Puget Sound Regional Council

Funding Application

Competition	King Countywide
Application Type	Corridor Serving Center(s)
King County Program	Larger Jurisdiction Program
Status	submitted
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Prepopulated with screening form?	No

Project Information

1. **Project Title**
   80th St and 85th St ITS Corridors
2. **Regional Transportation Plan ID**
   NA
3. **Sponsoring Agency**
   Seattle
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**
   The 80th Street and 85th Street Intelligent Transportation Systems (ITS) Corridor project will design and build traffic management systems to reduce congestion and delay on a corridor in north Seattle on the east-west cross streets of NW 80th and NW 85th Streets as well as a portion of Greenwood Ave N adjacent to the 80th and 85th corridors. The scope of work includes upgrading and installing fiber to interconnect traffic signals, adding leading pedestrian intervals, and optimizing corridor signal timing. The current request would fund design and construction work. With the corridor signal optimization scope of work, the project will also model and analyze options for removing split phase signal operations on NW 85th St approaching 8th Ave NW and 3rd Ave NW to reduce vehicle and pedestrian delay and improve travel times and vehicle speeds. Ancillary but necessary improvements could include new curb ramps and sidewalk upgrades, and the project scope may also include Accessible Pedestrian Signals if appropriate locations are available for these treatments.

2. **Project Justification, Need, or Purpose**
   The project has been developed to support movement and improve safety for all travel modes to and through north Seattle, an important and densely populated part of the region, to maintain freight access (an important industry cluster in the region), to support efficient transit movement, and to expand upon a citywide network that optimizes access and mode choice. Seattle, particularly in its Regional Growth Centers, is experiencing unprecedented pressure on its constrained transportation system from a variety of sources. Primary factors are increasing population density and the growing appeal of urban neighborhoods.

   The City of Seattle has already begun investing heavily in the ITS systems that will keep its streets functioning as the city continues to grow. Over the past few years the City has spent tens of millions on ITS projects. However, this work to date has been strongly focused within the Central Business District. In the N 80th/85th ITS project, the City will upgrade an important arterial corridor that serves transit, freight, general purpose traffic, and pedestrians into and through three Urban Villages. This corridor, and the supporting system-wide improvements, are primarily focused on moving transit, freight, and general-purpose traffic through north Seattle more efficiently, keeping traffic flowing on an important corridor in Puget Sound, while also improving pedestrian safety.

Project Location

1. **Project Location**
   N/NW 80th, 85th St, and Greenwood Ave N
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**
   NA
4. **Crossroad/landmark nearest the end of the project**
   NA
5. **Map and project graphics**
   80_85_ITS.pdf

Plan Consistency

1. **Is the project specifically identified in a local comprehensive plan?**
   No
2. **If yes, please indicate the (1) plan name, (2) relevant section(s), and (3) page number where it can be found.**
   N/A
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.**
   Seattle's Comprehensive Plan describes the importance of maintaining traffic signal systems that can prioritize pedestrian safety and encourage low-impact modes in addition to moving vehicles safely and efficiently. While signal operations may be more low-profile than other interests within the Comprehensive Plan, the plan is clear and unambiguous about the city's need to maintain and improve its signalization. The following excerpts provide several examples:

   Improved mobility in the future will also require looking for opportunities to remove or reduce choke points such as railroad crossings and to use new traffic-signal timing and other technologies to help move people and goods. (page 73)

   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. (page 84)

   T 8.3 Employ state-of-the-art intelligent transportation systems to increase efficiency of movement and reduce travel delays for all modes. (page 91)

   Improved mobility in the future will also require looking for opportunities to remove or reduce choke points such as railroad crossings and to use new traffic-signal timing and other technologies to help move people and goods. (page 73)

   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. (page 84)

G-G7 An integrated transportation network that addresses the freight mobility, highway access, and efficiency demands of all users; the nonmotorized and pedestrian needs of area residents; and that is supported by the basic services of good roads, transit service, and efficient area-wide circulation. (page 332)

AL-G7 A transformed Aurora Avenue North that is an aesthetically attractive regional highway and commercial corridor that acts as a gateway to the Aurora-Licton Residential Urban Village and to other communities, and that is safe for pedestrians, motorists, business operators, and employees. (page 209)

AL-G8 A comprehensive network is established of safe and attractive pedestrian and bicycle connections to transit, between commercial and residential areas, and between the urban village and nearby destinations such as North Seattle Community College and the proposed Northgate Sound Transit Station. (page 209)

AL-P18 Work with the community toward providing safe and attractive pedestrian and bicycle access, including sidewalks, on all streets throughout the urban village, providing connections to destinations such as the future Northgate Sound Transit Station, Northgate Mall, the future Northgate library, the Greenwood Library, Green Lake Park, and Bitter Lake Community Center. (page 209)

AL-P32 Work with residents, property and business owners, and surrounding neighborhoods toward the development of strategies to reduce congestion and enhance traffic safety. (page 211)

CH/B-P7 Improve mobility for people using all modes of transportation to, within, and around the Ballard Hub Urban Village to increase retail, commercial, and civic activity. Improve mobility for people using all modes of transportation to, within, and around the Crown Hill Urban Village to serve the residents and businesses there. (page 244)

CH/B-P8 Emphasize accessibility by transit, bicycle, and pedestrians in the Downtown Ballard area. (page 244)

G/PR-G21 A neighborhood where heavily traveled streets are pedestrian-friendly and attractively landscaped. (page 331)

G/PR-G22 A neighborhood with efficient and safe traffic flow and numerous safe pedestrian crossings. (page 331)

G/PR-P38 Seek to coordinate traffic signals throughout the neighborhood and to improve traffic flow at 85th Street and Greenwood Avenue North. (page 331)

G/PR-P42 Strive to provide improvements for pedestrians to cross busy streets at selected locations, with particular focus for people with disabilities. (page 331)

G-G7 An integrated transportation network that addresses the freight mobility, highway access, and efficiency demands of all users; the nonmotorized and pedestrian needs of area residents; and that is supported by the basic services of good roads, transit service, and efficient area-wide circulation. (page 332)

G/PR-P44 Strive to provide public walkways on streets where they are needed and in areas prioritized by the neighborhood with an emphasis on the main streets along Greenwood Avenue North and Phinney Avenue North and North 85th Street. (page 332)

Our ITS Strategic Plan also includes various goals and visions that reference the need for upgrades to our communication infrastructure, and the specific ways that these upgrades will help us meet our targets for safety and sustainability:

• To support development of a sustainable transportation system, and to contribute to the City's economic vitality, by implementing, operating and maintaining the most appropriate technology to meet multimodal transportation safety and mobility needs. (page 9)

• Implementing the vision will result in protection of traffic safety, reduced environmental impacts of transportation, improved multi-modal mobility and enhanced efficiencies of the transportation network. (page 9)

• Continue Controller/Cabinet and Equipment Upgrades: "SDOT must complete phase-out of older controllers/cabinets and associated equipment to enable improved traffic signal operations including additional vehicle, pedestrian and bicycle detection, transit signal priority, and the ability to communicate with the central control system" (page 25)

• Expand Deployment of Detection at Traffic Signals: "Additional traffic detection is required

to assist the Department in improving the operations of the traffic signals to reduce delays and associated vehicle emissions" (page 25)

• Expand Deployment of the Fiber optic Communications Network: "Fiber optic communications media is required to provide highly reliable communications to all ITS devices. Not only does a fiber network provide robust service to signals and ITS devices, it reduces maintenance calls." (page 25)

• Providing audible pedestrian crossing signals to support the visually impaired pedestrian at locations identified by the disabled community that meet SDOT policy. (page 41)

• ITS deployments to improve arterial operations and provide support for pedestrian, bicycle and transit modes. (page 43)

On page 25 of our ITS Strategic Plan, the 85th St corridor is identified as a key arterial for ITS improvements.

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, local centers 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 is located partially within, and extends between, three Urban Villages in Seattle. All three of these Urban Villages – Aurora-Licton Springs, Greenwood-Phinney Ridge, and Crown Hill – are designated as local centers. Two of these Centers – Aurora-Licton Springs and Crown Hill – are also candidate Countywide centers.

Criteria: Benefit to Regional, Countywide, Local, or Manufacturing/Industrial Center

1. **Describe how this project will benefit or support the housing and employment development in a 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.**
   Seattle's 2021 Urban Center / Village Housing Unit Growth Report forecasts that the Aurora-Licton Springs Urban Village will grow by approximately 1,000 housing units (30%) by 2035, that the Greenwood-Phinney Ridge Urban Village will grow by approximately 500 housing units (30%) by 2035, and that the Crown Hill Urban Village will grow by approximately 1,100 housing units (50%) by 2035. Combined, this is a total increase in 2,600 housing units by 2035. This will bring significant change to these three urban villages by 2035.

   NW 85th St is classified as a Minor Transit Route and is on Seattle's Frequent Transit Network, but Seattle's Transit Master Plan (TMP) identifies this corridor as a leading candidate for future RapidRide service. The TMP included an in-depth process to study travel for successful high- and medium-capacity transit service. The Crown Hill–Greenlake–U District route was identified as a Priority Bus Corridor (PB4) that runs along NW 85th St between the Crown Hill neighborhood and SR 99. This route has key connections to RapidRide D, RapidRide E, Priority Bus Corridor 5 (Greenwood), and the University District. It serves the Crown Hill, North Beach, Greenwood, Greenlake, and University District neighborhoods. The TMP notes that this corridor has all the features of a productive RapidRide line, with up to 7,400 average weekday riders (including 1,100 new riders), travel time savings of 19% compared to local bus service, and net greenhouse gas reductions of 1,150 metric tons of CO_2e per year. However, the plan also notes that "fiber is not installed" and this upgrade will be necessary to allow full RapidRide operation.

   The foundation of Seattle's Comprehensive Plan is the Urban Village strategy. It is the City's unique approach to meeting the state GMA requirement, and it is similar to Vision 2040's growth centers approach. This strategy encourages most future job and housing growth to occur in specific areas in the city that are best able to absorb and capitalize on that growth. These are also the best places for efficiently providing essential public services and making amenities available to residents. It is important to note that the Urban Village strategy also puts more people near transit service so that they can more easily use buses or light rail to get to job centers, shopping, or other destinations. This access is useful for all residents, but

particularly those with limited incomes or physical limitations that make them reliant on public transit. This project is an opportunity to serve three of Seattle's Urban Village centers and make progress towards the Urban Village strategy outlined in the City's Comprehensive Plan.

2. **Describe how the project will support the development/redevelopment plans and activities (objectives and aims) of the center.**
   The City of Seattle's 2035 Comprehensive Plan speaks to operating and maintaining the transportation system and calls out how thoughtful operation and maintenance of the transportation system promotes safety, efficiency, infrastructure preservation, and a high-quality environment. Spending money on maintaining and preserving the system today can prevent spending more dollars on replacing parts of the system later. Key policies in the Plan that speak to ITS improvements include T 8.3 "Employ state-of-the-art intelligent transportation systems to increase efficiency of movement and reduce delays for all modes," and T 8.5 "Optimize traffic-signal corridors, taking the needs of all types of transportation into account."

   Additionally, as mentioned above, these Urban Villages are estimated to grow by approximately 30-50% in terms of housing units by 2035. By implementing this project all modes of transportation will see improvements. Upgrading fiber at key intersections will allow for interconnected traffic signals that are optimized for corridor signal timing. This will benefit transit, freight, and vehicle movements. The corridor signal optimization work will also include modeling and analysis of options to modify signal operations to reduce vehicle and pedestrian delay. Other improvements such as Leading Pedestrian Intervals and potential curb ramp and sidewalk work will benefit non-motorized modes of travel. By improving safety, travel time, and reliability for multiple modes, this area will be better able to serve an increase in population and serve the growing Urban Villages and communities that rely on this corridor to access their destinations.

   The Seattle Comprehensive Plan also includes Neighborhood Plans. The Aurora-Licton Springs, Greenwood-Phinney Ridge, and Crown Hill neighborhood plans outline goals and policies to help implement each neighborhood's goals. Key transportation-related goals and policies for each of these neighborhoods include (but are not limited to):

   Aurora-Licton Springs
   • AL-P4 Encourage the development of enhanced transit connections to the village core, the Northgate transit hub, and the Northgate high-capacity transit station.
   • AL-G6 Safe and convenient crossings of Aurora Avenue North that logically link transit stops and retail nodes. Safe and accessible pedestrian routes along Aurora Avenue North and adjacent side streets leading to the crossings.
   • AL-P21 Encourage enhanced transit service between Downtown Seattle and the AuroraLicton Urban Village. Seek to coordinate improvements to transit service with crosswalks and pedestrian, bicycle, and transit shuttle routes.
   • AL-G13 Excellent multimodal transportation services for the neighborhood, connecting to Downtown Seattle, other neighborhoods, and regional destinations, with minimal negative impacts to residential areas.

   Greenwood-Phinney Ridge
   • G/PR-G22 A neighborhood with efficient and safe traffic flow and numerous safe pedestrian crossings.
   • G/PR-G24 A neighborhood with convenient and frequent transit service that provides access to neighborhood commercial and activity areas, adjacent neighborhoods, local transit hubs, and regional transit stations
   • G/PR-P38 Seek to coordinate traffic signals throughout the neighborhood and to improve traffic flow at 85th Street and Greenwood Avenue North.

   Crown Hill/Ballard (grouped together in the Seattle Comprehensive Plan)
   • CH/B-G4 A transportation system that supports residential, commercial and civic activity in the core of the Ballard and Crown Hill urban villages, and encourages people to use transit and nonmotorized transportation modes.
   • CH/B-P7 Improve mobility for people using all modes of transportation to, within, and around the Ballard Hub Urban Village to increase retail, commercial, and civic activity. Improve mobility for people using all modes of transportation to, within, and around the Crown Hill Urban Village to serve the residents and businesses there.

   These goals and policies clearly emphasize the need to be strategic in how transit, freight, and other modes of transportation are planned for and prioritized within each of the three urban villages.

3. **Describe how the project will benefit a variety of user groups, including commuters, residents, and/or commercial users.**
   Population and employment in Seattle have been growing rapidly, and those that live and work in north Seattle will see more reliable and safer traffic flow, which supports not only public transit but also freight, vehicle, and non-motorized traffic. Because the benefits of this project will be felt along this entire corridor, through three urban villages, a large variety of user groups will see improvements to their daily lives. Populations that live outside of the project area will have better access to the goods and services that are accessed by this

corridor in North Seattle, and this will only increase as other regional transit corridors are improved, such as future light rail and transit stations/hubs. Furthermore, it is essential when we are building key east-west connections that we also include safe pedestrian crossings with improvements such as LPIs and new curb ramps and sidewalk work. This will help ensure that people that live along the corridor and are accessing goods and services along the corridor have safe north-south crossing options. Seattle has historically had limited or congested east-west connections, which lead to poor mobility and the negative externalities that come with traffic, such as noise and air pollution. Not only will an optimized east-west corridor provide faster and more reliable traffic improvements, but the living conditions of those along the corridor will be safer. Improving this corridor for all users will improve the quality of life and the safety of all who travel through this area.

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.**
NW 85th St and NW 80th St are critical east-west connections in north Seattle. Other key transit networks connect to the project area, such as the City of Seattle's soon-to-be-improved Route 40 Transit Plus Multimodal Corridor, which ties into this project in the Crown Hill neighborhood. This project will improve service to the Northgate community in the northeast and to Ballard, Fremont, and Downtown Seattle in the south. By making improvements along the corridor there are more opportunities to have safe, efficient, and reliable connections to many key employment and job centers within the City.

   The Regional Transportation Plan identifies NW 85th St as the location for a future King County Metro RapidRide line connecting Loyal Heights and the University District via Green Lake. This project would improve the attractiveness and reliability of transit to a Regional Growth Center (RGC), University Community. The University Community RGC is one of the unusual regional centers that supports all 10 of our region's identified industry clusters. According to PSRC's Regional Centers Monitoring Report, the RGC hosts jobs and employment sites within all the industry clusters that anchor our regional economy, including more than 1,000 jobs in three key areas: Retail, Services, and Education. In the Education cluster, this RGC is by far the most dynamic center. It hosts more than 25,000 jobs in this sector. Seattle's 2021 Urban Center / Village Housing Unit Growth Report forecasts that the University Community RGC will grow by approximately 3,500 housing units by 2035 and the City's Comprehensive Plan Employment Growth Report forecasts equally robust growth in employment, with 5,000 additional jobs anticipated in this center by 2035. This project will connect the growing Urban Villages along the corridor to the University District's employment opportunities.

   The transit, freight, and pedestrian improvements would work together to make the three urban villages along this corridor attractive employment and housing locations. This will drive new job and business opportunities for this corridor and beyond.

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.**
As an ITS project, the 80th/85th St Corridor ITS project is entirely focused on smart use of existing resources. With virtually no opportunity for road expansion or new capacity in this corridor and Seattle's urban village centers, the City's long-term strategy must rely almost exclusively on increased efficiencies and promoting positive mode shift within the existing transportation network. The City's long-term plans for mobility and job creation have entirely embraced this principle. The City focuses its short-term and long-term efforts on system management – especially projects that move freight, transit, and non-motorized modes more efficiently. Move Seattle, the City's 10-year strategic transportation vision, as well as the City's ITS plan (called NextGen ITS), explicitly address the necessity of optimizing the existing infrastructure in the city's built-out, urban environment.

   N 80th and N 85th St provide key east-west arterial connections and a regional link to some of the region's denser urban villages and neighborhoods, and other important land uses. In addition, these corridors offer access to north and south connections, including SR 99 and I-5, two of the region's most significant facilities for long-range trips, including transit and freight.

   These ITS improvements relieve pressure on the overall system by operating key corridors at maximum capacity. Traffic-management tools, such as signal synchronization, signal optimization, and signal priority for transit, all serve to maximize the throughput of people and goods on a specific roadway. However, the benefits are not limited to specific corridors; they are network-wide.

   Non-motorized transportation, and other active transportation modes such as public transit, are likewise aided by the implementation of this ITS project. Leading pedestrian intervals

provide safer and more predictable pathways to/from urban centers while improving safety for all roadway users to access local businesses, parks, schools and other services along the corridors.

2. **Describe how this project provides a "logical segment" that links to a center or manufacturing/industrial center.**
   The project corridor is within and connects between several urban villages. N 80th and N 85th St are both within and connect to the Aurora-Licton Springs Urban Village, the Greenwood-Phinney Ridge Urban Village, and the Crown Hill Urban Village. These urban villages are increasing by 2,600 housing units by 2035, an increase of more than 30%. The corridor is a combination of a principal and minor arterial, and as such is the logical connection to convey large numbers of freight trucks, buses, and general purpose traffic within and between each of these designated urban centers. Daily traffic volumes are around 19,000.

3. **Describe how the project fills in a missing link or removes barriers to/from a center.**
   By upgrading the ITS system in the project corridor, an important arterial connection can be better managed in the city and region. N 80th and N 85th St are within and connect the Aurora-Licton Springs Urban Village, the Greenwood-Phinney Ridge Urban Village, and the Crown Hill Urban Village, and N 85th St is a principal arterial in the Metropolitan Transportation System. Upgrading this established and logical connection will allow more people and goods (freight trucks, buses, and general purpose traffic) to move between centers and throughout the region. Adding LPIs to each of the signals will also provide pedestrians with a safer walking environment, removing physical barriers for people walking to/from each of these centers.

4. **Describe how this project will relieve pressure or remove a bottleneck on the Metropolitan Transportation System and how this will positively impact overall system performance.**
   N 85th Street is identified as a principal arterial that provides transit and freight access to the region as part of the Metropolitan Transportation System. The corridor is currently identified as a "congestion roadway" that experiences heavy to severe congestion by the PSRC Transportation System Visualization Tool. Improving signal timing in this corridor through this project will relieve pressure, allowing more people and goods to move along N 85th St as part of the Metropolitan Transportation System.

5. **Describe how the project provides opportunities for active transportation that can lead to public health benefits.**
   Smoother traffic flow along these roadways can bring benefits of reduction in overall travel time, reduction in delay, and fuel savings, according to modeling work performed for these corridors. The corresponding improvement in air quality has immediate, direct impacts on the workers and residents who work and/or live in these neighborhoods. Ancillary improvements include new curb ramps and rebuilt sections of sidewalk as needed, which will further enhance non-motorized access along the corridor. Finally, the real and perceived safety benefits of LPIs increase the likelihood that more people in these communities will choose to walk and roll for their commutes and recreational trips or to meet other daily needs.

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.**
   In the N 80th/85th ITS project, the City will upgrade an important arterial corridor that serves transit, freight, general purpose traffic, and pedestrians to and through three Urban Village centers and as part of the region's Metropolitan Transportation System. This corridor, and the supporting system-wide improvements, are primarily focused on moving transit, freight, and general-purpose traffic through north Seattle more efficiently and keeping traffic flowing on an important corridor in Puget Sound.

   Freight movement, including long haul and local deliveries, is critical for this corridor. Based on SDOT traffic counts for N 85th St in April 2020, 5% of traffic is heavy-duty freight vehicles and another 13.2% is light-duty local delivery and/or utility vehicles. We don't have recent counts for N 80th St but observed traffic patterns are similar. Freight and general-purpose traffic use these roadways somewhat interchangeably, largely based on congestion levels.

   As described above, the corridor currently sees high transit ridership that is expected to grow significantly with local development as well as a proposed conversion to RapidRide service. Buses operating along the corridor, people walking and biking to transit stops in the area, and transit routes crossing the corridor on north-south roadways will all benefit from signal optimization and TSP installed with this project.

   Also vital are the improvements that will increase pedestrian and non-motorized safety. This project includes the installation of Leading Pedestrian Intervals (LPIs) at all signalized intersections in the corridor to give people on foot a head start when crossing the intersection. LPIs turn on the walk signal before people driving get the green light, which helps make pedestrians more visible. This tactic has been used at almost 300 intersections in Seattle, and there has been a 48% reduction in pedestrian turning collisions and a 34% reduction in serious injury and fatal pedestrian collisions. This project includes the implementation of LPIs, and modified signal phasing, which have been identified to improve safety. Additionally, this project will include sidewalk and curb ramp work as identified through

the design process. These improvements will increase the safety and accessibility of those moving through and traveling within these urban villages.

Reliable transportation and movement of goods, and improved pedestrian facilities, will make these three Urban Villages more attractive locations to live and work. By providing an optimized east-west connection between these urban villages, there are increased opportunities to access key goods and services throughout the city.

Equity Criteria

1. **Identify the population groups to be served by the project.**
   This project will serve numerous communities by improving the safety, speed, and reliability of movement along the corridor that will impact not only the communities adjacent to the project, but also those that are served by this corridor. Several of the census tracts on the western portion of the project have high Older Adult populations, or populations over age 65. There are also three census tracts on the southwestern area of the project that has Youth Age ranges above the regional average, up to as high as 6% of the census tract population between the ages of five and seven. In the central section of this project, around Greenwood Ave N, 8% of the population has incomes below 200% of the federal poverty line (the threshold where some federal benefits are available due to low incomes). According to Seattle's Race and Social Equity Index, the rates of workers who commute by public transportation are higher than surrounding communities. The census tract that includes the north/south Greenwood Ave N corridor has a 33% rate of workers commuting on public transportation.
2. **Identify the disparities or gaps in the transportation system / services for these populations that need to be addressed.**
   The populations described above tend to be more dependent on a variety of transportation methods. Elderly and younger populations may not have access to or the ability to drive in a private vehicle, and therefore rely more on walking, biking, and public transportation. Additionally, as mentioned above, some communities have 33% of workers that depend on reliable travel options to access jobs and other destinations.
3. **Describe how the project is addressing those disparities or gaps and providing a benefit to the population groups identified in question 1 above.**
   Improving speed and reliability for public transportation will help address the mobility gap and improve access to housing, employment opportunities, and other daily destinations. Increased access to nearby employment centers such as the University Village (currently via King County Metro Route 45 and later via a new RapidRide line) will provide more opportunity to jobs, and safety improvements such as safer crossings through LPIs and new curb ramps will benefit those who choose to use or are dependent on walking or transit as a key mode of transportation.
4. **Describe the public outreach process that led to the development of the project.**
   This project includes elements that have been identified during the public outreach process for other plans and projects, including the Seattle Transit Master Plan, Seattle Pedestrian Master Plan, and current Green Lake Outer Loop Project. Local community members and stakeholders often express interest in signal, transit, and pedestrian improvements that are considered priority projects for their neighborhood. To determine which neighborhood priorities should be included in our work plans and projects, we monitor public requests for improvements. Projects with community backing are prioritized for implementation as funding becomes available. We also look at neighborhood plans and transportation studies to determine which requested projects have been identified as community priorities. Recent communication received during the ongoing Green Lake Outer Loop Project requested a safer, more predictable corridor for people walking, taking the bus, and driving, which contributed to the development of this project.
5. **Describe how this outreach influenced the development of the project.**
   During planning, design, and construction of the proposed improvements on 80th and 85th, we plan for inclusive public outreach and engagement. We have developed an effective public engagement process built on gathering input from community members about their needs and concerns, presenting them with options that meet project goals and objectives, and incorporating their input along with our expertise and collected data in selecting a design for a particular project. We plan to use a wide variety of methods to reach stakeholders and community members, including mailers, drop-in events, and taking information to regularly scheduled meetings and events of business and community-based organizations. Elements from the aforementioned Transit and Pedestrian Master Plans will be included in this project.
6. **Is the project in an area of low, medium, or high displacement risk?**
   The project is in an area of high displacement risk.
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 City of Seattle has been a proactive leader in addressing displacement risk. Since 2017, Seattle and its partners have invested more than $710 million to fund development of

affordable homes. City investments are helping to build more than 3,600 new, low-income homes. In 2018, our mayor established the Affordable Middle-Income Housing Advisory Council to address the growing need of housing options for middle-income wage earners. In 2019, our city council adopted a “community preference” policy. Under this policy, when affordable housing is built in an area of high displacement risk, developers will give applicants a better chance of securing a spot in the new development (usually based on whether they live or work in the same neighborhood). Finally, Seattle has established an Equitable Development Initiative (EDI) to fund projects that address displacement and lack of access to opportunity for historically marginalized communities. The EDI offers grants to community-based organizations that perform outreach, education, and community development work within at-risk communities.

Safety Criteria

1. **Describe how the project addresses safety and security.**
   This project includes the installation of Leading Pedestrian Intervals (LPIs) at all signalized intersections in the corridor to give a head start to people on foot as they cross an intersection. LPIs turn on the walk signal before people driving get the green light, which helps make pedestrians more visible. This tactic has been used at almost 300 intersections in Seattle, and we have seen a 48% reduction in pedestrian turning collisions and a 34% reduction in serious injury and fatal pedestrian collisions at these sites. This project includes the implementation of LPIs, and modified signal phasing, which have been identified to improve safety.
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.**
   Seattle's Vision Zero Action Plan notes that "Crashes with pedestrians, bicyclists, and motorcyclists make up less than 5% of total crashes, but nearly 50% of the fatalities." This trend is not unique to Seattle; it is typical in highly urbanized areas where large numbers of unprotected roadway users must mingle with vehicular traffic. The action plan also recognizes that "More often than not, the youngest and oldest are most impacted." These statistics are especially compelling in areas like the 80th/85th St corridor, where popular transit routes produce high volumes of pedestrians, Urban Village activity clusters promote walking, and unusually high proportions of the population are elderly or families with young children. In areas like these, highly effective and well-proven pedestrian safety treatments like LPIs are an especially powerful tool to move us toward Vision Zero.
3. **Describe how the project reduces reliance on enforcement and/or designs for decreased speeds.**
   Although controlling speed on N 80th and 85th Streets is important for safety, conventional traffic calming techniques cannot usually be applied on arterials. Traffic signal synchronization and optimized vehicle progression can be used in this corridor to encourage adherence to posted speed limits by providing specific green light travel bands through the corridor. LPIs provide pedestrians with an “early start” on crossing intersections, which slows down drivers making turns. Implementing speed indicator signs provides motorists with their speed, consistently causing the fastest speeders to reduce their speeds in corridors. Also, by providing improved coordination of traffic signals with interconnected communications along the corridor, there would be less opportunities and need for drivers to run red lights at intersections.
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?**
   In February 2015, Seattle adopted a Vision Zero policy alongside city leaders, safe streets advocates, and friends and family of those who have been impacted by traffic crashes, and launched a program to end traffic deaths and serious injuries by 2030. Since then, we’ve made progress toward our goal of improving safety for everyone who travels on Seattle’s streets. Seattle is committed to achieving our Vision Zero goal to eliminate transportation-related serious injuries and deaths. This policy identifies the need to bring a higher level of safety to urban centers where high volumes of traffic merge. This grant includes the implementation of LPIs, and modified signal phasing, which have been identified to improve safety (Vision Zero Plan p. 16).

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.**
   Intelligent Transportation Systems

Air Quality and Climate Change: Intelligent Transportation

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

1. **What is the existing level of service?**
   The existing daily LOS on the corridors is LOS C, but during the PM peak hour, the LOS drops to LOS D.
2. **What are the existing number of lanes (in one direction)?**
   NW 85th St has 2 lanes in each direction and NW 80th St has 1 lane in each direction.
3. **What is the existing average daily traffic?**
   NW 85th St has ADT of 19,400 and NW 80th St has 15,200.
4. **What is the existing average speed?**
   The average speed on NW 85th is 19.6 MPH, and on NW 80th the average speed is 20.2 MPH. The average PM peak hour speeds drop on NW 85th to 14.4 MPH and on NW 80th to 16.0 MPH.
5. **What are the ITS improvements being provided?**
   The scope includes fiber interconnect to traffic signals with new signal equipment for communications to Seattle DOT's centralized control and monitoring system, Leading Pedestrian Intervals and updated pedestrian crossing times, and optimized and synchronized corridor signal timing. This work will also include analysis to reduce signal delay by removing split sequential phase operations.
6. **How many intersections are being improved?**
   We plan to improve 22 signalized intersections.
7. **What is the length of the project?**
   4.8 miles total
8. **What is the percentage of freight truck traffic in the project area?**
   Based on SDOT traffic counts for N 85th St in April 2020, 5% of traffic is heavy-duty freight vehicles and another 13.2% is light-duty local delivery and/or utility vehicles. We don't have recent counts for N 80th St but observed traffic patterns are similar. Freight and general-purpose traffic use these roadways somewhat interchangeably, largely based on congestion levels.
9. **What is the expected improvement to level of service?**
   From average daily LOS C to LOS B and PM peak hour from LOS D to LOS C.
10. **What is the expected improvement to average speed?**
    Average daily speeds are expected to improve up to 1 MPH, with PM peak hour speeds improving up to 3 MPH.
11. **What is the expected improvement to average vehicle delay?**
    Average daily travel times could improve up to 1 minute, with PM peak hour travel times improving up to 3 minutes along the corridors.
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.)**
    SDOT Traffic Report, SDOT Freight Master Plan, SDOT traffic counts, Iteris ClearGuide data

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.**
   PSRC's Useful Life table is appropriate for this project.
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
PE	2025		$845,000.00
construction	2026		$3,380,000.00

Total Request: $4,225,000.00

Total Estimated Project Cost and Schedule

PE

Funding Source	Secured/Unsecured	Amount
STP	Unsecured	$845,000.00
Local	Secured	$132,000.00
		$977,000.00

Expected year of completion for this phase: 2025

Construction

Funding Source	Secured/Unsecured	Amount
STP	Unsecured	$3,380,000.00
Local	Secured	$528,000.00
		$3,908,000.00

Expected year of completion for this phase: 2026

Summary

1. **Estimated project completion date**
   2026
2. **Total project cost**
   $4,885,000.00

Funding Documentation

1. **Documents**
   Signals_Budget.pdf
2. **Please enter your description of your financial documentation in the text box below.**
   Secured local funds are programmed in our budget for Signal Major Maintenance. An excerpt From- our Capital Improvement Program is attached for documentation.

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?**
   October 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?**
   July 2025

Project Readiness: NEPA

1. **What is the current or anticipated level of environmental documentation under the National Environmental Policy Act (NEPA) for this project?**
   Categorical Exclusion (CE)
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).**
   July 2025

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.**
   NEPA Categorical Exclusion
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).**
   July 2025
7. **When is the project scheduled to go to ad (month and year)?**
   October 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.**
   This project includes funding to analyze a key segment of the N 85th St corridor approaching 8th Ave NW and 3rd Ave NW that have traffic signals that currently operate split-phase sequential traffic operations. The analysis would look at alternatives to remove the split phase signal operations to allow for concurrent phase operations with the goal of reducing pedestrian and vehicle delay, vehicle idling, and improving travel times through the corridor. Depending on the results of the analysis, these changes to signal operations could possibly be implemented with this project or may be included in a new, separately funded project to improve corridor operations.
2. **Describe any innovative components included in your project: these could include design elements, cost saving measures, or other innovations.**
   N/A
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.**
   N/A
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.**
   N/A
5. **Final documents**
   N/A