

PSRC's 2014 Regional FHWA Application

Important: Please review the following information before beginning the application.

Definition of a project: For the purposes of this competition, a project must be clearly defined by geographic limits and/or functionality. If a project contains multiple components, the sponsor must clearly indicate how they are logically connected to one another. A project with multiple geographic locations must demonstrate their functional relationship (for example, signal coordination work in various locations tied together through a traffic control center).

Projects that include multiple components or sponsors are allowed to be submitted, but the scope of work, funding amounts and schedules for each individual agency and/or component must be clearly identified at the time of application. If awarded PSRC funds, these projects may be separated into their individual components or lead agency in the regional Transportation Improvement Program. Each individual TIP project will be subject to PSRC's project tracking policies and will be administered according to the scope of work and funding awarded for each. If you have questions please contact Kelly McGourty at (206) 971-3601 or kmcgourty@psrc.org.

Resources: A resource document has been developed to assist sponsors in completing PSRC's online applications for the 2014 project selection process. The document summarizes information needed by sponsors to complete applications, as well as provides useful information on various topic areas such as financial constraint and project tracking requirements.

Submitting Applications: The importance of complete and accurate information on every application cannot be overemphasized. The evaluation and scoring of all submitted projects will be based on the answers provided in this application.

There is no set page limit for applications submitted to the regional competition. It is important to provide complete, detailed responses, but please be as concise as possible. Additional supporting information such as maps and other diagrams are encouraged, but other attachments such as comprehensive plan materials are unnecessary.

All applications must be submitted by 5:00p.m. April 8, 2014.

Project Information

Project Title

Broadway Streetcar Extension

Transportation 2040 ID#

5153

The current list of investments that are required to be on the Transportation 2040 Regional Capacity Project List and have a designated ID # can be accessed at Appendix N of the 2014 Transportation 2040 Update, [here](#). If your project is exempt from this requirement, please enter "N/A." Helpful information on those exempt investments that are considered programmatic in nature or are on local facilities and therefore not required to be on the Project

List can be found here.

For assistance or questions regarding these issues, contact Kimberly Scrivner at 206-971-3281 or kscrivner@psrc.org.

Sponsoring Agency

City of Seattle

Co-Sponsoring Agency

CA Status

- Yes
 No

CA Sponsor (if applicable)

Contact Information

Project Contact Name

Jim Storment

Project Contact Phone

206-684-5013

Project Contact Email

jim.storment@seattle.gov

Project Description

Project Scope

The City of Seattle proposes to construct an extension of its modern streetcar system, extending the First Hill Streetcar line by approximately one-half mile north along Broadway from E Denny Way to either E. Roy Street or E. Prospect Street in the Capitol Hill neighborhood. The project will provide additional transit system connectivity of urban residential and commercial uses to Sound Transit's Capitol Hill Link light rail station on Broadway, as well as local circulation along a streetcar system that includes the First Hill line, the South Lake Union line, and the planned Center City Connector in downtown Seattle. The project includes station, track and systems infrastructure, purchase of an additional modern streetcar vehicle, and multi-modal improvements including a protected bikeway.

Project Purpose

The purpose of this project is to extend the reach of high-quality transit service through high-density residential neighborhoods and key commercial districts that are critical to Seattle's economy.

Project Location

Broadway East/Capitol Hill

Please identify the county(s) the project is located in. Check all that apply.

- King County
- Kitsap County
- Pierce County
- Snohomish County

Please identify the crossroad, milepost or landmark nearest the beginning and end of the project below, if applicable. Crossroad/landmark nearest to the beginning of the project:

Howell Street

Crossroad/landmark nearest to the end of the project:

Roy Street

Please identify the center(s)

The project serves the First Hill/Capitol Hill regionally designated center.

Federal Functional Classification

Roadways must be approved on the federally classified roadway system before projects on it may use federal transportation funds (this includes proposed new facilities), unless the project meets certain exceptions. Resources to identify a facility's functional classification or exceptions to this requirement may be found [here](#).

Federal Functional Class

Urban Functional Classification Population over 5,000

You have selected Rural. If this is not the appropriate classification, please go back and change your selection.

Please select the appropriate rural classification.

You have selected Urban. If this is not the appropriate classification, please go back and change your selection.

Please select the appropriate urban classification.

16 Minor Arterial

Plan Consistency

All projects must be consistent with a comprehensive plan that has been certified by PSRC as being consistent with the Growth Management Act, VISION 2040 and Transportation 2040. Projects must be consistent with the comprehensive plan of each jurisdiction in which the project is located. If a comprehensive plan has not been certified, projects located in that jurisdiction may not be included in the Regional TIP.

Is the project specifically identified in a local comprehensive plan?

- Yes
- No

Is the project specifically identified in a local comprehensive plan?

If no, describe how the project is consistent with the applicable local comprehensive plan, including specific local policies and provisions the project supports.

Seattle's Comprehensive Plan includes extensive descriptions of the importance of transit, and describes transit improvements as a high priority for local investment. The following two paragraphs are taken from the introductory sections of two Comprehensive Plan elements, "Increasing Transportation Choices" and "Making Transit a Real Choice."

"To be effective, the City must provide for transportation alternatives and educate people on transportation choices that are responsive to the specific needs of Urban Centers as well as other residential and employment areas."

"Providing convenient and accessible transit service can help reduce reliance on single-occupant vehicles, slow the increase in environmental degradation associated with their use, and increase mobility without building new streets and highways. Street rights-of-way are limited and as streets get more congested, transit provides an efficient way to move large numbers of people around the city and the region and support growth in urban centers and villages."

Select the project category

Designated Regional Growth Center

Designated Regional Growth Center

In the sections below, please provide complete but concise responses, addressing as many bullet points as possible. The evaluation and scoring of all submitted projects will be based on the answers provided by the sponsor. Refer to the 2014 Regional Project Evaluation Criteria for PSRC's FHWA Funds in PSRC's Call for Projects for guidance, examples, and details on scoring for additional information.

A1. Regional Growth Center Development

HOUSING/EMPLOYMENT

This project will support mobility within the First Hill / Capitol Hill regionally-designated growth center. This center is one of the densest and fastest growing centers in the Puget Sound region. The center had over 40,000 existing jobs and 20,000 households in 2004, and by 2014 has already reached its 20-year growth target for new households, adding over 3,400 households in just 9 years. Within the regional growth center, Seattle's Comprehensive Plan has designated 4 local centers, including Capitol Hill. The Capitol Hill neighborhood is even denser and faster growing than the regional center overall. By 2014 it has reached 134% of its growth target for households.

The Capitol Hill center is bisected by the proposed Broadway Extension, with the Capitol Hill Link Light Rail station located at the south end and the terminus of the extension at the north end. In 2004, Capitol Hill had a housing density of 31 households / acre, this has increased to 34 / acre, the second highest density within the area. The First Hill / Capitol Hill regional center experienced steady growth even during the economic downturn, reflecting its proximity / connectivity to Seattle's other regional centers, the vitality of its neighborhoods, and the attractiveness of Capitol Hill to students and high-tech employees. Broadway, the "Main Street" of this center, has developed into a signature corridor for mixed use, transit-oriented redevelopment. While historically the street included eclectic single-story commercial buildings and small apartment buildings, recent construction features mixed-use structures with larger ground-level retail spaces and several stories of multifamily residential units above. This extremely dense development extends all the way to Roy Street.

Both City policies and market forces restrict off-street parking and encourage walking, biking and transit as major mode shares for the area. The Streetcar project supports multimodal travel by incorporating one of Seattle's first protected bike lane installations, expanded sidewalks, landscaping/wayfinding and public use space within existing rights-of-way. The Broadway Extension segment is critical to serving the core of the Capitol Hill center with increased capacity for on-street transit. The extension additionally expands the northerly "travelshed" of the Capitol Hill Link Light Rail station, ensuring that the area with high density development is accessible via transit, biking or walking. It also provides improved transit connections for students living in this area traveling to educational and workforce development opportunities on the growing Seattle Central and Seattle University campuses.

DEVELOPMENT/REDEVELOPMENT PLANS

The First Hill Streetcar improves the speed, reliability and capacity of transit connections between Capitol Hill, First Hill and the Chinatown-

A2. Project's Benefit to the Regional Growth Center

PROJECT REMEDIES

This project will provide higher capacity transit at a frequency level equivalent with other high capacity routes across the city. Currently, high frequency bus service along the Broadway Corridor turns at Pine Street. By providing the extension of the First Hill Streetcar to Roy Street at the north end of Capitol Hill, the entire Broadway Corridor will have a continuous high-frequency, higher capacity transit option along its entire length. Sidewalk improvements and the addition of a protected bike lane promote the safety and convenience of walking and bicycling through the corridor. The protected bike lane in particular will increase bicycle mode share by providing a separated facility that provides a direct link between northern Capitol Hill and First Hill.

USER GROUPS

The Capitol Hill / First Hill regional growth center is a very dense, transit-oriented community with a very diverse population. There are residential, commercial and educational uses in close proximity to the project. There are also a number of public destinations such as libraries, parks and communities centers near the Broadway Extension.

The First Hill / Capitol Hill regional center is known for its eclectic and diverse residents, ranging from affluent families and young professionals to limited-income students and low-wage service workers. At 34 households / acre, Capitol Hill is the second densest neighborhood in Seattle. Because of its density, urban design and high levels of transit service, over one-third of residents do not own cars and over two-thirds of commuting is by non-SOV modes, making it one of the Puget Sound region's true existing transit oriented communities.

Capitol Hill has a higher percentage of residents below poverty than Seattle on the whole (14.4 percent vs. 11.8 percent). Within Capitol Hill are 1,460 subsidized rental housing units, over 60% of which are dedicated to households earning up to 30% of median income. Over 10% of subsidized units in Capitol Hill are dedicated to families and those with special needs. The increased capacity and improved transit service offered by the Broadway Extension will increase access for these populations and help reduce the cost of transportation, leaving more household income available for other needs.

Residents of Capitol Hill who commute to high tech employment centers east of Lake Washington increasingly use transit to reach their destinations. The streetcar will provide improved transit access for these commuters to regional transit service, including several regional routes on First Hill as well as to the regional light rail and commuter rail systems.

Other users include the substantial number of visitors who come to the center from around the region to experience its many cultural and entertainment attractions. The recent Neighborhood Business Intercept Survey compiled by Seattle Department of Transportation and the Office of Economic Development showed that over one-half of the visitors to the business district along the Broadway Extension come from outside the neighborhood and 16% of visitors come from outside of Seattle. Only 25% of these visitors drive alone and most visitors stay in the area over three hours.

Users benefited by the Broadway Extension will also include the many students living at the north end of Capitol Hill commuting to Seattle Central Community College and Seattle University at the south end of the Capitol Hill. Seattle Central has over 10,000 students, including 3,000 from 50 nations. Forty-nine percent of students at Seattle Central identify as non-white and over half of the degrees and certificates awarded by the school go to students of color. Seattle University has over 7,750 students, thirty percent from ethnically diverse backgrounds, representing 77 nations. Students at these schools will have increased transit opportunities to access neighborhood services at the north end of Capitol Hill such as shopping, restaurants and the Capitol Hill Library. It will also benefit residents of the 1,700 affordable housing units planned at the Yesler Terrace redevelopment by providing them direct connections to

SAFE & CONVENIENT

The project provides safe and convenient transit and non-motorized access to major destinations within the Capitol Hill / First Hill Regional Center, where over one-third of residents do not own cars. It will connect students living in the north end of Capitol Hill to Seattle Central Community College and Seattle University providing more convenient access, particularly for those with mobility impairments. Transit capacity, speed and reliability will greatly improve with dedicated streetcar service, ITS improvements and frequent headways. Sidewalk improvements and pedestrian-scale lighting will enhance the safety of walkers, transit users, and the mobility impaired. The addition of a protected bike lane will facilitate the safe and convenient travel of bicycles on Broadway.

IMPROVED CIRCULATION AND OPPORTUNITIES FOR ACTIVE TRANSPORTATION

The Broadway Extension project will improve pedestrian safety and convenience with wide, ADA-compliant sidewalks, landscaping / transit amenities and wayfinding features. These improvements will increase safety for pedestrians and the disabled. Bicycle circulation will also be improved by the project. Capitol Hill currently does not have any dedicated, protected bicycle facilities and the protected bike lane planned as part of this project will provide a safer, dedicated bicycling route through the heart of Capitol Hill. Transit priority signalization and ITS improvements will improve the overall efficiency of the corridor for transit.

These project features will enhance Broadway's role as the center's "Main Street" and ensure that it is a complete street serving all modes efficiently. All of these measures encourage and improve the safety of active transportation modes within an existing dense, transit-oriented community where many residents do not own cars. A recent conservative estimate of the health benefit of providing a 1,200-foot long, separated, buffered bicycle facility along Mercer Corridor West (similar to the half-mile separated bike lane proposed as part of this project) indicated that the facility could have a long term (25-year) health benefit of up to \$10 million by increasing the use of active transportation modes.

TRAVEL MODES

The Broadway Extension includes improvements for a range of travel modes, including transit, walking and bicycling. A direct connection from the entire Broadway business district and dense residential neighborhoods to the Capitol Hill Link Light Rail station will provide improved access to many regional growth centers and locally designated centers served by Link Light Rail and the regional bus system. As stated above, the extension of the First Hill Streetcar to Roy Street will provide a single, continuous high-frequency transit route along the entire Broadway Corridor with service seven days a week, something that does not exist today. The presence of such a line, with a fixed guideway, will encourage increased transit ridership by providing employees, residents and visitors more assurance of consistent transit service. It will also encourage increased transit use by eliminating the need for transfers along Broadway. The project provides a missing mode, addressing the lack of a dedicated, separated bicycle facility within the heart of the Capitol Hill area, by building a protected bike lane for bicyclists that will greatly improve bicycling safety and convenience of both current riders. The extension of the protected bike lane further along Broadway will make bicycling a more attractive option for those throughout the Capitol Hill and Montlake areas for commuting to jobs in the First Hill / Capitol Hill and Downtown regional growth centers. It will also encourage future residents within this transit-oriented community to choose cycling for shorter discretionary trips.

PARKING

Seattle has an extensive and innovative parking management program that includes variable parking pricing, curbspace space management and elimination of parking minimums within regional growth centers. Seattle is also conducting a commercial load zone management pilot project with the FHWA that will investigate innovative technology options for pricing and managing the use of these zones. Seattle's

B1. Development and Users Benefit

In the sections below, please provide complete but concise responses, addressing as many bullet points as possible. The evaluation and scoring of all submitted projects will be based on the answers provided by the sponsor. Refer to the 2014 Regional Project Evaluation Criteria for PSRC's FHWA Funds in PSRC's Call for Projects for guidance, examples, and details on scoring for additional information.

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Corridor Serving Center(s)

In the sections below, please provide complete but concise responses, addressing as many bullet points as possible. The evaluation and scoring of all submitted projects will be based on the answers provided by the sponsor. Refer to the 2014 Regional Project Evaluation Criteria for PSRC's FHWA Funds in PSRC's Call for Projects for guidance, examples, and details on scoring for additional information.

C1. Benefit to Regional Growth or Manufacturing/Industrial Center

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Please describe how your project will reduce emissions. Include a discussion of the population served by the project (who will benefit, where, and over what time period). Specific questions have been prepared to assist you in responding to this criterion depending on the type of project.

Please select all of the elements in the list below that are included in the project's scope of work, and provide the requested information in the text box below.

- Diesel Particulate Emissions Reduction Projects (e.g. diesel engine retrofits)
- Roadway Capacity (general purpose and high occupancy lanes)
- Transit
- Bicycle/Pedestrian Facilities
- Intelligent Transportation Systems (signalization, etc.)
- Alternative Fuels or Vehicle Technology
- Other

The First Hill Streetcar will reduce emissions by expanding transit capacity and connectivity for the First Hill / Capitol Hill and Downtown Regional centers.

Current bus transit service along the Broadway Extension segment includes King County Metro Routes 9, 60 and 49, the latter being electric trolley service. Together these routes serve around 11,000 passengers each weekday, with 1,844 weekday boardings in the affected segment. Buses through Capitol Hill are often very crowded and the large amount of boardings and alightings at each stop can slow down routes through the area. Bus service along Broadway from the north end of Capitol Hill through First Hill to the International District is less frequent than many other high capacity lines in the regional center. The First Hill Streetcar will operate seven days a week with a high frequency. The Broadway Extension will continue this service through the core of the Capitol Hill center and provide additional transit capacity within this center, which will attract additional transit ridership, reduce vehicle trips and reduce vehicle miles travelled.

The streetcar vehicles are anticipated to have a passenger capacity similar to that of the vehicles operating in Seattle's South Lake Union neighborhood, Tacoma and Portland: approximately 115 passengers seated and standing, with a "crush load" estimated at approximately 150 passengers. The maximum daily passenger capacity at the proposed span of service and headways would be approximately 21,000 passengers.

Sound Transit performed a ridership forecast in the planning for the First Hill Streetcar project including the Broadway Extension segment. Sound Transit's analysis projected a range of 3,000 to 3,500 daily passengers in 2030, including 500 new daily passengers. Experience with Seattle's South Lake Union Streetcar, Portland's streetcar system and other systems throughout the United States, however, show that ridership can grow significantly faster than estimated. Because of the high level pedestrian activity along Broadway, the high level of transit use by Capitol Hill residents, customers and visitors, the convenience of the connection to light rail and the presence of rapidly growing student populations at the colleges at the south end of the center, Seattle anticipates high levels of ridership.

Additionally, the improved bicycle and pedestrian connections provided to light rail and the Metro bus system can increase ridership on these services. Transit signal priority and other ITS improvements can also increase the speed and reliability of buses and streetcar service in the corridor, resulting in increased ridership within the Capitol Hill center and beyond. Increased transit ridership is one of the key strategies in Seattle's aggressive Climate Action Plan for reducing greenhouse gas emissions.

The expanded transit service will be powered with emission-free electric streetcars. Expanding the use of electric transit vehicles is also an important strategy of the Climate Action Plan. Overhead electrification infrastructure will be redesigned to accommodate both trolley and streetcar operations.

Broadway currently includes marked bicycle sharrows (shared-use lanes) adjacent to on-street parking. The project includes a half-mile extension of the protected bike lane being constructed south of Denny Way. Protected bike lanes help eliminate conflicts between bicycles and parked cars by placing the protected bike lane on the inside of the parking lane. This facility will run through the core of the Capitol Hill center, where over one-third of the households do not own cars. It will also serve Seattle Central and Seattle University as well as the Cornish College of the Arts, which have a combined student population of over 17,000. Research has shown that protected bike lanes with this design can increase bicycle ridership 18 to 20 percent, compared with the 5 to 7 percent increase found resulting from installing standard bicycle lanes, further reducing emissions. Additionally, the protected bike lane extension will allow bikes to serve a "last mile" role for access to high-capacity transit options.

Broadway carries 23,500 vehicles each day, including almost 300 buses each weekday that serve over 11,000 riders

Financial Plan & Project Readiness

In this section, sponsors will address questions regarding the PSRC funding request, the total estimated project cost and schedule, and the project's readiness to obligate PSRC funds. Sponsors should be aware of the following information before completing this section:

Funding Request: Sponsors may request funding for any single project phase, but requests for multiple phases are limited to preliminary engineering plus the subsequent phase necessary. I.e, a sponsor may request funding for both preliminary engineering and right of way phases or preliminary engineering and construction phases, but not both right of way and construction phases.

Funding Requirements: A minimum of 13.5% of local matching funds is required for both Surface Transportation Program (STP) and Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding. The combination of the requested PSRC funds plus all other funding must be adequate to fully fund that phase. Requests that do not result in a phase being fully funded will be considered ineligible for PSRC funding.

Obligation Requirements: Per PSRC's project tracking policies, all project phases awarded PSRC funds must obligate by June 1st of the program year selected. For more information, see PSRC's project tracking policies [here](#).

PSRC Funding Request

Please identify the phase(s) for which PSRC funds are being requested, the funding source, the amount, and expected year of obligation. Confirm the total by pressing the calculate button.

Funding Source

- STP
- CMAQ

Phase

Construction

Obligation Year

2015

Amount Requested

10000000

Phase

Obligation Year

Amount Requested

Total PSRC Funding Request

10000000

Total Estimated Project Cost and Schedule

In the table below, please provide the total estimated cost and schedule for all phases of the project, from start to finish, and indicate when each phase was, or is planned to be, completed. If a phase is not required for the project, indicate with N/A.

Please include all funding amounts and sources (including the requested PSRC funds) and identify whether they are secure, reasonably expected, or unsecure. PSRC's definitions and guidance for determining secure and reasonably expected funds may be found [here](#).

NOTE: If you find that you need more rows than provided in the tables below, please fill out the supplemental project cost spreadsheet available [here](#) and upload in the area below.

Upload (only if necessary)

Planning Phase

Please note, the planning phase of a capital project is considered to be part of the preliminary engineering phase. Complete this section only if this project is an independent planning study.

Funding Source

Funding Status

Funding Amount

Total Planning Phase Cost

Actual or estimated completion date

Preliminary Engineering/Design Phase

Funding Source

Funding Status

Funding Amount

Funding Source

Funding Status

Funding Amount

Funding Source

Funding Status

Funding Amount

1750000

Funding Source

Funding Status

Funding Amount

Funding Source

Funding Status

Funding Amount

Total Preliminary Engineering/Design Cost

3300000

Actual or estimated completion date

April 2015

Right of Way Phase

Funding Source

Funding Status

Funding Amount

Total Right of Way Phase Cost

Actual or estimated completion date

Construction Phase

Funding Source

Funding Status

Funding Amount

Total Construction Phase Cost

Actual or estimated completion date

Other Phase

Funding Source

Funding Status

Funding Amount

Total Other Phase Cost

Actual or estimated completion date

Project Summary

The calculated total project cost below is based on the entries completed above. Please review for accuracy before proceeding to ensure all funding is reflected.

Total Estimated Project Cost

25000000

Estimated Project Completion Date

July 2016

Financial Documentation

Please provide supporting documentation using the upload function below to demonstrate that all additional funds for the phase(s) for which PSRC funds are being requested are secure or reasonably expected.

Upload

http://fs19.formsite.com/psrc/files/f-0-475-7876739_CUzHVgg6_f-6-346-7857841_nT9D0mYg_Streetc

Upload

Upload

Please describe the secure or reasonably expected funds identified in the supporting documentation. For funds that are reasonably expected, an explanation of procedural steps with milestone dates for completion which will be taken to secure the funds for the project or program should also be included. For more information, refer to PSRC's financial constraint guidance.

The City of Seattle has secured funds for the Preliminary Engineering/Design Phase and has adopted a 2014-2019 Capital Improvement Program that identifies \$19.825 M of future revenue for the 2015 Construction phase. However, with the requested federal grant, construction of this project would be funded as shown above.

Project Readiness

PSRC recognizes that the complexity of some projects can trigger a variety of prerequisites that must be satisfied before federal funding is typically eligible to be obligated. The questions in this section are designed to identify those requirements and assist sponsors to:

- Identify which obligation prerequisites and milestones apply to their specific project.
- Identify which of these have already been satisfied at time of application.
- Provide an explanation and realistic completion date for all obligation prerequisites and milestones not yet completed.

In the following section, sponsors will be asked a series of questions about the project. Based on these responses, sponsors will be directed to the appropriate set of subsequent questions addressing the project's readiness.

NOTE: Sponsors applying for funds for only planning studies or preliminary engineering/design phases are not required to provide further information for project readiness and will be directed to the next required set of questions.

Are you requesting funds for ONLY a planning study or preliminary engineering?

- Yes
 No

Is preliminary engineering for the project complete?

- Yes
 No

What was the date of completion (month and year)?

Have preliminary plans been submitted to WSDOT for approval?

- Yes
 No

When are preliminary plans expected to be complete and approved by WSDOT (month and year)?

Are there any other PE/Design milestones not listed above?

July 2014	30% PS&E (Terminus selected)
October 2014	60% PS&E
March 2015	90% PS&E
April 2015	100% PS&E
June 2015	Advertise for construction bid
September 2015	Notice to Proceed with Construction

Project Readiness

What is the current level of NEPA documentation?

- Environmental Impact Statement (EIS)
- Environmental Assessment (EA)
- Documented Categorical Exclusion (DCE)
- Categorical Exclusion (CE)

Has the NEPA documentation been approved?

- Yes
- No

Please provide the date of NEPA approval, or the anticipated date of completion (month and year).

September 2014

Project Readiness

Will right of way be required for the project?

- Yes
 No

How many parcels do you need?

What is the zoning in the project area?

Discuss the extent to which your schedule reflects the possibility of condemnation and the actions needed to pursue this.

Does your agency have experience in conducting right of way acquisitions of similar size and complexity?

- Yes
 No

If not, when do you expect a consultant to be selected, under contract, and ready to start (month and year)?

In the box below, please identify all relevant right of way milestones, including the current status and estimated completion date of each. For example, these might include:• True cost estimate of right of way• Right of way plans (stamped)• Relocation plan• Right of way certification• Right of way acquisition• Certification audit by WSDOT • Relocation certification

Project Readiness

Are funds being requested for construction?

- Yes
- No

Do you have an engineer's estimate?

- Yes
- No

Identify the environmental permits needed for the project and when they are scheduled to be acquired.

October 2014	NEPA – Documented Categorical Exclusion (DCE)
November 2014	SEPA – Determination of Non-Significance (DNS) Checklist
February 2015	Environmental Permits/Approval:
	<input checked="" type="checkbox"/> Street Use Permit
	<input checked="" type="checkbox"/> Section 106 (Historic and Cultural Resources) evaluation and Department of Archaeology and Historic Preservation (DAHP)

Are Plans, Specifications & Estimates (PS&E) approved?

- Yes
- No

Please provide the date of approval, or the date when PS&E is scheduled to be submitted for approval (month and year).

March 2015

When is the project scheduled to go to ad (month and year)?

June 2015

Other Considerations

Please describe any additional aspects of your project not previously addressed in the application that could be relevant to the final project recommendation and decision-making process. In addition, please describe any innovative components included in your project: these could include design elements, cost saving measures, or other innovations.

This project will construct a protected bike lane on Broadway consistent with the protected bike lane constructed as part of the First Hill Streetcar. This feature will ensure the safe and convenient travel of bicyclists north and south along the Broadway corridor.

File Submission

Please provide any additional supporting documents, including maps, through the upload functions below.

Upload

http://fs19.formsite.com/psrc/files/f-0-477-7876739_VpbAi48m_StreetcarExtensionGrantMap.pdf

Upload

Final Review

Please review all application form questions to ensure you have completed all fields. An email containing a PDF version of the project application will be sent to the project contact upon submission.

NOTE: Sponsors may update and resubmit information included in the application until the April 8th deadline. After the deadline has passed, the form site will close and sponsors will not have access for revisions.

Last Update

2014-03-19 16:12:00

Start Time

N/A with Save & Return

Finish Time

N/A with Save & Return

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Browser

IE 9

OS

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Broadway Streetcar Extension

Project Scope

The City of Seattle proposes to construct an extension of its modern streetcar system, extending the First Hill Streetcar line by approximately one-half mile north along Broadway from E Denny Way to either E. Roy Street or E. Prospect Street in the Capitol Hill neighborhood. The project will provide additional transit system connectivity of urban residential and commercial uses to Sound Transit's Capitol Hill Link light rail station on Broadway, as well as local circulation along a streetcar system that includes the First Hill line, the South Lake Union line, and the planned Center City Connector in downtown Seattle. The project includes station, track and systems infrastructure, purchase of an additional modern streetcar vehicle, and multi-modal improvements including a protected bikeway.

Project Purpose

The purpose of this project is to extend the reach of high-quality transit service through high-density residential neighborhoods and key commercial districts that are critical to Seattle's economy.

Regional Growth Center Development

- SUPPORT FOR HOUSING AND EMPLOYMENT DEVELOPMENT IN CENTERS
- SUPPORT THE DEVELOPMENT/REDEVELOPMENT PLANS AND ACTIVITIES (OBJECTIVES AND AIMS) OF THE CENTER.
- SUPPORT FOR JOBS AND BUSINESSES, AND INDUSTRY CLUSTERS WITHIN THE REGIONAL ECONOMIC STRATEGY

HOUSING/EMPLOYMENT

This project will support mobility within the First Hill / Capitol Hill regionally-designated growth center. This center is one of the densest and fastest growing centers in the Puget Sound region. The center had over 40,000 existing jobs and 20,000 households in 2004, and by 2014 has already reached its 20-year growth target for new households, adding over 3,400 households in just 9 years. Within the regional growth center, Seattle's Comprehensive Plan has designated 4 local centers, including Capitol Hill. The Capitol Hill neighborhood is even denser and faster growing than the regional center overall. By 2014 it has reached 134% of its growth target for households.

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The Broadway Extension segment is critical to serving the core of the Capitol Hill center with increased capacity for on-street transit. The extension additionally expands the northerly "travelshed" of the Capitol Hill Link Light Rail station, ensuring that the area with high density development is accessible via transit, biking or walking. It also provides improved transit connections for students living in this area traveling to educational and workforce development opportunities on the growing Seattle Central and Seattle University campuses.

DEVELOPMENT/REDEVELOPMENT PLANS

The First Hill Streetcar improves the speed, reliability and capacity of transit connections between Capitol Hill, First Hill and the Chinatown-International District, supporting regional and local development and redevelopment plans and activities. As stated above, Capitol Hill has grown rapidly, exceeding its 20-year growth targets within 10 years. Over 400 additional household units are already permitted for construction, which will result in the center exceeding its residential growth target by 77%. Seattle's policies encouraging low amounts of parking in developments within growth centers encourage lower auto ownership and more use of walking, biking and transit. Over two-thirds of residents within Capitol Hill use non-SOV modes to commute, and over one-third do not own a car. The Broadway Extension will directly benefit residents, businesses and schools along the "Main Street" of the Capitol Hill center significantly expanding transit and bicycle access to, and utilization of, the Capitol Hill Link light rail station from the northern part of this growth center.

The First Hill Streetcar and the Broadway Extension will directly address goals and policies in Seattle's Comprehensive Plan. The project is specifically identified in Seattle's Transit Master Plan, the City's transit development plan, as well as the City's Adopted Capital Improvement Program. The Broadway protected bicycle lane is also specifically identified in Seattle's Bicycle Master Plan. The transit and bike network extensions support the following policies from VISION 2040:

- MPP-En-21: Reduce the rate of energy use per capita, both in building use and in transportation activities
- MPP-En-23: Reduce greenhouse gases by expanding the use of conservation and alternative energy sources and by reducing vehicle miles traveled by increasing alternatives to driving alone.
- MPP-DP-14: Preserve and enhance existing neighborhoods and create vibrant, sustainable compact urban communities that provide diverse choices in housing types, a high degree of connectivity in the street network to accommodate walking, bicycling and transit use, and sufficient public spaces.
- MPP-T-11: Prioritize investments in transportation facilities and services in the urban growth area that support compact, pedestrian- and transit-oriented densities and development.
- MPP-T-15: Improve local street patterns – including their design and how they are used – for walking, bicycling, and transit use to enhance communities, connectivity, and physical activity.

- MPP-T-20: Design transportation facilities to fit within the context of the built or natural environments in which they are located.
- MPP-T-21: Apply urban design principles in transportation programs and projects for regional growth centers and high-capacity transit station areas.
- MPP-T-23: Emphasize transportation investments that provide and encourage alternatives to single-occupancy vehicle travel and increase travel options, especially to and within centers and along corridors connecting centers.
- MPP-T-24: Increase the proportion of trips made by transportation modes that are alternatives to driving alone.
- MPP-T-32: Integrate transportation systems to make it easy for people and freight to move from one mode or technology to another.

Seattle undertook an extensive neighborhood planning effort following the adoption of its Urban Village growth strategy as part of the Comprehensive Plan. These plans were developed to provide strategies and recommendations to allow neighborhoods to support expected growth. The Broadway Extension addresses recommendations from a number of neighborhood-oriented plans for further development and re-development of the Capitol Hill center, including the Capitol Hill Neighborhood Plan, Capitol Hill-Broadway Transit-Oriented Development Guidelines, Capitol Hill Urban Design Guidelines. Two priority issues addressed in the adopted Capitol Hill Neighborhood Design Guidelines are addressed by the Broadway Extension project:

- Integrating transit and open space with new commercial and residential development is essential for making the most of these public and private assets.
- Maintaining the special character and pedestrian-orientation of the neighborhood’s commercial corridors is important to their economic vitality.

REGIONAL ECONOMIC STRATEGY

Capitol Hill supports the Tourism cluster of the Regional Economic Strategy, which has the highest employment of any cluster in the Puget Sound region, as one of the City’s most prominent entertainment districts with a rich and diverse history. It is home to the Seattle Asian Art Museum, Volunteer Park, Cal Anderson Park and the Cornish College of the Arts, as well as boutique retail shops, restaurants, historic theaters, bars, music venues, and other educational institutions that together create a regional cultural destination.

The First Hill / Capitol Hill regionally-designated growth center, where the project is located, has over 40,000 jobs with a density of over 45 employees / acre. The regional growth center is one of focal points for the Life Sciences and Global Health sector in the Puget Sound region. The Capitol Hill neighborhood is the home of one of Seattle’s largest medical centers, Group Health Cooperative’s Capitol Hill campus. The proposed Harrison Street station along the Broadway Extension will reduce the walk distance to the streetcar from the north end of the Group Health campus, putting the line within a five-minute walk, and will link to other medical facilities along Broadway.

One of the economic foundations shared across all of the region’s economic clusters is Education and Workforce Development. The First Hill/Capitol Hill regional center is a hub for workforce development and education within Puget Sound, serving as the home to Seattle Central Community College (SCCC), Seattle University (SU) and Cornish College of the Arts. The Broadway Extension will link Cornish, at the north end of the extension to both SCCC and SU. The extension will also provide access to educational opportunities at Cornish to residents of the

1,700 affordable housing units at Seattle Housing Authority's new Yesler Terrace redevelopment within the First Hill / Capitol Hill regional growth center. The many students who live in the north end of Capitol Hill and attend SCCC and SU will also be able to get to class easier and safer with the extension of the streetcar and protected bicycle lane.

The Puget Sound region's continued prosperity depends on providing a high quality of life that will retain and attract the well-educated, highly talented employees from around the world that businesses need in order to be competitive. Capitol Hill's rapid growth and popularity as a cultural center is evidence of the type of vibrant and thriving community that is a crucial economic foundation of the Regional Economic Strategy. Many of the residents of the First Hill / Capitol Hill center are employed in the Life Sciences and Information Technology clusters, drawn to Capitol Hill by its diverse community, urban amenities and educational and cultural opportunities. This project will ensure that residents, employees and visitors are able to access jobs and educational opportunities through efficient transit service and safe active transportation facilities.

Project's Benefit to the Regional Growth Center

- DESCRIBE HOW THE PROJECT REMEDIES A CURRENT OR ANTICIPATED PROBLEM
- DESCRIBE THE USER GROUPS THAT WILL BENEFIT FROM THE PROJECT

PROJECT REMEDIES

This project will provide higher capacity transit at a frequency level equivalent with other high capacity routes across the city. Currently, high frequency bus service along the Broadway Corridor turns at Pine Street. By providing the extension of the First Hill Streetcar to Roy Street at the north end of Capitol Hill, the entire Broadway Corridor will have a continuous high-frequency, higher capacity transit option along its entire length. Sidewalk improvements and the addition of a protected bike lane promote the safety and convenience of walking and bicycling through the corridor. The protected bike lane in particular will increase bicycle mode share by providing a separated facility that provides a direct link between northern Capitol Hill and First Hill.

USER GROUPS

The Capitol Hill / First Hill regional growth center is a very dense, transit-oriented community with a very diverse population. There are residential, commercial and educational uses in close proximity to the project. There are also a number of public destinations such as libraries, parks and communities centers near the Broadway Extension.

The First Hill / Capitol Hill regional center is known for its eclectic and diverse residents, ranging from affluent families and young professionals to limited-income students and low-wage service workers. At 34 households / acre, Capitol Hill is the second densest neighborhood in Seattle. Because of its density, urban design and high levels of transit service, over one-third of residents do not own cars and over two-thirds of commuting is by non-SOV modes, making it one of the Puget Sound region's true existing transit oriented communities.

Capitol Hill has a higher percentage of residents below poverty than Seattle on the whole (14.4 percent vs. 11.8 percent). Within Capitol Hill are 1,460 subsidized rental housing units, over 60% of which are dedicated to households earning up to 30% of median income. Over 10% of subsidized units in Capitol Hill are dedicated to families and those with special needs. The increased capacity and improved transit service offered by the

Broadway Extension will increase access for these populations and help reduce the cost of transportation, leaving more household income available for other needs.

Residents of Capitol Hill who commute to high tech employment centers east of Lake Washington increasingly use transit to reach their destinations. The streetcar will provide improved transit access for these commuters to regional transit service, including several regional routes on First Hill as well as to the regional light rail and commuter rail systems.

Other users include the substantial number of visitors who come to the center from around the region to experience its many cultural and entertainment attractions. The recent Neighborhood Business Intercept Survey compiled by Seattle Department of Transportation and the Office of Economic Development showed that over one-half of the visitors to the business district along the Broadway Extension come from outside the neighborhood and 16% of visitors come from outside of Seattle. Only 25% of these visitors drive alone and most visitors stay in the area over three hours.

Users benefited by the Broadway Extension will also include the many students living at the north end of Capitol Hill commuting to Seattle Central Community College and Seattle University at the south end of the Capitol Hill. Seattle Central has over 10,000 students, including 3,000 from 50 nations. Forty-nine percent of students at Seattle Central identify as non-white and over half of the degrees and certificates awarded by the school go to students of color. Seattle University has over 7,750 students, thirty percent from ethnically diverse backgrounds, representing 77 nations. Students at these schools will have increased transit opportunities to access neighborhood services at the north end of Capitol Hill such as shopping, restaurants and the Capitol Hill Library. It will also benefit residents of the 1,700 affordable housing units planned at the Yesler Terrace redevelopment by providing them direct connections to educational and cultural opportunities at the north end of the Capitol Hill.

Circulation Within the Regional Growth Center

- SAFE & CONVENIENT ACCESS
- IMPROVE CIRCULATION AND ENHANCED OPPORTUNITIES FOR ACTIVE TRANSPORTATION
- RANGE OF TRAVEL MODES OR PROVIDES A “MISSING” MODE
- PARKING COMPONENT

SAFE & CONVENIENT

The project provides safe and convenient transit and non-motorized access to major destinations within the Capitol Hill / First Hill Regional Center, where over one-third of residents do not own cars. It will connect students living in the north end of Capitol Hill to Seattle Central Community College and Seattle University providing more convenient access, particularly for those with mobility impairments. Transit capacity, speed and reliability will greatly improve with dedicated streetcar service, ITS improvements and frequent headways. Sidewalk improvements and pedestrian-scale lighting will enhance the safety of walkers, transit users, and the mobility impaired. The addition of a protected bike lane will facilitate the safe and convenient travel of bicycles on Broadway.

IMPROVED CIRCULATION AND OPPORTUNITIES FOR ACTIVE TRANSPORTATION

The Broadway Extension project will improve pedestrian safety and convenience with wide, ADA-compliant sidewalks, landscaping / transit amenities and wayfinding features. These improvements will increase safety for pedestrians and the disabled. Bicycle circulation will also be improved by the project. Capitol Hill currently does not have any dedicated, protected bicycle facilities and the protected bike lane planned as part of this project will provide a safer, dedicated bicycling route through the heart of Capitol Hill. Transit priority signalization and ITS improvements will improve the overall efficiency of the corridor for transit.

These project features will enhance Broadway's role as the center's "Main Street" and ensure that it is a complete street serving all modes efficiently. All of these measures encourage and improve the safety of active transportation modes within an existing dense, transit-oriented community where many residents do not own cars. A recent conservative estimate of the health benefit of providing a 1,200-foot long, separated, buffered bicycle facility along Mercer Corridor West (similar to the half-mile separated bike lane proposed as part of this project) indicated that the facility could have a long term (25-year) health benefit of up to \$10 million by increasing the use of active transportation modes.

TRAVEL MODES

The Broadway Extension includes improvements for a range of travel modes, including transit, walking and bicycling. A direct connection from the entire Broadway business district and dense residential neighborhoods to the Capitol Hill Link Light Rail station will provide improved access to many regional growth centers and locally designated centers served by Link Light Rail and the regional bus system. As stated above, the extension of the First Hill Streetcar to Roy Street will provide a single, continuous high-frequency transit route along the entire Broadway Corridor with service seven days a week, something that does not exist today. The presence of such a line, with a fixed guideway, will encourage increased transit ridership by providing employees, residents and visitors more assurance of consistent transit service. It will also encourage increased transit use by eliminating the need for transfers along Broadway.

The project provides a missing mode, addressing the lack of a dedicated, separated bicycle facility within the heart of the Capitol Hill area, by building a protected bike lane for bicyclists that will greatly improve bicycling safety and convenience of both current riders. The extension of the protected bike lane further along Broadway will make bicycling a more attractive option for those throughout the Capitol Hill and Montlake areas for commuting to jobs in the First Hill / Capitol Hill and Downtown regional growth centers. It will also encourage future residents within this transit-oriented community to choose cycling for shorter discretionary trips.

PARKING

Seattle has an extensive and innovative parking management program that includes variable parking pricing, curbspace space management and elimination of parking minimums within regional growth centers. Seattle is also conducting a commercial load zone management pilot project with the FHWA that will investigate innovative technology options for pricing and managing the use of these zones. Seattle's parking management strategies are aimed at reducing reliance on the single-occupant vehicle and to preserve limited roadway space for short-term parking to support numerous local shops, restaurants and service businesses. The Broadway Streetcar Extension will support these policies by providing increased transit capacity and improved bicycle access so that residents, employees, customers and visitors do not need to use a vehicle and pay for or search for scarce parking. The design of the system will include short-term parking to support numerous local businesses.

Please describe how your project will reduce emissions. Include a discussion of the population served by the project (who will benefit, where, and over what time period). Specific questions have been prepared to assist you in responding to this criterion depending on the type of project.

Please select all of the elements in the list below that are included in the project's scope of work, and provide the requested information in the text box below.

- Diesel Particulate Emissions Reduction Projects (e.g. diesel engine retrofits)
 - Roadway Capacity (general purpose and high occupancy lanes)
 - Transit
 - Bicycle/Pedestrian Facilities
 - Intelligent Transportation Systems (signalization, etc.)
 - Alternative Fuels or Vehicle Technology
 - Other
-

The First Hill Streetcar will reduce emissions by expanding transit capacity and connectivity for the First Hill / Capitol Hill and Downtown Regional centers.

Current bus transit service along the Broadway Extension segment includes King County Metro Routes 9, 60 and 49, the latter being electric trolley service. Together these routes serve around 11,000 passengers each weekday, with 1,844 weekday boardings in the affected segment. Buses through Capitol Hill are often very crowded and the large amount of boardings and alightings at each stop can slow down routes through the area. Bus service along Broadway from the north end of Capitol Hill through First Hill to the International District is less frequent than many other high capacity lines in the regional center. The First Hill Streetcar will operate seven days a week with a high frequency. The Broadway Extension will continue this service through the core of the Capitol Hill center and provide additional transit capacity within this center, which will attract additional transit ridership, reduce vehicle trips and reduce vehicle miles travelled.

The streetcar vehicles are anticipated to have a passenger capacity similar to that of the vehicles operating in Seattle's South Lake Union neighborhood, Tacoma and Portland: approximately 115 passengers seated and standing, with a "crush load" estimated at approximately 150 passengers. The maximum daily passenger capacity at the proposed span of service and headways would be approximately 21,000 passengers.

Sound Transit performed a ridership forecast in the planning for the First Hill Streetcar project including the Broadway Extension segment. Sound Transit's analysis projected a range of 3,000 to 3,500 daily passengers in 2030, including 500 new daily passengers. Experience with Seattle's South Lake Union Streetcar, Portland's streetcar system and other systems throughout the United States, however, show that ridership can grow significantly faster than estimated. Because of the high level pedestrian activity along Broadway, the high level of transit use by Capitol Hill residents, customers and visitors, the convenience of the connection to light rail and the presence of rapidly growing student populations at the colleges at the south end of the center, Seattle anticipates high levels of ridership.

Additionally, the improved bicycle and pedestrian connections provided to light rail and the Metro bus system can increase ridership on these services. Transit signal priority and other ITS improvements can also increase the speed and reliability of buses and streetcar service in the corridor, resulting in increased ridership within the Capitol Hill center and beyond. Increased transit ridership is one of the key strategies in Seattle's aggressive Climate Action Plan for reducing greenhouse gas emissions.

The expanded transit service will be powered with emission-free electric streetcars. Expanding the use of electric transit vehicles is also an important strategy of the Climate Action Plan. Overhead electrification infrastructure will be redesigned to accommodate both trolley and streetcar operations.

Broadway currently includes marked bicycle sharrows (shared-use lanes) adjacent to on-street parking. The project includes a half-mile extension of the protected bike lane being constructed south of Denny Way. Protected bike lanes help eliminate conflicts between bicycles and parked cars by placing the protected bike lane on the inside of the parking lane. This facility will run through the core of the Capitol Hill center, where over one-third of the households do not own cars. It will also serve Seattle Central and Seattle University as well as the Cornish College of the Arts, which have a combined student population of over 17,000. Research has shown that protected bike lanes with this design can increase bicycle ridership 18 to 20 percent, compared with the 5 to 7 percent increase found resulting from installing standard bicycle lanes, further reducing emissions. Additionally, the protected bike lane extension will allow bikes to serve a “last mile” role for access to high-capacity transit options.

Broadway carries 23,500 vehicles each day, including almost 300 buses each weekday that serve over 11,000 riders on three Metro routes. It also has high pedestrian volumes. Signal optimization, signage and striping to improve operational efficiencies and provide directional information is planned throughout the alignment consistent with the revised roadway configuration and operations. Features include pedestrian wayfinding to streetcar stop area destinations and static and/or variable message signs directing general purpose traffic to available off-street parking (in areas where the project would restrict on-street parking that is currently permitted). By making Broadway operations more efficient, emissions will also be reduced.