included in the "Air Quality Guidance" document contained in the Call for Projects. If you have an alternate useful life figure for your project, please explain and provide the appropriate documentation supporting the deviation from the approved Useful Life table.**
   N/A
2. **For CMAQ projects: Is the project located as a 7 of 10 for diesel pollution and disproportionate impacts in the Washington Environmental Health Disparities map?**
   N/A

Criteria: Project Readiness and Financial Plan

1. **What is the PSRC funding source being requested?**
   STP
2. **Has this project received PSRC funds previously?**
   No
3. **If yes, please provide the project's PSRC TIP ID**
   N/A

Phase	Year	Alternate Year	Amount
construction	2025		$3,000,000.00

Total Request: $3,000,000.00

Total Estimated Project Cost and Schedule

PE

Funding Source	Secured/Unsecured	Amount
Local	Reasonably Expected	$1,176,445.00
		$1,176,445.00

Expected year of completion for this phase: 2025

Construction

Funding Source	Secured/Unsecured	Amount
STP	Unsecured	$3,000,000.00
Local	Reasonably Expected	$1,188,145.00
		$4,188,145.00

Expected year of completion for this phase: 2026

Summary

1. **Estimated project completion date**
   12/2026
2. **Total project cost**
   $5,364,590.00

Funding Documentation

1. **Documents**
   Attachment_5.pdf
2. **Please enter your description of your financial documentation in the text box below.**
   Reasonably expected local match funds will be included as part of the 2023-2024 King County budget. The 2023-2024 budget will be developed in the spring/summer of 2022 and is scheduled for adoption in the fall of 2022.

   To secure an appropriation in the 2023-2024 budget, King County Metro will include a request for the Route 36 Improvements project in its capital budget request for the biennium. Metro management will approve the capital budget request and transmit it to the County Executive's Office by July 1, 2022. The capital and operating budget requests will be reviewed, finalized and sent to the King County Council on September 24, 2022. The Council should adopt the final budget
   by mid-November 2022.

Project Readiness: PE

1. **Are you requesting funds for ONLY a planning study or preliminary engineering?**
   No
2. **What is the actual or estimated start date for preliminary engineering/design?**
   January 2024
3. **Is preliminary engineering complete?**
   No
4. **What was the date of completion (month and year)?**
   N/A
5. **Have preliminary plans been submitted to WSDOT for approval?**
   No
6. **Are there any other PE/Design milestones associated with the project? Please identify and provide dates of completion. You may also use this space to explain any dates above.**
   N/A
7. **When are preliminary plans expected to be complete?**
   Corridor Planning Study is expected to be substantially complete by August 2023.

Project Readiness: NEPA

1. **What is the current or anticipated level of environmental documentation under the National Environmental Policy Act (NEPA) for this project?**
   Documented Categorical Exclusion (DCE)
2. **Has the NEPA documentation been approved?**
   No
3. **Please provide the date of NEPA approval, or the anticipated date of completion**

(month and year).
May 2024

Project Readiness: Right of Way

1. **Will Right of Way be required for this project?**
   No
2. **What is the actual or estimated start date for right of way?**
   N/A
3. **What is the estimated (or achieved) completion date for the right of way plan and funding estimate (month and year)?**
   N/A
4. **Please describe the right of way needs of the project, including property acquisitions, temporary construction easements, and/or permits.**
   N/A
5. **What is the zoning in the project area?**
   N/A
6. **Discuss the extent to which your schedule reflects the possibility of condemnation and the actions needed to pursue this.**
   N/A
7. **Does your agency have experience in conducting right of way acquisitions of similar size and complexity?**
   N/A
8. **If not, when do you expect a consultant to be selected, under contract, and ready to start (month and year)?**
   N/A
9. **In the box below, please identify all relevant right of way milestones, including the current status and estimated completion date of each.**
   N/A

Project Readiness: Construction

1. **Are funds being requested for construction?**
   Yes
2. **Do you have an engineer's estimate?**
   No
3. **Engineers estimate document**
   N/A
4. **Identify the environmental permits needed for the project and when they are scheduled to be acquired.**
   N/A
5. **Are Plans, Specifications & Estimates (PS&E) approved?**
   No
6. **Please provide the date of approval, or the date when PS&E is scheduled to be submitted for approval (month and year).**
   N/A
7. **When is the project scheduled to go to ad (month and year)?**
   2/2026

Other Considerations

1. **Describe any additional aspects of your project not requested in the evaluation criteria that could be relevant to the final project recommendation and decision-making process.**
   The City of Seattle has a capital project underway that coincides with the proposed Route 36 Speed and reliability Improvement project: SDOT’s Beacon Hill Bike Route project. This project is expected to implement new bicycle facilities that connect SE Seattle, including Beacon Hill and Othello to Downtown Seattle. Metro is coordinating with the city on these projects. If SDOT selects project designs that intersect with the Route 36, there could be opportunity for Metro and SDOT to partner on access to transit improvements. SDOT is still in

the planning stage of Beacon Hill Bike Route project and are still considering routing/design options.

2. **Describe any innovative components included in your project: these could include design elements, cost saving measures, or other innovations.**
   Route 36 operates as a zero-emissions trolley bus route. Trolley buses are a clean, zero-emissions fleet that is a critical part of fulfilling Metro's and the King County's commitment to green technologies, greenhouse gas reduction and leading on climate action. The King County Council has set targets for Metro to achieve a 100% zero-emissions bus fleet by 2035.

   Power to operate trolley buses comes from Seattle City Light, which generates nearly 100% of its power from non-GHG emitting sources (hydroelectric, nuclear, wind, and biomass).

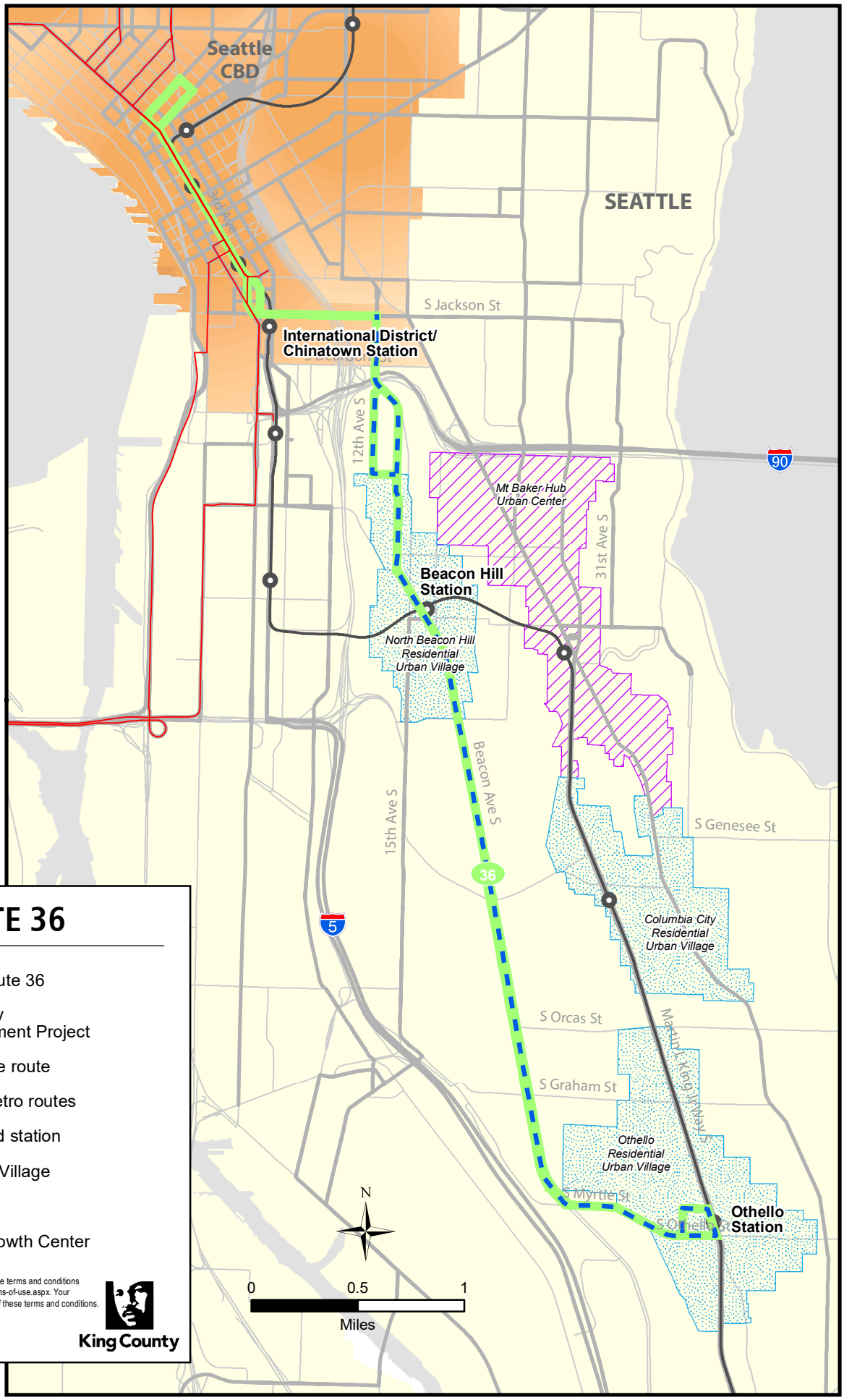
3. **Describe the process that your agency uses to determine the benefits of projects; this could include formal cost-benefit analysis, practical design, or some other process by which the benefits of projects are determined.**
   Metro is required by King County ordinance to conduct an annual assessment of its transit system. The assessment is based on adopted Service Guidelines, established criteria and processes that Metro uses to analyze and plan changes to our transit system. Metro's 2020 System Evaluation Report identified Route 36 for improvements.

   Past Metro transit speed and reliability projects have demonstrated their cost effectiveness in enhancing transit service. Metro's Speed and Reliability program identifies and prioritizes projects to improve performance and increase ridership. The program focuses on working with our partner cities to increase the operating efficiency of existing bus service in highly congested corridors. During the planning phase of this project currently underway, a list of proposed speed and reliability strategies has been identified along the corridor. This list will be prioritized for project implementation based on cost, user benefit, projected travel time savings, complexity of each project, and partner City input.

4. **Describe the jurisdiction's Apprenticeship Utilization Program / Ordinance in place for projects over $1 million with at least 15% Apprenticeship Utilization or programs that prioritize the use of local hire and the diversification of the workforce.**
   The project will be subject to King County's apprenticeship requirements, which require 5-15% of labor hours be offered to apprentices and journey-level workers, in order to support individuals obtaining training for family-wage jobs. The project is also subject to a community workforce agreement that will encourage the participation of King County residents from areas with a higher percentage of people living under 200% of the poverty line, with high unemployment, and with many residents under 25 who do not have a college degree.

5. **Final documents**
   Attachment_2.pdf, Attachment_3.pdf, Attachment_4.pdf

Attachment 1 - Project Area and Corridor Map



ROUTE 36

- Current Metro Route 36
- Speed & Reliabilty Corridor Improvement Project
- Current RapidRide route
- Other frequent Metro routes
- Link Light Rail and station
- Residential Urban Village
- Hub Urban Center
- PSRC Regional Growth Center

RM: G:\\Grants\Route36grant_v2

April 21, 2020

King County

Attachment 2 - Letter of Support

Seattle Department of Transportation

March 16, 2022

Terry White
General Manager
King County Metro Transit
201 South Jackson Street, KSC-TR-0415
Seattle, Washington 98104

Dear Mr. White:

On behalf of the City of Seattle, I am writing to express support for King County Metro Transit's application to the 2022 PSRC Regional grant competition for speed and reliability improvements to the Route 36 corridor. This interagency project, led by King County Metro Transit, will implement transit speed and reliability improvements on the Route 36 corridor to reduce peak hour bus travel times, improve service reliability, increase transit ridership, and improve access to transit. The City of Seattle will work closely with Metro to coordinate delivery of these improvements.

Primary elements of the project include traffic signal retiming, traffic signal modification, signal synchronization, modifications to signal timing, new bus lanes, channelization improvements, upgraded bus stop amenities, and improved bus stop spacing. These improvements will improve service reliability and reduce bus travel time by approximately 5-10% during peak hours, resulting in 2-5 minutes saved per trip and increasing transit ridership by 2-4%.

With over 9,200 weekday riders recorded in Fall of 2019, the Route 36 is one of Seattle's and King County Metro's highest ridership routes. As of Fall 2021, it carries about 5,400 people per day, which is in the Top 10 of Metro's highest ridership routes, despite system-wide pandemic-related ridership decline. This project will improve transit speed, reliability, and access from urban villages in Othello and Beacon Hill to downtown Seattle. Additionally, the Route 36 corridor has a high proportion of low-income, communities of color, and transit-dependent populations. The communities along the Route 36 corridor will benefit from improved access as well as faster and more reliable travel to employment and education opportunities and other destinations. Furthermore, this project will lower the demand for single-occupancy vehicle trips by improving transit service reliability and increasing transit usage.

Overall, this project supports the City of Seattle's mobility, climate, and equity goals and is consistent with the Seattle Transit Master Plan. It also supports broader countywide and regional policies and goals. The City of Seattle enthusiastically supports the selection of this project for funding.

Sincerely,
City of Seattle Department of Transportation

Kristen Simpson
Director, Interim

Kristen Simpson (Mar 17, 2022 15:37 PDT)

Attachment 3 - Metro Route 36 Corridor Population, Employment, and other Demographic Data and Forecasts

2021 Total Population (Esri)

for this area

19,528 which is less than the average for United States

Area	Value ▼	0	400,000,000
United States	333,934,112		
Washington	7,802,046		
King County	2,290,875		
This area	**19,528**		

2021 Total Households (Esri)

for this area

7,354 which is less than the average for United States

Area	Value ▼	0	200,000,000
United States	126,470,675		
Washington	3,031,361		
King County	932,958		
This area	**7,354**		

2021 White Population (Esri)

for this area

3,638 which is less than the average for United States

Area	Value ▼	0	400,000,000
United States	230,991,266		
Washington	5,604,384		
King County	1,387,005		
This area	**3,638**		

2021 White Population (Esri): Percent

for this area

18.63 which is less than the average for United States

Area	Value ▼	0.00	80.00
Washington	71.83		
United States	69.17		
King County	60.54		
This area	**18.63**		

2019 Households Below the Poverty Level (ACS 5-Yr)

for this area

1,011 which is less than the average for United States

Area	Value ▼	0	20,000,000
United States	15,610,142		
Washington	292,897		
King County	75,252		
This area	**1,011**		

2019 Households Below the Poverty Level (ACS 5-Yr): Percent

for this area

14.16 which is more than the average for United States

Area	Value ▼	0.00	20.00
This area	**14.16**		
United States	12.93		
Washington	10.28		
King County	8.53		

2021 Senior Population (Age 65+) (Esri)

for this area

3,297 which is less than the average for United States

Area	Value ▼	0	60,000,000
United States	57,652,490		
Washington	1,328,617		
King County	352,032		
This area	**3,297**		

2021 Senior Population (Age 65+) (Esri): Percent

for this area

16.88 which is less than the average for United States

Area	Value ▼	0.00	20.00
United States	17.26		
Washington	17.03		
This area	**16.88**		
King County	15.37		

2019 Households with 1+ Persons with a Disability (ACS 5-Yr)

for this area

1,699 which is less than the average for United States

Area	Value ▼	0	40,000,000
United States	30,781,341		
Washington	721,406		
King County	164,905		
This area	**1,699**		

2019 Households with 1+ Persons with a Disability (ACS 5-Yr): Percent

for this area

23.79 which is less than the average for United States

Area	Value ▼	0.00	40.00
United States	25.49		
Washington	25.33		
This area	**23.79**		
King County	18.70		

2019 Owner Households with No Vehicles (ACS 5-Yr)

for this area

279 which is less than the average for United States

Area	Value ▼	0	4,000,000
United States	2,414,113		
Washington	37,618		
King County	13,366		
This area	**279**		

2019 Owner Households with No Vehicles (ACS 5-Yr): Percent

for this area

8.41 which is more than the average for United States

Area	Value ▼	0.00	10.00
This area	**8.41**		
United States	3.12		
King County	2.66		
Washington	2.10		

2019 Renter Households with No Vehicles (ACS 5-Yr)

for this area

825 which is less than the average for United States

Area	Value ▼	0	8,000,000
United States	7,981,600		
Washington	156,765		
King County	77,514		
This area	**825**		

2019 Renter Households with No Vehicles (ACS 5-Yr): Percent

for this area

21.59 which is more than the average for United States

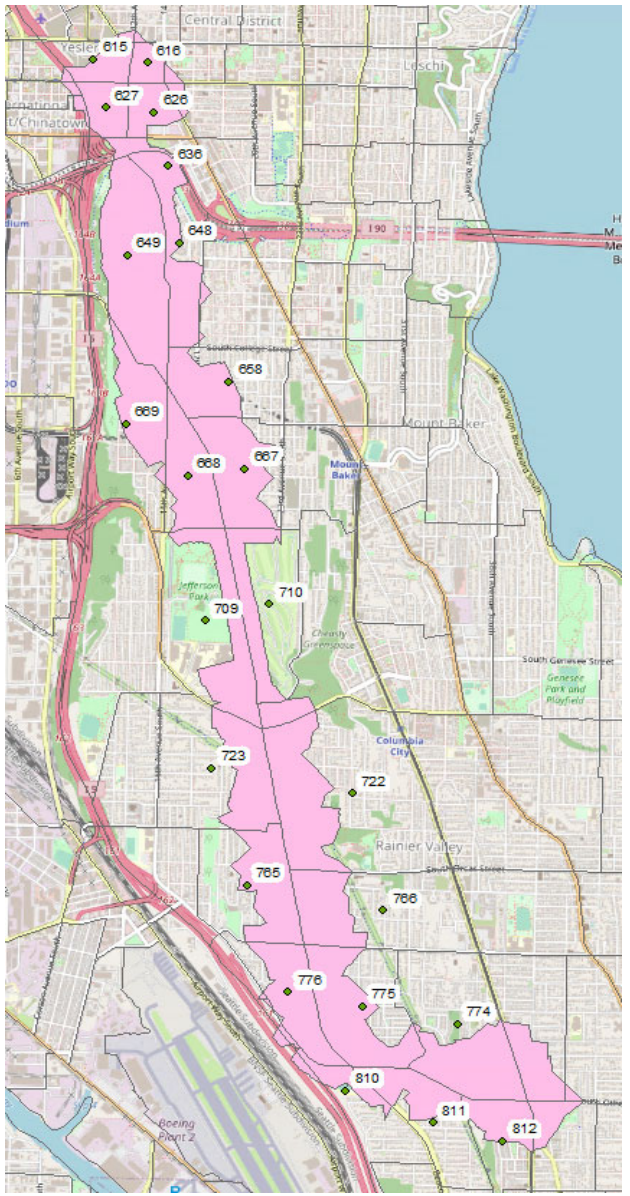
Area	Value ▼	0.00	40.00
This area	**21.59**		
King County	20.41		
United States	18.36		
Washington	14.86		

	Estimates		Projections - LUV2					Projections - RGS
	2014	2020	*2020	2025	2030	2035	2040	2050
HH Pop	18,379	--	18,458	18,825	19,989	20,957	23,176	29,256
GQ Pop	321	--	402	419	436	452	471	503
Total Pop	18,700	--	18,860	19,244	20,425	21,409	23,647	29,759
Households	6,941	--	7,581	7,933	8,672	9,447	10,995	14,122
Total Employment	9,372	10,560	9,951	10,090	10,234	10,821	11,270	14,492

Sources: LUV.2 Forecasts, Modeled V2050 RGS Outputs, PSRC Estimate of Total Employment using QCEW data inputs (2020)

* -For the projections, both LUV.2 and the modeled RGS used a base year 2014 set of inputs. So the 2020 numbers shown under projections are not actual estimates, but forecasted outputs from the modeling.
-The exception is the Total Employment estimate for 2020 provided by Grant of 10,560. That shows that our LUV.2 projections were a bit low, but overall pretty consistent with trends since 2014.
-I've also provided the 2050 RGS modeled outputs. Note the only year available (only one we used in simulations and analysis) is 2050 from that work. The projections are higher than what one would get extrapolating out from the LUV.2 data, reflecting the policy decision in V2050 to focus significant amounts of regional population and employment growth thru 2050 in areas served by transit…so in that sense they can be thought of as serving as the higher bound of projected totals, at least until the LUV.3 forecast is released later on this summer.

Area Map with PSRC TAZ boundaries for reference



Attachment 4 - Preliminary List of Proposed Route 36 Speed, Reliability, and Access Improvement Strategies

Project	Location	Description	Improvement Type
Next-Gen Transit Signal Priority	Up to 30 signalized intersections along project corridor	Implement Metro's next-generation Transit Signal Priority system to improve transit travel time reliability.	Infrastructure, Traffic Control/Bus Operations
NBL transit signal	12th Ave S / S Jackson St	Add a signal head to enable a protected northbound left turn phase for transit, increasing transit throughput and reducing transit delay	Infrastructure, Traffic Control
Transit queue jumps + signal phasing improvements and/or BAT Lane (NB direction only)	Beacon Ave S / 15th Ave S	Allows buses to bypass long queues from 15th/Link station, improving travel times NB BAT lane may require removal of two-way left turn lane or on-street parking.	Infrastructure, Traffic Control
In-lane stops and/or stop rebalancing	12th Ave S and 14th Ave S at: Golf Dr S, S Judkins St, S Atlantic St, S Massachusetts St	Reduce dwell time at stops	Infrastructure, Bus Operations
BAT Lanes (both directions) and/or phasing improvements + queue jumps	Beacon Ave S / S Columbian Way	Allows buses to bypass long queues, improving travel times and reducing signal delay (may require parking removal and SB near-side stop) NB: BAT lane from Ferdinand St to Angeline St. SB: BAT lane from Cheasty/Alaska St to Columbian St bus zone (far-side)	Infrastructure, Traffic Control
SB in-lane stop	Beacon Ave S / S Bayview St	Reduces dwell time at stop	Infrastructure, Bus Operations
SB BAT lane	Beacon Ave S (14th Ave S - S Lander St)	Allows buses to bypass long queues from 15th/Link station, improving travel times (may require parking and/or left turn lane removal, but could be a peak-only BAT lane and parking off-peak)	Transit Lanes
BAT Lanes (both directions) and/or transit queue jumps + signal phasing improvements	Beacon Ave S / S Spokane St	Make it easier for buses to merge back into traffic when not serving stops SB: Use TWLT center lane space to create SB BAT lane approaching Spokane (no QJ needed given FS bus zone) NB: use TWLT center lane (or other space) to create NB BAT lane approaching Spokane (where there could be a QJ signal)	Infrastructure, Traffic Control
In-lane stops and/or stop rebalancing	Beacon Ave S at: S Stevens St, S Hanford St	Reduces dwell time at stops	Infrastructure, Bus Operations
NB in-lane stop	Beacon Ave S / S Spokane St	Reduces dwell time at stop	Infrastructure, Bus Operations
BAT lane (NB only) and/or transit queue jumps + signal phasing improvements	Beacon Ave S / S Graham St	Allows buses to bypass long queues, improving travel times and signal delay (may require parking removal and NB near-side stop) NB: Rechannelize Beacon Ave between Holly St and Graham St to add BAT lane	Infrastructure, Traffic Control
NB transit queue jump	Beacon Ave S / S Lander St	Make it easier for NB buses to serve NB stop then merge back into traffic (requires concrete island removal)	Infrastructure, Traffic Control
In-lane stops and/or stop rebalancing	Beacon Ave S at: S Dawson St, S Brandon St, S Orcas St, S Spencer St	Reduce dwell time at stops	Infrastructure, Bus Operations
In-lane stops	Beacon Ave S, S Myrtle St, and S Myrtle Pl at: S Holly St, 27th Ave S, 32nd Ave S, S Holly Park Dr	Reduce dwell time at stops and better manage conflicts with bike lanes	Infrastructure, Bus Operations
Signal phasing improvements	Beacon Ave S / S Myrtle St	Minimize transit signal delay	Traffic Control

Attachment 5 - Project Budget Submittal Proposal

MW Approval Status	(All)

Sum of Amount This Month		Column Labels				
Row Labels	Project Name	2023	2024	2025	2026	10yr CIP
Fixed Assets						
Speed and Reliability Improvements						
Corridor/Spot Improvements						
New Projects	TDC Route 36 Corridor IMP	64,008	329,966	872,901	4,597,486	5,864,362
Corridor/Spot Improvements Total		**64,008**	**329,966**	**872,901**	**4,597,486**	**5,864,362**
Speed and Reliability Improvements Total		**64,008**	**329,966**	**872,901**	**4,597,486**	**5,864,362**
Fixed Assets Total		**64,008**	**329,966**	**872,901**	**4,597,486**	**5,864,362**
10yr CIP		**64,008**	**329,966**	**872,901**	**4,597,486**	**5,864,362**