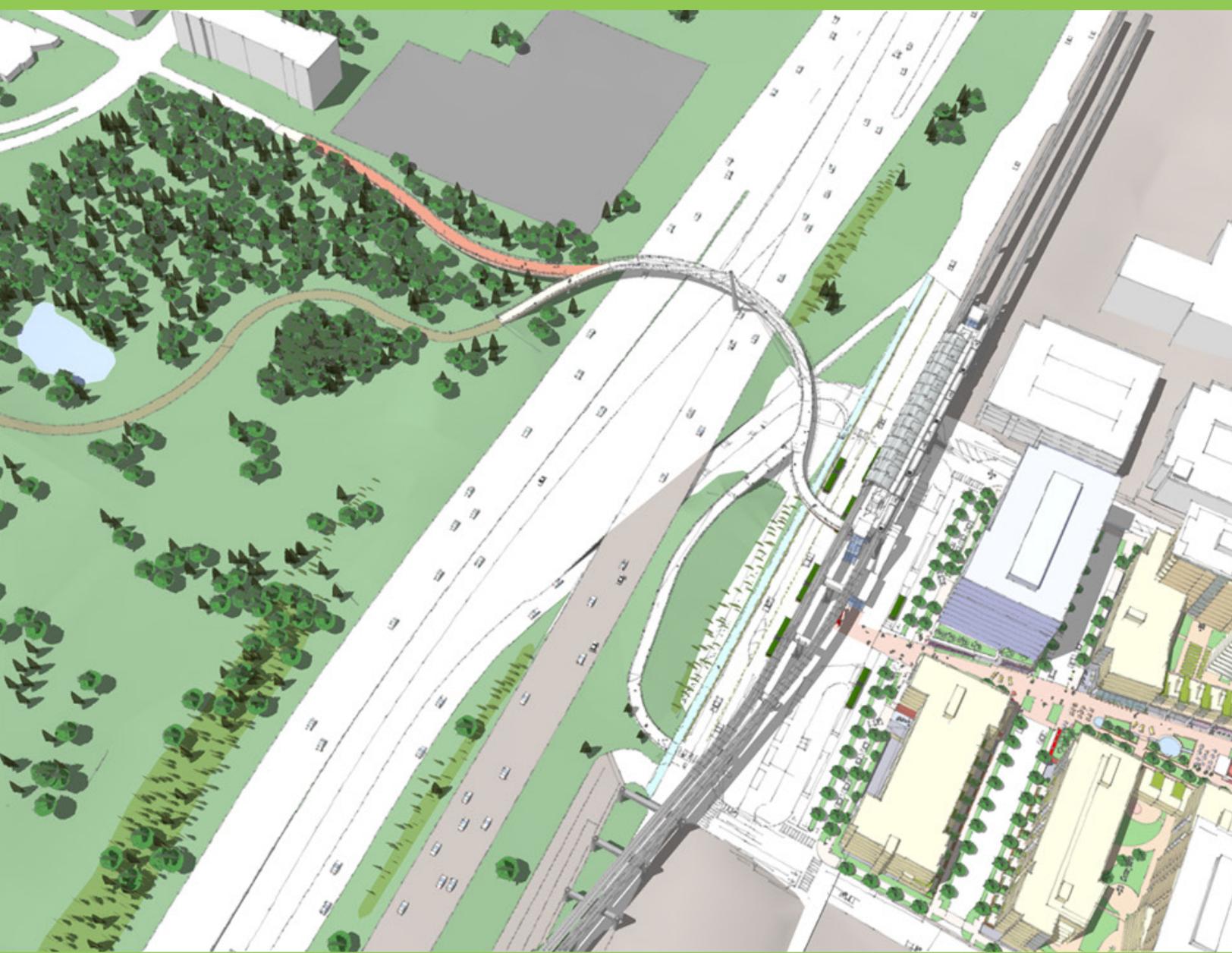




City of Seattle

NORTHGATE LIGHT RAIL STATION NON-MOTORIZED ACCESS



Project location: Seattle, King County, Washington, Congressional Districts 7 and 9
Northgate Link Light Rail Station coordinates: 47°42'11"N 122°19'41"W
Project type: Capital Project
Applicant type: Local Government
Amount: \$15 million
City of Seattle DUNS: 9483561

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Partners: City of Seattle, Washington State Department of Transportation, Puget Sound Regional Council, Sound Transit, North Seattle College



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- ➔ Supports Ladders of Opportunity
 - Aids creation of 4,000 new jobs in a Regional Growth Center (Northgate) with 11,000 existing jobs
 - Direct connection to Northgate transit center for 14,000 students at North Seattle College (NSC)
 - Better access to the Opportunity Center for Employment and Education (OCE&E) at NSC
 - Improves access to vital health care services, such as North Public Health Center and UW Medicine facilities

Quality of Life 12

- ➔ Reduces barriers between neighborhoods divided by Interstate 5 (I-5) – saving nearly a mile in crossing distance
- ➔ Constructs infrastructure prioritized through HUD Sustainable Communities Regional Planning (SCRIP) partnership
- ➔ Results in about 2.4 million additional non-motorized trips annually within station area
- ➔ Reduces traffic congestion and costs of travel, providing over \$1.1 million of savings each year
- ➔ Improves mobility within an affordable neighborhood of almost 6,400 people, of whom 48% are persons of color

Environmental Sustainability 20

- ➔ Creates a vibrant, walkable, mixed-use urban community centered on regional light rail and bus transit center
- ➔ Reduces automobile use, resulting in about 6,300 fewer vehicle trips each day
- ➔ Eliminates over 1.4 million pounds of carbon emissions annually
- ➔ Links east-west greenway connections to parks, open space, community gardens and regional trails

State of Good Repair 22

- ➔ Reduces infrastructure maintenance costs by over \$160,000 each year
- ➔ Investments leverage recent public and private development improvements

Safety and Health 23

- ➔ Reduces likelihood of collisions between vehicles and pedestrians and bicyclists at a major interstate highway interchange
- ➔ Results in about \$640,000 each year in reduced accident and health costs
- ➔ Makes safety improvements at 36 intersections and provides 24 blocks of bikeways and 30 blocks of sidewalks

Secondary Criteria

Innovation 24

- Use of new design technology
- Increases access to innovative programs at North Seattle College (NSC)
 - Opportunity Center for Employment and Education – innovative one-stop shop for employment, education, social and health services
 - Entrepreneurial Success Center – one of four programs awarded a “Shared Vision for Small Business” grant

Partnerships..... 26

- Regional HUD Sustainable Communities Partnership, Growing Transit Communities
- Recommended by community through Northgate Stakeholders Committee, Seattle Bicycle Advisory Board and Seattle Pedestrian Master Plan Advisory Committee
- Project is a partnership of Seattle, Sound Transit, King County, Puget Sound Regional Council (PSRC), Washington State Department of Transportation (WSDOT) and North Seattle College

Demonstrated Project Readiness

Project Readiness and NEPA 27

- Project is included in Regional and State TIP
- Planning (funded through HUD SCRP grant) is completed
- Project design is underway
- TIGER grant will leverage \$21.3 million in committed funding for non-motorized improvements in station area, as well as \$2.1 billion in transit capital investments

Summary of Benefit-Cost Analysis..... 30

Federal Wage Rate Certification

Appendices

- A. Benefit-Cost Analysis – Executive Summary
- B. Benefit-Cost Analysis – Technical Documentation
- C. Project Performance Evaluation Plan
- D. Letters of Support
- E. Funding Commitment Documents
- F. Northgate Pedestrian and Bicycle Bridge Feasibility Study
- G. Northgate Non-motorized Access Study
- H. Northgate Urban Design Framework
 - Final Northgate Urban Design Framework
 - 2013 Outreach Report and Graph
 - Northgate Outreach Summary
- I. Northgate Design Guidelines
- J. SDOT Action Agenda
- K. 2014 Climate Action Plan Status Report (Moving the Needle)

Go to http://www.seattle.gov/transportation/northgate_tiger.htm for letters of support, maps, regional collaboration documentation, and relevant technical supporting materials.

PROJECT DESCRIPTION

The City of Seattle, along with its partners at King County Metro, Sound Transit, WSDOT and North Seattle College (NSC), are requesting a FY 2014 US DOT TIGER grant in the amount of \$15 million to fund construction of the Northgate Link Light Rail Station Non-motorized Access Project, which includes a pedestrian and bicycle bridge crossing Interstate 5 (I-5) and other pedestrian and bicycle improvements at the Northgate Transit Center and the Sound Transit's Link Light Rail Northgate Extension project.

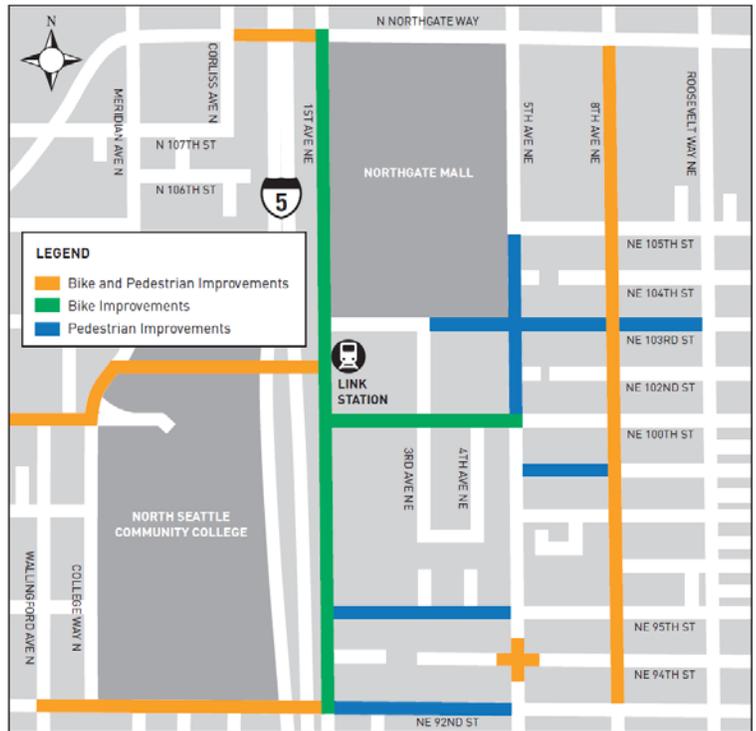
This project is a direct result of our region's participation in the joint DOT/ HUD/EPA Sustainable Communities program. Under that program, the Puget Sound region received a HUD Regional Planning Grant for its Growing Transit Communities project. A broad community engagement identified the need for pedestrian and bicycle improvements to transform the

Northgate Urban Center into a sustainable, transit-oriented community anchored by a major redevelopment of the King County Northgate Transit Center and Sound Transit's Link light rail station.

TIGER funding would extend the reach of the existing Northgate Transit Center and the future Sound Transit Link light rail station for pedestrians and bicycles. This will allow large numbers of people to access the Sound Transit system and regional bus connections by walking and biking. Sound Transit's non-motorized access study shows that over 3,000 people would use this package of sidewalks, walkways, protected bike lanes and bridge to access the light rail station. Today, the existing transit center serves over 6,000 passengers a day and the future light rail station is expected to serve over 15,000 passengers each day.

Today, the Northgate area is one of the Puget Sound region's major residential and employment centers with 3,600 households and over 11,000 jobs. It is one of Seattle's most affordable communities and has attracted a higher proportion of economically disadvantaged populations than the city as a whole.

Northgate Non-motorized Access Improvements





Interstate 5 at Northgate Link Light Rail Maple Leaf Tunnel Portal

Ten lanes of I-5 bisect the neighborhoods, creating barriers between homes, jobs, schools, transit stops and vital community services. There are only two crossings of I-5 within the urban center, making it difficult to impossible for many people within the standard walkshed to reach the light rail station without a car or bus transfer. The two existing crossings of I-5 are a distant walk from the light rail station site, and one of those existing crossings is complicated by freeway entrances. While slated for significant growth as part of both Seattle's Comprehensive Plan and the PSRC's *Vision 2040* plan, growth in Northgate has lagged behind most other designated growth centers due to this auto-oriented built environment. The construction of the Northgate Link Light Rail extension provides a tremendous opportunity to transform the Northgate center into a transit-oriented community.



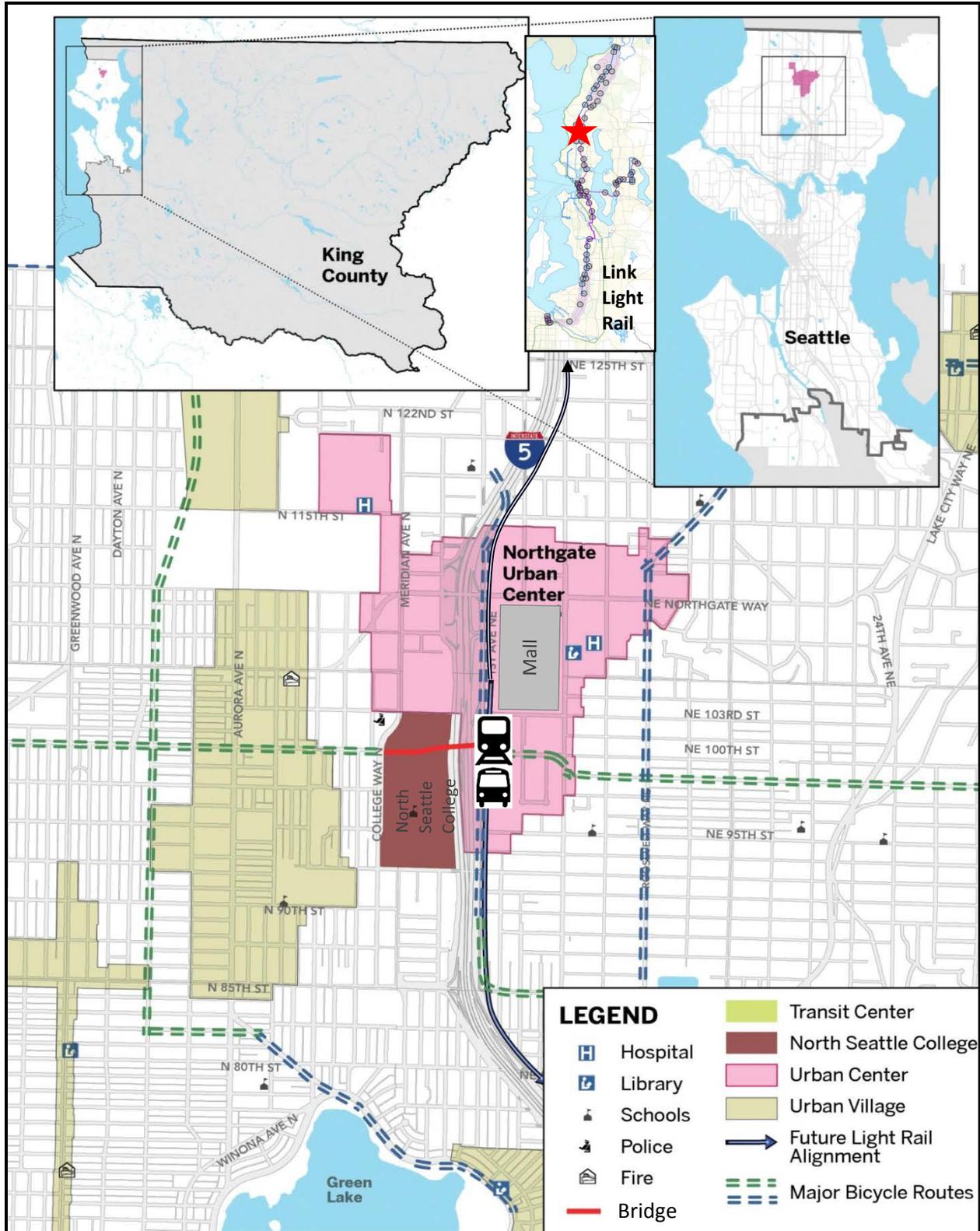
Northgate Way Under I-5 looking East

Non-motorized access is an important rung on the ladder of opportunity, providing a low-cost, healthy means of transportation that also builds a sustainable community. The centerpiece of this project, the proposed pedestrian and bicycle bridge, will reduce walking distances from the transit center to NSC by almost a mile. This will make it easier to access the Opportunity Center for Employment and Education, an innovative pilot, combining various state human services, including employment, social services and educational services, at one location. The bridge is an essential link for people accessing these services from the existing King County Northgate Transit Center, in addition to the North Seattle College's 14,000 students and over 400 staff.

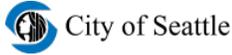
The need for this project has been identified in a number of Seattle's plans. Bicycle and pedestrian improvements were identified as priorities by the community during the development of the Northgate Coordinated Transportation Investment Plan. Support has continued to be very strong during stakeholder involvement for the Northgate Catalyst project of the PSRC's Growing Transit Communities effort. The Northgate pedestrian and bicycle bridge is also identified within the PSRC's Regional Bike Network as a key connection.

Northgate Non-motorized Access

Coordinates: 47° 42'11"N 122° 19'41"W



FUNDING PARTNERS



- Lead agency and primary grant recipient, responsible for project design, construction, operations and maintenance
- Maintains and operates a multi-modal transportation system with a value of \$13 billion
- Certified Agency since 1973 with a wealth of experience leading large projects and federal grants, including TIGER I and IV grants. Has technical, financial and legal capacity to complete this TIGER project on time and on budget
- Awarded HUD Sustainable Communities Grant
- \$5 million local match contribution for bridge, additional \$5 million committed to related non-motorized improvements



- Regional transit agency, responsible for design, construction, operations and maintenance of Link Light Rail
- \$5 million local match contribution for bridge, additional \$5 million committed to related non-motorized improvements



- Metropolitan Planning Organization and Economic Development District for the central Puget Sound region representing 72 cities, four counties, four port districts, eleven transit agencies, and two Native American tribes
- Designated a Preferred Sustainable Community by the U.S. Department of Housing and Urban Development and awarded a \$5 million Sustainable Communities grant in 2010
- \$718,000 CMAQ grant award for planning and design of non-motorized improvements in Northgate
- \$600,000 TAP grant award for design of Northgate Non-motorized Bridge



- North Seattle College provides learning opportunities for a diverse group of over 14,000 students each year
- Offers a new Bachelor of Applied Science degree in International Business
- Provides career training in over 50 certificate programs including emerging fields such as nanotechnology, sustainable and conventional energy and control technology, and green real estate
- Home of *Opportunity Center for Employment and Education* and *Entrepreneur Success Center*
- Providing air rights and easement for Northgate Pedestrian and Bicycle Bridge



- State Transportation Agency
- Steward of FHWA funding distributed to public agencies throughout the state
- Providing air rights and easement for Northgate Pedestrian and Bicycle Bridge

SUPPORTING PARTNERS



- King County Metro (KCM) is Seattle's major transit provider and operates a major transit center at Northgate
- Planning major transit-oriented development and Northgate park-and-ride facility
- Conducted feasibility analysis of Northgate Pedestrian and Bicycle Bridge

GRANT FUNDS AND SOURCES

2014 TIGER Grant Request

The City of Seattle is requesting \$15 million in 2014 TIGER funding, approximately 41% of the estimated \$36 million construction costs for the package of non-motorized improvements in Northgate. The City of Seattle has already secured the remaining funding for the project. The \$15 million 2014 TIGER grant request is the last funding element needed to complete the project. It is critical that Seattle obtain these funds to complete the project due to the expiration of the City’s Bridging the Gap transportation funding levy in 2015. Expiration of the levy reduces the amount of dedicated funding for transportation.

Cost Estimate (in millions) *	\$36.3	Secured Revenues (in millions) *	\$21.3
Design	\$7.0	Grants	\$1.3
Construction	\$29.3	City of Seattle	\$10.0
		Sound Transit	\$10.0
		2014 TIGER	\$15.0
		Total Revenues	\$36.3

* North Seattle College and WSDOT will provide easements and air rights for construction of the Northgate Pedestrian and Bicycle Bridge on public land at no cost. These easements are not included in the project costs or revenues.

ECONOMIC COMPETITIVENESS

Supports Ladders of Opportunity

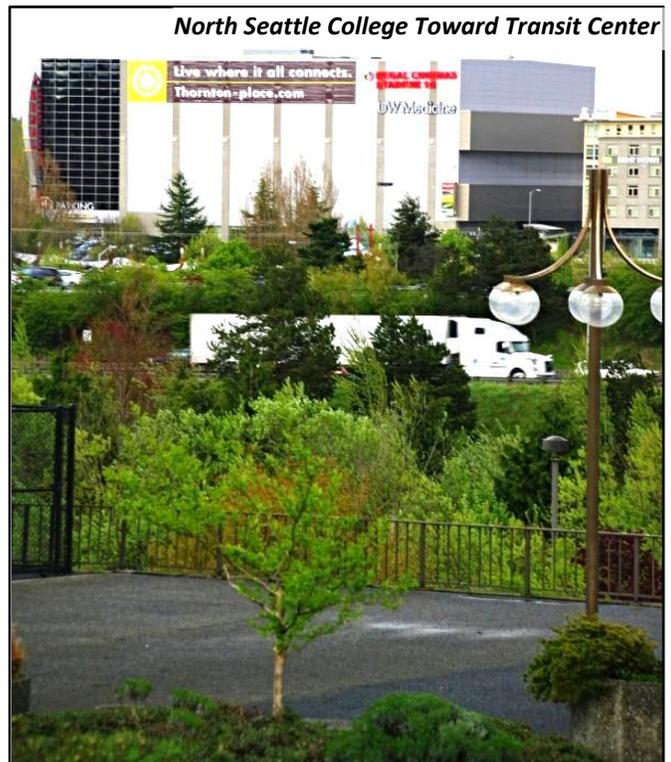
Today the ten lanes of Interstate 5 (I-5) serve as a barrier in Seattle’s Northgate neighborhood, dividing residents on either side from job, educational and service opportunities located on the other side of the freeway. The Northgate station non-motorized access improvements will improve connections across I-5, enabling those using these services to have more convenient access to them. The pedestrian and bicycle bridge is estimated to reduce the walk distance between the North Seattle College campus and the Northgate Transit Center by almost a mile, making transit much more accessible.

Improve Connections Between People and Centers of Employment and Education and Services

Connections to Employment

Northgate is a regional employment center with over 11,000 jobs in 2013. Seattle’s 2004 Comprehensive Plan set a target for the center to add over 4,000 new jobs by 2024. Unlike other regional employment centers within the Puget Sound region, Northgate is not meeting this target. Prior to the ‘Great Recession,’ Seattle had engaged in a significant revitalization program for the center, providing infrastructure improvements and spurring a mall expansion, a transit-oriented development on a parking lot and other developments in the area. The economic downturn severely impacted this revitalization effort and slowed development within the center. Development of Sound Transit’s Northgate Link Light Rail extension provides a tremendous opportunity to complete the revitalization of this employment center and develop a sustainable, transit-oriented, mixed use community and to reach the targeted employment growth levels.

I-5 is a barrier through the Northgate community for people trying to get to jobs by walking or biking. One of the connections across I-5, at Northgate Way, is a major urban interchange with high traffic volumes, complicated turning movements and an uninviting environment for pedestrians and bicyclists. The other connection across I-5 is a bridge over the freeway linking residential



neighborhoods with minimal sidewalks. King County Metro’s Northgate Transit Center is located between the two crossings of I-5 on the east side of the freeway, cut off from residential neighborhoods and employers on the west side of I-5. This TIGER grant will provide a new inviting and safe connection with the bridge, as well as improve conditions on the existing crossings at Northgate Way and NE 92nd Street.

Current conditions have had a real impact on growth and development in Northgate. Employees traveling to job and educational opportunities by bus from one side to the other must take a circuitous routing, and buses going through the Northgate Way/I-5 interchange are often delayed by significant congestion. The lack of convenient and safe pedestrian and bicycle connections at the two crossings of I-5 also severely impacts the use of active transportation modes. These barriers between residences on either side of the freeway from employment opportunities on the other side have hindered job growth and influenced choices of travel mode. Commute trip surveys indicate that the choice of whether to walk or bike to work within Northgate is strongly influenced by the presence of I-5. Residents living on one side of the freeway and working on the other are 50 percent less likely to walk or bike to work.

The Northgate area is one of Seattle’s more affordable neighborhoods, with housing prices well below the median within the City. Due to the availability of affordable housing, Northgate has attracted a higher proportion of residents from economically disadvantaged communities. Forty-eight percent of residents within the Northgate urban center are people of color compared to 34 percent city-wide. The median household income is also lower in the Northgate area than Seattle overall, and over 80 percent of the households rent, rather than own their own home. For these residents, non-motorized access is an important rung on the ladder of opportunity, providing a low cost, healthy means of transportation that also builds a sustainable community.

Connections to Education

This TIGER grant will provide a more direct and safer connection from a major multi-modal transportation hub to North Seattle College. Construction of the bridge would reduce the walking distance from the existing Northgate Transit Center to NSC from 1.2 miles to approximately 0.25 miles, making the college much more accessible to students from throughout the Puget Sound region.

NSC serves more than 14,000 students annually, many of whom are from diverse or economically disadvantaged populations. There are 17 “gainful employment” programs located at NSC, and the college now has both a Bachelor of Applied Science in Application Development degree and a Bachelor of Applied Science in International Business degree. While most students transfer to the University of Washington’s main campus, the College also has developed partnerships with three of the state’s four-year colleges and universities: Eastern Washington University (EWU), Western Washington University (WWU), and Central Washington University (CWU). The college has almost 450 employees and has been named a Military Friendly School by GI Jobs.

An excerpt from the NSC Strategic Plan showcases the college’s commitment to building community and their goal to “create a diverse, inclusive and safe environment accessible to all.” The college has recently undergone major renovations for services they are providing, and they are in the process of planning for their future and the benefits the bridge offers the campus.

NORTH SEATTLE COLLEGE



- 29% are academically disadvantaged
- 42% are taking classes to further their current or future work life
- 33% are people of color
- 60% are female
- 52% are over the age of 30, with a median age of 31
- 52% work part or full time
- 29% are parents
- Approximately 600 international students each quarter, hailing from 50 different countries

Connections to Services

Many community services are located within the Northgate Urban Center. It is a regional hub for shopping, higher education, and medical services. Due to the presence of I-5 and the lack of adequate pedestrian and bicycle facilities in the area, access to these facilities is primarily by auto.

Medical Services

Access to a number of medical and health services are impacted by the lack of pedestrian and bicycle connections within the Northgate urban center. There are several critical facilities on the west side of I-5 where they are not well connected to the Northgate Transit Center.



The University of Washington Medicine Northwest Hospital and Medical Center is located within the Northgate center on the west side of I-5. The presence of the hospital has spurred the development of a cluster of medical facilities in the area, many located on the west side of I-5 across from the Northgate Transit Center. The Northwest Hospital is the only facility in the Pacific Northwest to offer proton therapy for cancer patients. It also offers the Community Health Education & Simulation Center (CHESC), the first facility of its kind in the nation to offer classes to both healthcare practitioners and the general public. The medical center also has an Outpatient Medical Center on the west side of I-5, across from the transit center, immediately north of where the pedestrian and bicycle bridge will be located, which will benefit by improved access to the transit center.

King County Public Health’s North Public Health Center is also located across I-5 from the Northgate Transit Center and provides a wide range of public health services delivered directly to targeted, high-risk populations. King County Public Health is one of the largest metropolitan health departments in the United States with 1,500 employees. Public Health protects the public from threats to their health, promotes better health, and helps to assure that people are provided with accessible, quality health care. The patients accessing services at the North Public Health Center are primarily from economically disadvantaged populations, many of whom rely on transit to reach the center. Better connections to the existing transit center and future light rail station will be of great benefit to these patients. Improvements to other pedestrian and bicycle facilities in the Northgate center will also allow more people to use active transportation modes to receive these and other vital services, supporting a healthy community.

In addition to the facilities on the west side of I-5, there are several on the east side of I-5, as well. University of Washington Medicine has located its North Seattle clinic in the Thornton Place transit-oriented development adjacent to the Northgate Transit Center. Group Health Cooperative has also located a medical clinic within walking distance of the transit center, and Delta Dental Services of Washington and Qualis Health have facilities nearby.

Shopping/Retail

The Northgate Mall is a regional shopping center immediately adjacent to I-5 and the Northgate Transit Center. Northgate opened in 1950 and was the first regional shopping center in the United States to be described as a “mall.” The mall underwent a major redevelopment in 2007 and now has over 130 shops and 24 places to eat. Due to the presence of the mall, the Northgate area has become a regional shopping destination with several large shopping centers nearby.



Community Services

The Northgate community has a higher than average proportion of economically disadvantaged residents. This includes a large percentage of people of color as well as a growing population of elderly, due to the development of new senior housing in the area. This TIGER project will provide improved access for people to walk or bike to a wide variety of community services. The Northgate Community Center and Library, located on Fifth Avenue near the transit center, is the community’s hub, providing access to a number of educational, social and recreational programs.

Non-motorized improvements will make it easier for residents, employees and visitors to access Northgate’s many parks, including Northgate Park, Hubbard Homestead Park, Licton Springs Park, Mineral Springs Park, the North Seattle College environmental area, the Thornton Creek water quality channel, Northgate Community Center, Olympic View playfield and Thornton Creek Park. Two community gardens in the Northgate community, Maple Leaf and Licton Springs, will also gain better non-motorized access, making it easier for residents to grow their own food.



Promote Workforce Development

This project will improve access to the **Opportunity Center for Employment and Education** on the campus of North Seattle College. The Opportunity Center provides residents of North Seattle access in one location to employment services, social services, financial supports and post-secondary education provided by Employment Security/WorkSource, Department of Social and Health Services, North Seattle College and multiple on-site partners (such as the YWCA and King County).

The Opportunity Center provides an education resource center, job search lab and a kid’s play area. Customers receive multiple services under one roof, allowing for streamlined customer service delivery. The Opportunity Center partners are committed to delivering services in an integrated manner that will allow clients to achieve self-sufficiency through employment and lifelong learning.

During its first full year of operation, the Opportunity Center provided service to thousands of customers:

- **Social Services: 17,652 Customers**
Cash, food, childcare and medical assistance; EBT cards; substance abuse treatment referrals; child support establishment and collection; case management and children’s administration information sharing; mental health assistance; domestic violence advocacy; rent and utility assistance; housing placements; and financial literacy and assistance
- **Educational Services: 3,453 Customers**
Tuition assistance for low-income adults and dislocated workers; 1-on-1 tutoring in Basic Skills, ESL and GED and referrals for workforce development; college readiness workshops; and ongoing educational support services
- **Employment Services: 16,643 Customers**
Job search assistance and support; unemployment insurance assistance; employment and training services for veterans, people with disabilities; and Temporary Assistance for Needy Families

OPPORTUNITY CENTER FOR EMPLOYMENT AND EDUCATION



- Integrates employment services, educational services and social services
- Provides service to thousands of customers annually
- Partnership of state, local and private providers of services

Construction of the Northgate Pedestrian and Bicycle Bridge and the other non-motorized access improvements will make getting to the Opportunity Center easier by walking, biking or riding the bus and light rail for disadvantaged families and individuals, lowering transportation costs and increasing mobility choices.

Remove Barriers to Connected Systems of Transportation

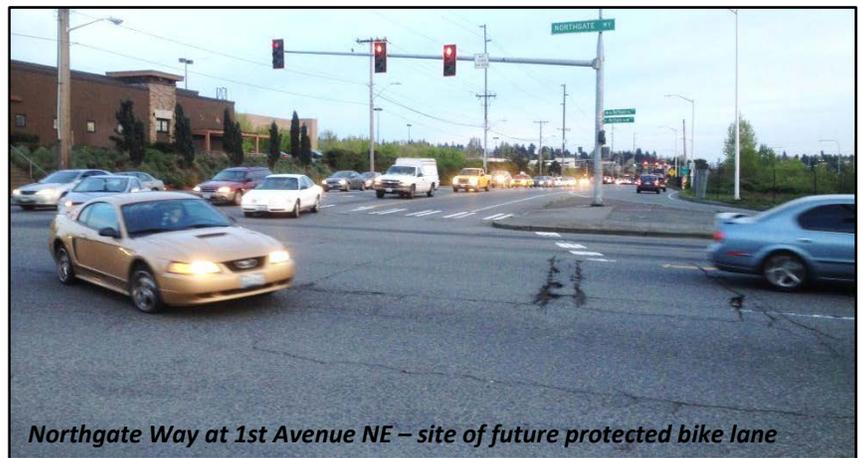
I-5 was a key factor in the growth of the Northgate regional growth center, and is critical for the economy of the Pacific Northwest and the western United States; however, today it is a major barrier to transportation in North Seattle. While the freeway has provided a significant benefit for growth of housing, business, education and medical services, the auto-oriented design of the facility and land-use patterns designed for driving have resulted in an existing neighborhood that inhibits transit use and active modes of transportation. Reliance on the freeway creates a vicious cycle that makes local trips longer and more people driving in the area. With only two crossing of I-5 within this regional employment and residential center, traffic has become congested, and transit, pedestrian and bicycle routings are circuitous.



Analysis of commute trip reduction survey information for major employers near I-5 in the Northgate area shows that employees living in zip codes on the opposite side of the freeway from their work place are much less likely to use active transportation modes. Employees living and working on the same side of I-5 are twice as likely to walk or bike to work as those from the opposite side.

The lack of curbs, sidewalks, bicycle paths and formal drainage infrastructure creates another barrier for active transportation modes and for reaching transit stops. Seattle and its public and private partners have made improvements in infrastructure within the neighborhood; however, there is much still left to do. Resolving this provision of safe and convenient paths for walking and biking has continued to be a top priority of the community since development of the Northgate Comprehensive Plan over 20 years ago.

Funding of this TIGER grant request will allow Seattle and Sound Transit to implement a network of improvements that will remove these barriers and create an interconnected pedestrian, bicycle and transit network. The Northgate Pedestrian and Bicycle Bridge will connect the east and west segments of a major greenway in North Seattle across I-5, linking two major regional trail facilities: the Interurban Trail extending from Everett to Seattle and the Burke-Gilman Trail connecting the Puget Sound to Issaquah. The bridge will also provide intermodal connections across I-5



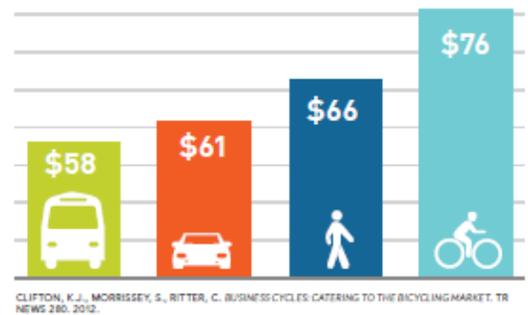
to the existing Northgate Transit Center and the Northgate Link Light Rail Station, resulting in increased light rail ridership and more use of active transportation modes.

The additional non-motorized access improvements will make walking, bicycling and using transit more safe and convenient for employees, students, residents, shoppers and visitors to this major regional center. It will provide a connected system of sidewalks and bikeways linking a variety of educational, employment and other services. The package of improvements was developed by a diverse set of community stakeholders and responds to their priorities for the revitalization and growth of this area. People biking and walking more will reduce the need to drive. More choices for people to get around will help break the vicious cycle of dependence on the auto and will use our investment in streets and transit more efficiently.

“Ped bridge across I-5 is necessary!! The bridge to College Way and the trail to the medical center will allow buses to be moved to 92nd Street instead of College Way/Northgate Way, so they’ll have less time-consuming turns and traffic.”

Promotes Business Opportunities

Northgate is a regionally designated growth center and is slated to have over 15,000 jobs by 2024. The medical, retail and education sectors are the biggest employers in the center with a hospital, a mall and a college that are each among the region’s largest. The Northgate Non-motorized Access Improvements will promote opportunities in all of these sectors by better connecting these facilities to each other, to the neighborhood and to the regional transit and active transportation networks. This will also support denser, transit-oriented development, which will result in more users of these services and more revenues for businesses. Analysis from Portland shows that customers who walk and bike generate more monthly revenue than those who drive.



Entrepreneur Success Center

North Seattle College has an Entrepreneurship certificate program, the only one of its kind in the Seattle College District, helping potential business owners step-by-step through solid business planning. The program has connections with the Small Business Administration (SBA), the Small Business Development Council (SBDC) and SCORE (the Small Business Council of Retired Entrepreneurs) so that students can obtain coaching on new business ideas right on campus.



An outgrowth of this program is the **Entrepreneur Success Center (ESC)**, which provides one-to-one assistance for individuals who are contemplating starting a business, are in the early stages of their start-up process, or are experiencing a stall-out in taking their business to the next level of development. The ESC was established to address a need in the North Seattle area that was

expressed by business owners themselves. More than 45 businesses from Seattle's north end used the center in the first year. The center recently received a one of four "Shared Vision for Small Business" grants from the National Association of Community College Entrepreneurship (NACCE) and Sam's Club to fund the expansion of the center and the scaling up of services provided there. The center is located at the north end of the NSC campus and will benefit greatly from the improved access to the Northgate Transit Center and the commercial and retail core of the Northgate urban center provided by the new bridge.

Supports Job Creation and Job Retention

Construction of the Northgate Light Rail Station Non-motorized Access improvements will provide over 300 short-term jobs in the construction trades and for suppliers. The construction trades were particularly hard hit in the Seattle area during the great recession with 40 percent unemployment. The City of Seattle is committed to increasing training and apprenticeship opportunities in the construction industry and recognizes that a diverse and well-trained workforce is critical to the economy, as well as the social vitality of the region.



Apprenticeship

The City requires the use of apprentice labor on construction projects estimated to cost \$1 million or greater. Contractors must ensure that up to 15 percent of the total contract labor hours are worked by apprentices enrolled in an approved or recognized apprenticeship program.

Race and Social Justice Initiative

Through the City's Race and Social Justice Initiative, Seattle has implemented a contracting equity program and a new women and minority-owned businesses (WMBE) Inclusion Plan, which will be used as part of the contracting process for these improvements.

Opportunities for Small and Disadvantaged Business Enterprise

Seattle is committed to increasing small business participation in City contracting opportunities. Ordinance 119603 encourages City departments to use affirmative efforts to solicit the participation of WMBEs in all competitive contracting opportunities. The new Executive Order 2014-03 requires departments to increase contracting with WMBEs, and to provide a welcome and responsive environment for all businesses that support such efforts. It also requires prospective large businesses wishing to contract with the City to develop a WMBE Inclusion Plan detailing how WMBE subcontractors will be sought and retained as part of the final contract. The City of Seattle's engagement efforts have led to a significant increase in the amount of WMBE participation in contracting over the last 10 years. In 2013 the City of Seattle spent \$40 million with WMBEs. The City works with nearly 6,000 small minority-and-women owned businesses by sharing upcoming contracting opportunities and providing technical assistance.

Use of Community-Based Organizations

The City participates in many community partnerships. They include organizations like: Tabor 100, the Community Coalition for Contracts and Jobs, the National Association for Minority Contractors and the Greater Seattle Chamber's multicultural business arm and the Urban Enterprise Center. These partnerships are focused on outreach to local businesses to provide information on upcoming projects and contract opportunities.

Ensuring Workers are Safe and Treated Fairly

The City requires that the prevailing wage rate be paid to all employees working on its construction projects. On construction projects that receive federal funding, the City monitors all prevailing wage requirements for those projects in accordance with state and federal laws. The City will enforce both federal and state prevailing wages and fringe benefits (see federal wage rate certification). When the federal and state wage rates differ, the higher wage rate will be required. Seattle already has an on-the-

job training program aimed at developing trainees from disadvantaged populations to journeyman status. Training and promotions of members of minority groups and women is a primary objective of this program.

Consistent with Nation’s Civil Rights and Equal Opportunity Laws

Seattle vigorously enforces social equity requirements and equitable contracting practices in our construction contracts. The City will require that minority business enterprises be afforded the full opportunity to submit bids. No businesses, employees or potential employees will be discriminated against because of race, creed, color, national origin, gender, age, marital status or the presence of any physical, sensory or mental disability.

QUALITY OF LIFE

Creation of Affordable and Convenient Transportation Choices

The Federal Highway Administration’s fact sheet on the *Benefits of Livability* indicates that living in a location where only one car per home is needed can reduce total housing and transportation costs to 50 percent of income or less and that families in auto-dependent locations spend 25 percent of their income on transportation. Numerous studies have shown that the cost of owning a car is a major burden for those families with below average incomes. Heavy reliance on automobiles also has heavy costs for our society by requiring infrastructure, degrading our environment and affecting public health and safety. Seattle and the Puget Sound region are committed to reducing vehicle trips and vehicle miles traveled, as well as improving our air and water. We are also committed to ensuring that affordable and convenient transportation options are available to all members of our society, regardless of economic circumstance.

This project builds upon the City’s commitment to race and social justice and supports several key policies from SDOT’s 2012 Action Agenda aimed at making sure there are safe, affordable and efficient transportation choices for everyone.

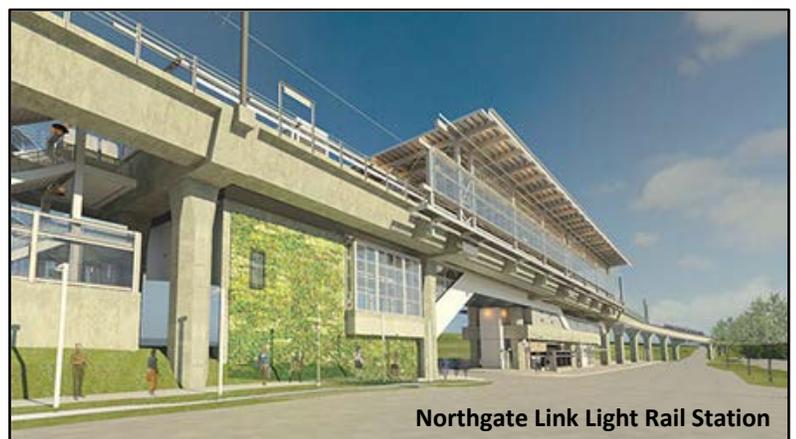
- Increase mobility and access for everyone
- Make transit the efficient, affordable choice for a variety of trips
- Make healthy travel choices the easy choices
- Increase efficient and affordable access to jobs and education

This project results in over 6,300 reduced vehicle trips daily, resulting in about 1.75 million fewer vehicle miles traveled each year. By encouraging more people to use walking and biking and providing better access to transit, this TIGER application will reduce household travel costs by over \$970,000 annually. It also significantly reduces travel time, providing a savings valued at over \$6 million over 20 years.

Improved Transit Access

Northgate is the site of one of King County Metro Transit’s most heavily used regional transit centers. Twenty-eight bus routes traveling throughout King County stop at the Northgate Transit Center. The center incorporates five different parking areas with a total of about 1,500 park and ride spaces, which are typically 90 to 100 percent occupied. Over 6,000 riders a day use the transit center, and a 2012 survey by Metro indicated that the majority of riders at the center get there by car. About three-quarters of riders at the station travel to downtown Seattle, and about 20 percent travel to the east side of King County.

Sound Transit has begun construction of the Northgate Extension of its Link Light Rail system. This long awaited 4.3 mile extension will reduce the travel time to downtown Seattle to 14 minutes and it is



Northgate Link Light Rail Station

estimated the extension will add 62,000 riders to the regional rail system. When Sound Move 2 is completed, the Sound Transit Link Light Rail system will extend 54 miles, linking Lynnwood, Seattle, Redmond and Federal Way. Eventually, the system will extend to Tacoma and Everett.

The Northgate station is expected to have 15,000 daily boardings and will continue to be a major transit hub for the entire North Seattle area. Until construction of the Lynnwood Link Extension is complete in 2023, Northgate will serve as the interim northern terminus of the Link Light Rail system. Sound Transit, King County and Seattle are working together to reduce the percentage of riders who drive to Northgate to access transit. Our goal is to have 70 percent of people access the light rail station using transit, bikes or by foot.

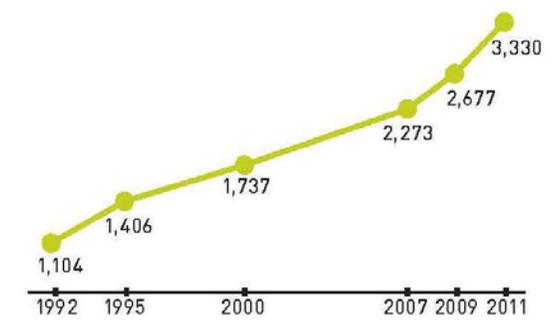
While the Northgate Transit Center has a very high level of transit service and very high ridership levels, currently it is located in an auto-oriented neighborhood, unlike much of Seattle. Despite the amount of transit service available, WalkScore has given the Northgate neighborhood a Transit Score of 58 points out of possible 100. Northgate is the lowest ranking of Seattle’s six regional growth centers for both Walk Score and Transit Score, pointing out the difficulty of pedestrians within this area compared to other urban growth centers. This TIGER project improves access to the existing transit center and to the future light rail station, resulting in higher numbers of people walking and biking to access transit services.

The Northgate Access Study, conducted by Sound Transit in partnership with Seattle and King County, estimated that the package of improvements included in this TIGER application would result in a 6 percent increase in boardings at the Northgate station, about 870 daily boardings. The study also indicated that about 2,800 station users would benefit from these improvements.

Improved Pedestrian and Bicycle Access

Over the next 20 years, Seattle will add 120,000 new people and 115,000 jobs within city limits. That is more growth than Seattle experienced over the last 20 years. Key to accommodating this growth will be investments in bicycle and pedestrian infrastructure and nurturing Seattle’s culture of using active transportation modes in a manner that purposefully benefits the city’s livability, affordability, public health, economic competitiveness, and natural environment.

The City has set aggressive goals for increasing the share of people walking, biking and using transit as part of its Climate Action Plan. Within Seattle’s Center City, over 50 percent of commuters currently use these modes rather than drive a car to work. Seattle wants to extend this success to its other growth centers, as well as encourage people to use these modes for non-work trips. This TIGER grant funds non-motorized improvements that will help increase bicycling and walking by employees, students and shoppers in the Northgate urban center. Sound Transit’s Non-motorized Access Study for the Northgate Link Light Rail station estimated that about 2,800 people would use these improvements each day to access the station.



SOURCE: SDOT. 1992-2011 DOWNTOWN SEATTLE BICYCLE COUNTS.

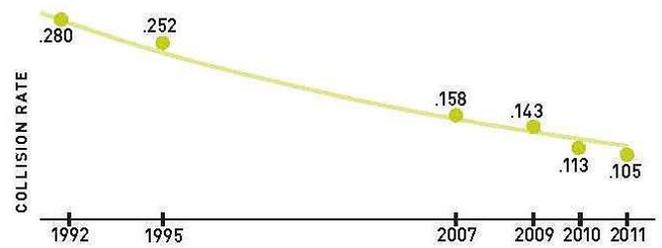
Number of daily bicycle commute trips

Seattle’s Bicycle Master Plan

On April 14, 2014, the City Council adopted Seattle’s updated Bicycle Master Plan (BMP), which signifies an important shift in the way Seattle will accommodate people riding a bicycle for any trip purpose. The updated BMP includes best practices and the latest thinking about bicycle facilities, which will result in planned investments to serve a broader range of people who already ride bicycles, and those who are considering it. The updated plan will help Seattle continue its national leadership in bicycling. Thousands of people already bicycle daily to work, to play, and to run errands in their neighborhoods and across the city. The increase in bicycling in the city over the past several years makes Seattle third in the country for the percentage of people who commute to work by bicycle.

The BMP is organized around five goals:

- Ridership: Increase the amount and mode share of bicycling in Seattle for all trip purposes
- Safety: Improve safety for bicycle riders
- Connectivity: Create a bicycle network that connects to places that people want to go, and provides for a time-efficient travel option
- Equity: Provide equal bicycling access for all through public engagement, program delivery, and capital investment
- Livability: Build vibrant and healthy communities by creating a welcoming environment for bicycle riding



SOURCE: SDOT. 1992-2011 DOWNTOWN SEATTLE BICYCLE COUNTS. 2011. 2011 RATE BASED ON PARTIAL COUNT.

Collision rates for bicyclists

The BMP identifies a network of “all ages and abilities” bicycle facilities with comfortable separation from motor vehicles and a focus on intersection safety. The network provides short distance connections to neighborhood destinations, as well as connections to destinations throughout the city. It also links neighborhoods to the Regional Trail Network, which is part of the Puget Sound region’s Active Transportation Plan.

The Northgate Pedestrian and Bicycle Bridge included in this package is identified as a catalyst project in the BMP and will connect a wider set of improvements on both the east and west side of the bridge, providing both local and regional connections. It is anticipated that the bridge will greatly increase bicycle use across I-5 by addressing the barrier effect of the freeway. In 2011 Seattle began a new systematic bicycle counts program that uses National Bicycle and Pedestrian Documentation (NBPD) methodology to count bicycles (and pedestrians) at 50 locations citywide, four times a year. In both 2011 and 2012, despite being a major crossing of I-5, Northgate was among the five locations with the lowest bicycle volumes.

This TIGER project also includes three protected bike lane projects. At the beginning of 2014, Seattle was selected to be one of six U.S. cities to be a Green Lane Project City by PeopleforBikes. The Green Lane Project works with cities to speed installation of protected bike lanes around the country. Seattle will receive financial, strategic and technical assistance for two years to create protected bike facilities that will increase vitality in urban centers.



Broadway Protected Bicycle Lane

The lessons learned through this process will help inform and guide the development of the First Avenue NE protected bike lane that is part of this project. The protected bike lane will run north-south, parallel to the Link Light Rail line from NE 92nd Street to the Northgate light rail station at NE 103rd Street, and will directly connect to the pedestrian and bicycle bridge across I-5. The facility will make bicycling safer for all ages and abilities in the corridor.

A protected bike lane along NE 100th Street to Fifth Avenue NE is also included in this package. This facility will also directly connect to the Northgate Pedestrian and Bicycle Bridge and will link to the Burke Gilman Trail, the “bike highway” of the Puget Sound region, through an east-west greenway connection. The other protected bicycle lane in this package of improvements also connects across I-5 at NE 92nd Street, providing a connection to neighborhood-level routes south of the college to Green Lake and Woodland Park Zoo.

Seattle’s Pedestrian Master Plan

The Seattle Pedestrian Master Plan (PMP) is a long-term action plan to make Seattle the most walkable city in the nation. The plan establishes the policies, programs, design criteria, and projects that will further enhance pedestrian safety, comfort, and access in all of Seattle’s neighborhoods. This TIGER project helps implement the four goals of the PMP:

- Reduce the number and severity of crashes involving pedestrians
- Make Seattle a more walkable city for all through equity in public engagement, service delivery, accessibility, and capital investments
- Develop a pedestrian environment that sustains healthy communities and supports a vibrant economy
- Raise awareness of the important role of walking in promoting health and preventing disease

Much of the residential neighborhoods within the Northgate center do not currently have sidewalks, or where sidewalks exist, they are substandard. This is reflected in the relatively low Walk Score in the Northgate center (85) compared to other Seattle urban centers (90-98). Construction of new sidewalks/walkways or improvements to sidewalks are planned to occur along eight streets within the core of the Northgate center as part of this package of improvements, encouraging more people to walk to community services and to access the transit network. A Safe Routes to School improvement linking to Olympic View Elementary is also part of this project.



King County Department of Transportation (KCDOT) completed the Northgate Pedestrian Bridge Feasibility Study Report in December 2012. The report identifies possible alignments, bridge types and estimated costs for a bridge. The study reported that a bridge would reduce the walking distance from the transit center to NSC from 1.2 miles to approximately 0.25 miles. The report cites a previous study indicating that a bridge would result in a 30 percent reduction in average walking time to the Northgate Transit Center and Light Rail Station, and would effectively expand the area walk shed (0.5 miles) to more than 150 buildings and bike shed (3.0 miles) to more than 3,000 additional buildings.

Supporting Existing Communities

The Northgate Community

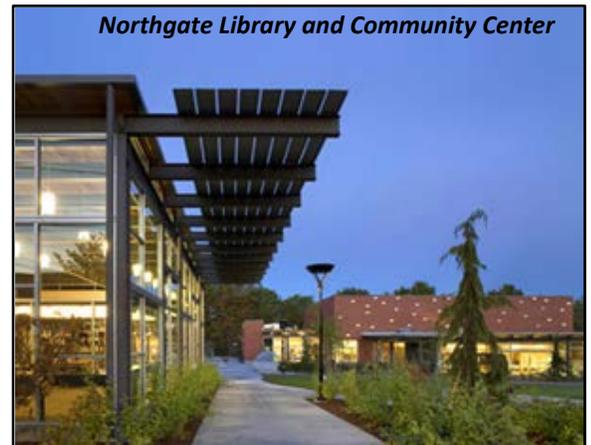
Prior to 1954, the Northgate area was part of unincorporated King County, a mostly rural and farming area. During the time between the two World Wars it was home to a large community of Japanese immigrants who set up farms, greenhouses and nurseries. Most of the roads in this area lacked the basic urban street infrastructure expected today: curbs, sidewalks, bikeways, planting strips and drainage facilities. In 1950, the Northgate Center, the first shopping center to be identified as a mall, was opened, and in 1954 the North Seattle area was annexed into the City of Seattle. Northwest Hospital opened in 1960 on 33 acres nearby.

The I-5 freeway, designed with an exit at Northgate Way, was built in the mid-1960s, dividing the community and restricting access, with only two crossings within the neighborhood. Northgate Mall doubled in size in 1965, in anticipation of the freeway, and the North Seattle College was established in 1970 across from the mall on I-5's west side. Easy freeway access and the presence of the mall, college and hospital resulted in the rapid auto-oriented development of the area, without improvements in pedestrian and bicycle infrastructure. In 1970, in an effort to attract riders and alleviate traffic congestion, Seattle Transit began operation of Washington State's first park and ride express bus service, the Blue Streak, from Northgate. Cars quickly filled 500 reserved parking spaces and the service was credited with eliminating 1,200 cars from the daily freeway commute. The success of the park and ride express service in Northgate led to expansion of parking and, eventually, the development of a major transit center southwest of the mall, adjacent to I-5. The transit center was hemmed in by parking between the mall and the freeway, with little pedestrian access, and was sited on the opposite side of I-5 from the college.



Over the next 20 years the center continued to develop in an auto-oriented fashion. In 1993, Seattle developed the Northgate Comprehensive Plan, setting the goal of transforming the center into a mixed-use, transit-oriented community. Passage of the Sound Move transit plan, funding light rail in Seattle, kick-started efforts to revitalize the community, and in 2001, the City updated the Northgate Comprehensive Plan.

As a result, Seattle engaged in a significant revitalization program for the center, providing infrastructure improvements such as the Northgate Branch Library and Community Center, the Maple Leaf Community Garden and the Fifth Avenue Northeast Street Improvements, spurring a mall redevelopment, transit-oriented development on a former parking lot and other developments in the area.



The 'Great Recession' severely impacted this revitalization effort and slowed development within the center. Between 2005 and 2014, the Northgate Urban Center only achieved 40 percent (754 units) of its targeted residential growth for 2024. The nearby urban villages of Ballard and Bitter Lake have each surpassed their goals by 208 percent (2,076 units) and 147 percent (1,174 units), respectively. Another nearby urban village, Lake City, has achieved 58 percent (525 units) of its residential development target. Northgate has done better in attracting employment, achieving 60 percent of its new employment target of 4,200 jobs.

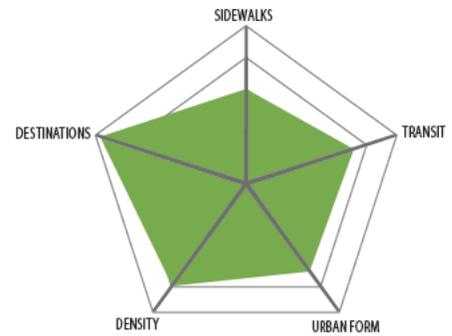
Development of Sound Transit's Northgate Link Light Rail extension provides a tremendous opportunity to complete the revitalization of this employment center, develop a sustainable, transit-oriented, mixed use community and to reach the targeted employment growth levels.

Land-use / Transportation Integration

Seattle’s growth management strategy, the urban village strategy, is a smart growth strategy that emphasizes significant public investment such as parks, libraries, community and transit centers, along with transit service investments, into urban centers with the greatest potential for locating more residents, jobs, stores and services in a close proximity. The approach reduces the burden of automobile reliance, promotes healthy travel alternatives, shortens commutes and provides more time and opportunities for recreation, leisure, shopping and social interaction. An outcome of this strategy, often called livability, fosters a rich environment in which to enjoy all aspects of daily life.

Northgate is designated as one of Seattle’s centers that allow the greatest development intensity and offer a diverse mix of uses, housing, jobs, educational opportunities and employment. King County Metro Transit has one of its major transit centers and park and rides located adjacent to the Northgate Mall in the middle of the neighborhood. Sound Transit is extending the Link Light Rail system to the Northgate Transit Center, which will serve as the interim northern terminus of the line until it is extended to Lynnwood. King County, Sound Transit, Seattle and PSRC have made redevelopment of the Northgate light rail station area into a transit oriented community a primary goal. For this reason, the Northgate station area was identified as a catalyst demonstration project as part of the region’s HUD Sustainable Communities grant project, Growing Transit Communities.

PHYSICAL FORM + ACTIVITY



One of many tools developed by the PSRC, as part of Growing Transit Communities, are the Transit Community Profiles. These profiles assess station areas and provide recommendations to ensure equitable future development. At Northgate, the profile identified good social infrastructure paired with an immediate risk of displacement for lower income residents. This understanding strengthens the City and County effort to maximize the affordable and low- income housing in the TOD and expand the non-motorized improvements to existing low income housing developments and areas not directly accessible to the station area. The Northgate profile also indicated lower scores for physical form and activity because of the lack of sidewalks and overall pedestrian connectivity.

This TIGER application directly targets this shortcoming.

Northgate Urban Design Framework Public Participants represented a diverse range of ages, race and ethnicities, gender and backgrounds.

13 men, women, and elders English-Tigrinyan discussion, came after church	3 Group Health employees, 1 grew up in the area	15 Mosque members, from throughout Seattle	15 residents of Lake City Court, including 9 East African immigrants, 1 Native American, 1 African American, 1 Caucasian, 1 Chinese, 1 Bosnian
9 youth, including 5 East African, 3 African American, 1 mixed race	10 high school students including 4 women/6 men; 3 African American, 2 Native American, 5 Caucasian	16 senior residents of Northaven Senior Community	10 students and staff, residing in Northgate and throughout Seattle
5 church members and local residents, 2 women/3 men, ages 50s to 80s	12 former elementary school alumni and parents	8 apartment residents, including 7 men/1 woman, mostly professionals, all recent residents of the neighborhood	10 apartment residents, 6 men/4 women, most car-less, recent residents
4 participants, including 2 major property owners and 1 Chamber of Commerce representative	12 Somali community members, 8 women/3 men, mostly residing in Northgate or Lake City	10 Native American community members, 7 women/3 men, ages 30 to 70	

The Northgate Urban Design Framework (UDF), funded through the HUD grant and completed in December 2013, provides an integrated transportation and land-use vision for implementing the key strategies identified by the Growing Transit Communities report. Those specific elements that relate and support this TIGER application include: improving the pedestrian environment through improved sidewalks, providing a new pedestrian and bicycle crossing of the I-5 barrier, completing bicycle facilities tying Northgate to adjacent neighborhoods and activity

centers, targeting dense development in sites near the light rail station and establishing affordable housing targets in the station area. As development continues in the area, the UDF suggests coordinated improvement to break up the superblocks into shorter, walkable blocks with pedestrian amenities and linked open spaces.

Consistent with Seattle’s Race and Social Justice Initiative, the public engagement process was focused on inclusive outreach targeted to reach economically disadvantaged communities. It built upon strong and sustained relationships and partnerships with organizations representing these populations.

As a result of this planning and the public’s requests, it is no surprise that Seattle, Sound Transit, King County and PSRC have dedicated \$21,300,000 to non-motorized access to improve access throughout the urban center. This investment is in addition to the light rail station and integrated bus transit center. Award of this TIGER grant will build transit ridership and leverage future transit-oriented development.

Access to Affordable Housing

City of Seattle voters have a long history of supporting affordable housing development and preservation by their approval of five ballot measures since 1981. In November 2009, Seattle voters overwhelmingly approved a seven year, \$145 million renewal of the Seattle Housing Levy. Over two-thirds of levy funding is dedicated to the Rental Production & Preservation program, which provides affordable rental housing. At least 60 percent of these funds serve households with an income below 30 percent of median income.



Aljona Thornton Place Retirement Community

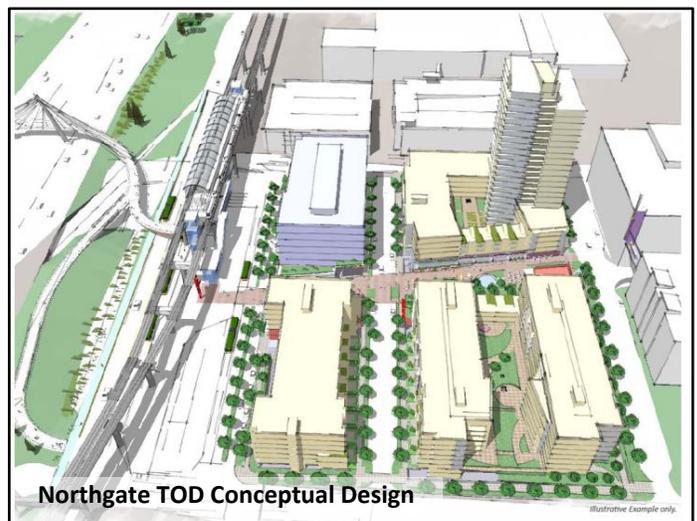
Seattle’s 2004 Comprehensive Plan set a growth target of 2,500 new household units within the Northgate urban center by 2024. Through 2013, only about 750 of these units had been developed, leaving a need of about 1,750 new housing units. The 2013 Northgate Urban Design Framework provides a vision for a compact healthy community with affordable housing choices for a diverse population. The plan calls for the transformation of an auto-centric office retail area into a livable, walkable, dense urban center anchored by a multi-modal transit station. Northgate offers a number of unique opportunities to meet affordable housing objectives.

Northgate Apartments

During a contract rezone process for the Northgate Apartments (217 units of lower-cost rental housing) in 2012, the owner agreed to dedicate land for a publicly subsidized affordable housing project at no cost as mitigation for the demolition of the existing units. This provides an opportunity to provide units that will have income eligibility requirements and rents affordable to those with very low incomes.

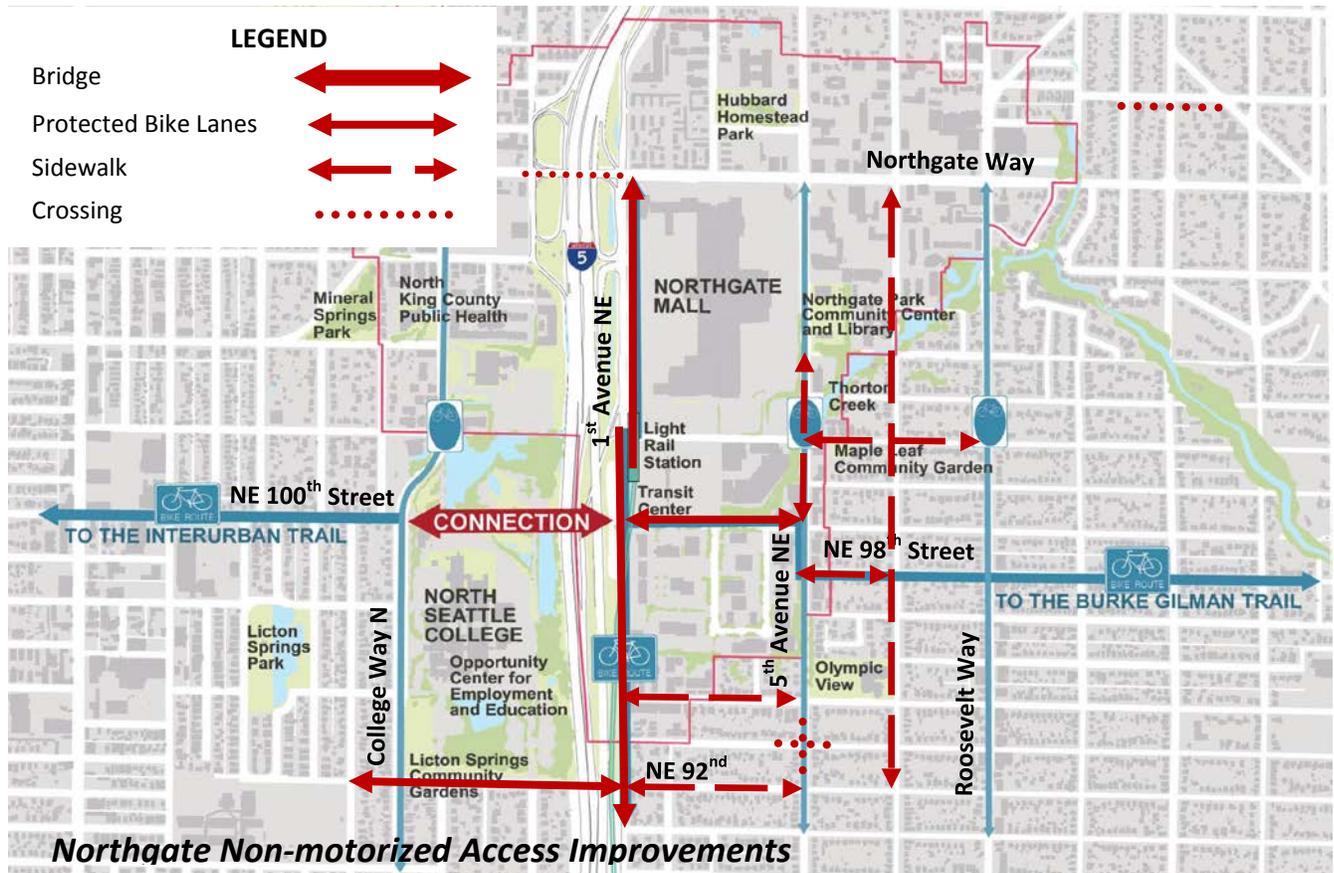
King County Metro TOD

The Puget Sound region’s Growing Transit Communities Partnership (HUD Sustainable Communities partnership) provided King County \$500,000 for a catalyst demonstration transit-oriented development (TOD) project to include affordable housing at the site of the Northgate Transit Center park-and-ride south of Northgate Mall. Seattle and King County are looking at opportunities to provide affordable housing through the development agreement for the site.



Northgate TOD Conceptual Design

Connections to Existing Transportation Modes and Infrastructure



Access to Quality of Life Amenities

This TIGER grant will improve access for residents, employees and visitors of the Northgate urban center to the wide variety of amenities that make Seattle known for its quality of life. There are many parks, open spaces, community gardens and environmental areas that provide a connection with nature. The Thornton Creek Water Quality Channel is the center piece of the Thornton Place transit-oriented development adjacent to the Northgate Transit Center.



The Northgate bridge and the greenways it links will connect the Licton Springs Park, Mineral Springs Park, the NSC Environmental area, the water quality channel, Northgate Community Center, Olympic View playfield, Thornton Creek Park and two regional trails, the Interurban Trail between Everett and Seattle and the Burke-Gilman Trail.



Access to healthy food is a top priority for the City of Seattle. Seattle’s Food Action Plan has made it a priority to eliminate food inequities that disproportionately affect low-income residents, children, seniors, and communities of color. This TIGER grant will improve access to two community gardens in the Northgate community, Maple Leaf and Licton Springs, making it easier for residents to grow their own food.

ENVIRONMENTAL SUSTAINABILITY

Energy Efficiency, Air Quality and Climate Protection

Seattle has made reducing emissions pollution a central unifying goal in its land-use and transportation strategies. Guided by its Climate Action Plan, Seattle is a recognized leader on environmental issues, showing the world that it's possible to grow economically while shrinking the city's carbon footprint. Road-based transportation creates 40 percent of Seattle's greenhouse gas emissions, making it the major source of emissions in the city. Due to its importance, Seattle has set a goal of reducing road-



based greenhouse gas emissions by 82 percent from 2008 levels by 2030. In order to meet this goal, Seattle has placed an emphasis on increasing the number of people walking and biking and on enhancing neighborhood walkability. As a result of aggressive programs to encourage people to use active transportation modes and increase pedestrian and bicycle safety, Seattle has seen significant increases in these modes since 2011.

These improvements will result in mode shift towards non-motorized travel, which will reduce vehicle miles traveled. The reduction in vehicle miles traveled will result in a reduction in hydrocarbons, particulate matter, and carbon dioxide.

When people have the option of walking or cycling for everyday trips, it reduces vehicle miles traveled, which leads to decreased greenhouse gas (GHG) emissions that impact air quality. Because every vehicle trip causes emissions due to cold starts and hot soak conditions, shorter trips generate respectively higher amounts of emissions. Trips that are shorter than 3 miles are easily ridden or those shorter than one-half mile are easily walked if sufficient facilities exist. These shorter trips are also the ones with a high rate of GHG emissions due to the cold starts.



Another advantage to reducing vehicle miles traveled is the reduction in congestion. Traffic congestion is a growing problem in Seattle and, as housing is developed and the population grows, traffic congestion will continue to increase. However, this need not be the case. Over 50% of commute trips into downtown Seattle are on bus, riding a bike or walking. Cycling competes very effectively with the automobile for trips under 3 miles, and could replace many trips to, from and within the Northgate area. As the neighborhood continues to become denser and sidewalks are constructed, walking will also become a more convenient option for employees and residents in the area. Neighborhood business district surveys completed in 2012 showed that in dense neighborhoods with good sidewalk infrastructure, most residents walked or biked to the business district.

By reducing vehicle trips and encouraging people to walk and bike, this project will significantly reduce harmful emissions. It is estimated that there will be over 6,000 fewer vehicle trips and about 9,400 more trips by pedestrians and bicyclists each day following completion of this project. This will result in about 5,250 pounds fewer emissions of hydrocarbons and a reduction of about 3,600 pounds of nitrous oxide each year. Consistent with Seattle's aggressive greenhouse gas reduction goals, carbon emissions will be reduced by over 1.4 million pounds each year.

Environmental Education

The NSC campus includes environmentally-sensitive wetlands, which have inspired a college-wide commitment to sustainability for nearly two decades. The college uses the wetlands as a teaching facility, and in the past five years this work has expanded to include not only environmental education, but also social, cultural, and economic sustainability. One category that NSC has focused on is transportation – which prompted the installation of a bike repair station on campus.

Funding these improvements will provide direct access to the NSC, which offers a program in Earth Sciences and class opportunities incorporating environmental sustainability.

There is also an opportunity to incorporate an educational element with the bridge. These opportunities include educational and interpretive wayfinding along the bridge and approaches to narrate the important watershed features, natural features and resources of the area. The campus Sustainability Committee has been involved actively in the review of the Northgate bridge project to minimize habitat displacement.



North Seattle College Campus Pond

Coordination with Watershed and Environmental Management Activities

Thornton Creek is part of an important watershed that runs through the Northgate project area. The watershed drains approximately 11.6 square miles in northeast Seattle and Shoreline. It is Seattle's largest watershed, and drains to Lake Washington at Matthews Beach. The creek is a historic home to at least five species of Pacific salmon and trout, including species listed under the Endangered Species Act (ESA).



Thornton Creek Water Quality Channel

The headwaters of the South Fork of Thornton Creek begin on the eastside of the freeway between I-5 and First Avenue NE. Here, there are a series of small wetlands, ditches, a culvert and an open channel. The headwaters are connected to the wetlands surrounding NSC on the west side of I-5 via pipes and ditches traversing under I-5. The man-made wetlands in this area were developed for the treatment of stormwater runoff from the nearby park and ride by the Washington State Department of Transportation (WSDOT) and King County. The City was an active partner in this work.

As mitigation for a development in the area, Seattle Public Utilities (SPU) partnered with the Seattle Department of Planning and Development, SDOT, the Washington State

Department of Ecology, King County, interest groups and private developers to construct the Thornton Creek Water Quality Channel. Built in conjunction with improvements to surrounding roadways, Northgate Mall, Northgate Library and the Northgate Community Center, the facility is part of a larger strategy to revitalize the Northgate Urban Center. The facility receives and treats runoff from 680 acres, most of which was formerly untreated, using natural drainage system technology – drainage that mimics the way nature works to clean the water, slow it down and let water flow through the channel year-round.

The design of the Water Quality Channel includes native landscaping and pedestrian pathways that provide access throughout the site with connections to the Thornton Place TOD Aljoya Retirement Community, the King County Transit Center, the Northgate Mall, the new Library and Community Center just up Fifth Avenue NE, NE 100th Street and 3rd Avenue NE. The facility's public open space and pedestrian connectivity to the regional transit hub has assisted in revitalizing economic development in the neighborhood, setting the stage for Northgate to meet its growth targets.

This TIGER project will build upon the success of the city's and its partners' activities to protect the Thornton Creek watershed. In addition to coordinating with city partners, permits will be required by the U.S. Army Corps of Engineers (USACE) and the Washington State Department of Fish and Wildlife (WDFW). The City will work closely with these agencies to develop protective mitigation measures. Sidewalks and walkways will be built to current stormwater codes, reducing untreated stormwater runoff into Thornton Creek. Providing pedestrian and bicycle infrastructure will also reduce harmful runoff of pollutants related to automobile use and lessen the need for wider streets with more impervious surface.

STATE OF GOOD REPAIR

The Seattle Department of Transportation (SDOT) implemented a comprehensive Asset Management program following the passage of the ‘Bridging the Gap’ transportation funding package in 2006. The Asset Management program is focused on setting service levels, investing to meet them and establishing and measuring performance. It is a departmental management tool for making sound business decisions. Today, SDOT has over 480,000 assets tracked in its asset management database with a replacement cost of over \$13 billion. The asset management database is also integrated with a work management system to track all activities that repair, replace or improve Seattle’s transportation system.

Several of the bicycle and pedestrian projects investments within this application funded by the City of Seattle and Sound Transit contribute to the state of good repair for travelers in the project area. In June 2012, the city and Sound Transit each dedicated \$5 million to repair and improve bicycle and pedestrian facilities in the area. While the City has recently improved many facilities along Fifth Avenue NE and Northgate Way, other facilities, originally constructed nearly 50 years ago, have deteriorated and present difficult conditions for pedestrians and bicyclists.



NE 92nd Street looking east

Paving improvements, lighting, and separated bicycle and pedestrian facilities will greatly improve the Northgate Way underpass of I-5. At the NE 92nd Street Bridge, paving improvements, a protected bicycle lane and an improved intersection at First Avenue NE will greatly improve bike and pedestrian travel conditions and will serve the greater demand of users anticipated in the Northgate light rail station area.



Investments made in the project area will address substandard sidewalks that have not been upgraded by new construction and addition of sidewalks where there are none today. These projects will contribute to the state of good repair by addressing drainage, which currently deteriorates edge pavement conditions and erodes adjacent property. These sidewalk and drainage improvements also contribute to longer lifespans for subsequent paving improvements and overlays.

Direct pedestrian and bicycle access to the Northgate Transit Center and Sound Transit Link Light Rail station will make connections to buses and trains more reliable. Rather than relying on indirect transit routings, long walks or bike rides through congested intersections, people will be able to walk directly to transit. This will reduce vehicle use, resulting in

lower maintenance costs and reduce the need for fewer buses to operate circuitous routes to link destinations in close proximity “as the crow flies.” **The benefit-cost analysis for this project shows that reduced vehicle usage will result in approximately \$160,000 in reduced maintenance costs each year.**

SAFETY AND HEALTHY COMMUNITIES

Safer Pedestrian and Bicycle Network

The Northgate Non-motorized Access project will create safe walking and biking connections and result in mode shifts toward non-motorized travel, which will reduce the number of accidents. More travelers and commuters will choose not to travel in their automobiles. Instead they will walk or bike to their destinations. This will result in reduced loss of life, injuries, and property damage.

Today, the Northgate urban center is dominated by auto-oriented design with limited facilities for people to walk and bike safely and conveniently. The two crossings of the I-5 freeway, a significant barrier for pedestrians and bicyclists, are far from transit stations and many community services.



The Northgate Way underpass of I-5, the primary crossing for the neighborhood, has very high traffic volumes of over 31,000 average annual weekday vehicles. As a designated seaport connector to the Port of Seattle, it carries over four million tons of freight annually. Using the Northgate Way underpass requires walkers and bikers to negotiate a number of freeway on- and off-ramps with heavy traffic and complicated movements. Northgate Way between First Avenue NE (just east of I-5) and Meridian Avenue N (west of I-5) is a high collision location. Over the last ten years, 461 accidents have occurred resulting in 210 injuries.

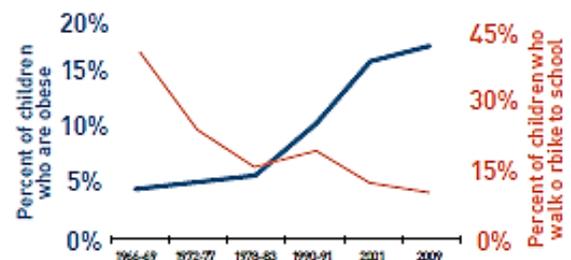
This project will provide a new crossing of I-5, allowing people to walk and bike directly between the Northgate Transit Center and North Seattle College and other destinations on the west side of I-5. New protected bicycle lanes will provide safe and attractive travel options for people of all ages and abilities in three locations connecting the bridge, as well as link to regional and neighborhood bike facilities.

New sidewalks and walkways will make it easier for residents, employees and people using the Northgate Transit Center and future light rail station to safely and conveniently get to their destination. The project also includes improvements to existing sidewalks and crossing to increase safety. **As a result, this TIGER project is expected to result in over \$7 million of safety benefits over 20 years.**

Healthier Community

Increasing evidence from experts shows that physical inactivity has become a major public health problem that has expensive economic consequences. The U.S. Centers for Disease Control and Prevention estimated that \$147 billion in added annual health costs could be attributed to obesity. Research shows that increased physical activity due to additional pedestrian and bicycle trips results in significant health benefits, including reduced risk of coronary heart disease, hypertension, colon cancer, and diabetes. The CDC has also shown that childhood obesity rates go down when more children walk or bike to school.

National Rates of Walking and Bicycling to School and Childhood Obesity



SOURCE: CDC, NHANES, McDONALD 2007, OGDEN AND CARROL 2010, NHITS 2009.

The 2004 study *Cost-Benefit Analysis of Physical Activity Using Bike/Pedestrian Trails* quantified the net benefits of money spent

on trail development from a health standpoint. The study found that every \$1 investment in trails for physical activity led to \$2.94 in net direct annual medical benefit. Quantifiable benefits of this project include reduction in medical care costs, reduction in lost productivity, and reduction in workers compensation costs. Studies have found that employees who get more exercise by bicycling and walking to work take fewer sick leaves than other employees. In the U.K., it was found that absenteeism costs employers \$478 per day and that employees who are bicyclists take 2.4 sick days per year, compared with 4.5 sick days taken by other employees. In Denmark, one study estimated that cycling saves \$68.7 million in healthcare costs each year.

This package of improvements will enhance the health benefits of non-motorized choices by supporting a walkable and bike friendly urban environment that can help individuals increase their level of physical activity. The project will increase the use of active transportation modes, which will result in reduced healthcare costs, a reduction in lost productivity, and a reduction in workers compensation costs. **Health benefits of these pedestrian and bicycle improvements is estimated to be over \$5.5 million over 20 years.**

INNOVATION

Design Technology and New Opportunities

The bridge design process has been informed by emerging digital technologies, aiding the team in the analysis of alternatives and the conception of new structural solutions. The use of these new technologies, including parametric modeling and algorithmic solving, has been central in the early stages of design, allowing the simultaneous development and analysis of many options. These tools enable the optimization of multiple performance characteristics for design variants such as environmental impact, span length, total distance, traffic parameters and highway visibility. As the design progresses, the process will engage digital design and coordination tools to help connect project teams together. Customized software tools will bring digital collaboration to the forefront of the design and delivery process. Shared digital models will increase project efficiency, enhance coordination and accuracy, and become the foundation for construction through digital fabrication.

Leverage

The Northgate area has seen significant public and private investment to help set the stage for transforming it from an auto-oriented to a transit-oriented community that is more livable and sustainable. This TIGER grant leverages these investments, providing the public low-cost, affordable ways to reach them. Transportation improvements have included the Fifth Avenue Northeast Streetscape project, construction of the Third Avenue NE Extension, new sidewalks along NE 100th Street, and the NE Northgate Way and Fifth Avenue NE Intersection and Pedestrian Improvements Project.

The package of non-motorized investments proposed will support Sound Transit's Northgate Link Light Rail extension, which will cost over \$2.1 billion to complete, including over \$145 million of federal funds, and add 62,000 daily boardings (15,000 estimated at Northgate station) to the Link Light Rail system. They will strengthen the North Link extension to Lynnwood and enhance the value of the federal investment in the entire Link system. These access improvements also support the investment in the Northgate Transit Center and the regional bus service provided there.



Other public infrastructure improvements in the area include construction of the Northgate Branch Library, Community Center and Park campus, the Hubbard Homestead Park, the Maple Leaf and Licton Springs Community Gardens and the Thornton Creek Water Quality Channel. Expansion of community medical facilities is also occurring at the North Public Health Center.

These public investments and the planned light rail station have begun to result in private investments in the area that will accelerate the transition to a more walkable, transit-oriented community. Key projects include the redevelopment of the Northgate Mall (Simon Properties – 116,750 sq. ft. of new retail and an 184,000 sq. ft. joint use parking facility), Thornton Place (Lorig Associates – transit-oriented development with 388 residential units, 144 senior housing units, and 124,870 square feet of commercial uses) and 507 Northgate (Wallace Properties – 163 residential units and 55,000 square feet of retail). Non-motorized improvements, including the pedestrian and bicycle bridge, will also greatly increase the accessibility of the planned Northgate Transit Oriented Development (TOD) at the Northgate Transit Center, helping to convert large parking lots to dense, mixed-use development.



Support for Innovative Workforce and Business Development Strategies

North Seattle College, located across I-5 from the Northgate Transit Center and future light rail station, is the site of two innovative programs that support the Ladders of Opportunity that are a priority for TIGER funding. The **Opportunity Center for Employment and Education** provides integrated educational, vocational, employment and supportive services through a partnership of multiple community-based agencies and community colleges. These organizations are working together to provide seamless employment and educational services and public assistance benefits to the unemployed, the underemployed, students and their families. The center aims to coordinate services to meet current and future workforce needs and shape the delivery of those services to be maximally effective in helping customers achieve self-sufficiency through employment and life-long learning.

The **Entrepreneur Success Center (ESC)** is one of only four programs in the country to receive a “Shared Vision for Small Business” grant from the National Association of Community College Entrepreneurship (NACCE) and Sam’s Club. The ESC provides one-to-one assistance for individuals who are contemplating starting a business, are in the early stages of their start-up process, or are experiencing a stall-out in taking their business to the next level of production/customer service. The center offers free private guidance sessions, as well as exclusive access to computer software that supports market research, business and marketing planning.

Sustainable Infrastructure Practices

The City of Seattle and the Seattle Department of Transportation are striving to be leaders in environmental stewardship. SDOT’s GreenDOT program is the department’s Environmental Management System (EMS) and is our commitment to go beyond basic compliance with environmental rules. We continually work to identify and implement improvements in how we do our work that reduce environmental impact and increase sustainability. Additionally, sustainability considerations are explicitly factored into SDOT’s prioritization process for large capital investment decisions.

The City is a leader in sustainable infrastructure practices, green stormwater infrastructure (GSI) and climate change. SDOT has implemented design and construction practices to ensure all transportation capital projects maximize environmental benefits for the public. This TIGER project will be implemented consistent with these practices. Construction materials will be reused and recycled whenever possible, use of “green” concrete and asphalt materials will be maximized, lighting will be designed for low energy consumption and the design will support enhancement of environmentally sensitive areas.

PARTNERSHIPS

The Northgate Link Light Rail Station Non-motorized Access project is the result of a strong collaboration among a broad range of government, business, and community participants. The project integrates the transportation network with a diverse and innovative set of public services. These improvements were identified as the result of a robust planning process as a direct outcome of the PSRC's Growing Transit Communities effort, funded through a HUD Sustainable Communities grant.

Jurisdictional/Stakeholder Collaboration and Disciplinary Integration

The identification of necessary non-motorized access improvements in the Northgate light rail station area is the result of a thorough planning process that began with the designation of the Northgate community as an Urban Center in 1994 and the center's designation as one of the Puget Sound region's 27 regional growth centers. The first comprehensive plan for the center addressed both land-use and transportation and identified the need to enhance the pedestrian and bicycle network within the center, recommending a grade-separated crossing to reconnect the east and west areas of the neighborhood across I-5.

As part of the multi-disciplinary Northgate revitalization effort that began in 2003, Seattle embarked on development of the Northgate Coordinated Transportation Investment Plan (CTIP), which was completed in September 2006. This plan was guided by a 22-member Northgate Stakeholders Group, with members representing a broad cross section of the community and a variety of partner agencies. As a result of their efforts, the Northgate CTIP made a priority of providing better pedestrian and bicycle facilities, particularly improvements to enhance transit access. The stakeholders group expressed its strong support of the development of pedestrian and bicycle crossing over I-5 to link the North Seattle College and the Northgate Link Light Rail station.



These improvements have also been identified as priorities in Seattle's three modal master plans: the Bicycle Master Plan, Pedestrian Master Plan and Transit Master Plan. These plans were developed with extensive public participation, with a strong effort to engage traditionally under-represented communities, consistent with Seattle's Race and Social Justice Initiative.

This TIGER grant request is a direct result of the Northgate Catalyst Demonstration project that was part of the Puget Sound region's Growing Transit Communities (GTC) project, our region's participation in the joint DOT/ HUD/EPA Sustainable Communities program. GTC funded a broad community engagement effort identifying several priorities for transforming the Northgate employment and residential growth center into a sustainable, transit-oriented community anchored by a major redevelopment of the King County Northgate Transit Center and interim end point for Sound Transit's extension of light rail from the University of Washington north to Snohomish County. As part of the Growing Transit Communities project, Seattle's Department of Planning and Development led the development of the Northgate Urban Design Framework in partnership with transportation agencies, utilities, North Seattle College, King County/Seattle Public Health and PSRC.

Project development has been a joint effort of Seattle, Sound Transit and King County Metro Transit, with Seattle taking on the role for lead agency of these improvements. King County led the initial feasibility study for the pedestrian and bicycle bridge, while Sound Transit led the Non-motorized Access Study. The three agencies have regular coordination meetings and are dedicated to ensuring these improvements provide the maximum benefit for people to walk, bike and use transit.

Non-motorized improvements at the Northgate Link Light Rail station are included in PSRC's award-winning Metropolitan Transportation Plan, *Transportation 2040*, and in both the Regional and State Transportation Improvement Programs. The Puget Sound region has recognized the significance of these improvements to the success of our regional growth strategy with \$1.3 million of PSRC managed federal funds for the design and environmental processes.

The Puget Sound region's *Prosperity Partnership* has identified Education and Workforce Development and Entrepreneurship and Innovation as two of the region's Economic Foundations in PSRC's Regional Economic Strategy. This TIGER project will support both of these foundations by providing better connections to the North Seattle College from the Northgate Transit Center and light rail station. NSC is the home of the **Opportunity Center for Employment and Education** and the **Entrepreneur Success Center**, two innovative programs aimed at those specific needs.

Neighborhood & Business Support

The Northgate Coordinated Transportation Investment Plan, developed in coordination with the 22 members of the Northgate Stakeholders Group, identifies improvements to the non-motorized transportation network in the community one of its top priorities. As a result of this importance more than 24 elected leaders, business owners and community members have signed letters of support.

PROJECT READINESS

Technical Feasibility

Seattle has the expertise and experience to manage this project and fulfill all federal requirements. SDOT has designed and constructed a number of large capital projects, including the Mercer East and Mercer West projects, funded with TIGER grants. The department manages a large bridge inventory, including many pedestrian and bicycle bridges, and is well versed in bridge design and construction, having completed a number of federally funded bridge projects. SDOT recently completed the West Thomas Street Overpass, which crosses a principal arterial and the BNSF railroad. SDOT also maintains and improves an extensive pedestrian and bicycle network, making Seattle the eighth most walkable city in the U.S. by WalkScore.



West Thomas Street Overpass

The goal for the spans over I-5 are to build an efficient structure for the least cost while maintaining an appropriate level of visual and experiential appeal as a gateway into the city. Figuring out how to provide weather protection as part of this bridge, while keeping life cycle costs low is critical. Innovative techniques are being used to develop the bridge design, and state-of-the-art construction methodologies are also being applied.

Catalyst Demonstration Projects



Northgate Pedestrian and Bicycle Bridge

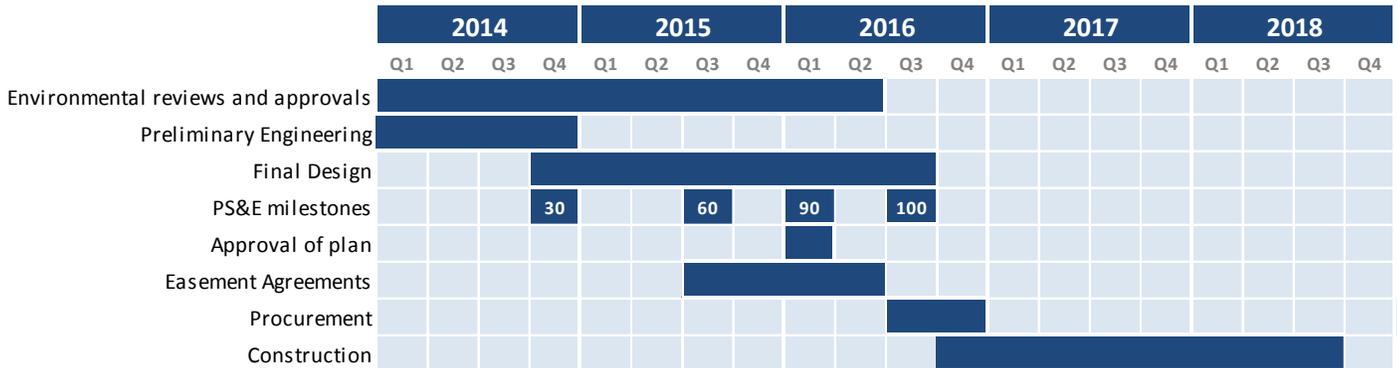
The alignment of the pathway begins on the west side of I-5 near the North Seattle Community College, crosses I-5 and terminates at the Northgate Transit Center and Sound Transit light rail station. The approaches will be made up of common structural components such as precast concrete girders, retaining walls and possibly an elevator/stair combination. The real innovation for the project will be the design of the main spans across I-5.

Construction over I-5 will require adherence to very restrictive criteria for building above the freeway, which is the main international trade connection between the US, Canada and Mexico. With the lack of construction lay down areas near the project site, it is anticipated that large components of the bridge will be constructed offsite and then brought to their final location. This will all need to be accomplished while maintaining a high level of traffic along the I-5 corridor. One method under consideration is use of a self-propelled modular transporter or self-propelled modular trailer (SPMT). These are a platform vehicle with a large array of wheels. SPMTs are used for transporting massive objects such as large bridge sections and other objects that are too big or heavy for trucks.

Project Schedule

The pedestrian and bicycle bridge is ready to be implemented. The detailed schedule presented includes all project milestones and illustrates the timeliness for completion of the critical elements. All necessary pre-construction activities will be complete to allow for potential grant funding awarded to be obligated no later than June 2016. The project will begin construction rapidly upon receipt of any TIGER grant funds and these funds will be spent steadily and expeditiously once construction starts. No real estate or right-of-way acquisition is required to complete the project. Easement agreements will be secured with our funding partners, the Washington State Department of Transportation and North Seattle College. In addition, there are no significant regulatory or legislative barriers to the project.

PROJECT SCHEDULE



Environmental Approvals

Early coordination with WSDOT and FHWA indicates that this project would qualify for a Documented Categorical Exclusion (DCE) under the NEPA. Technical reports are being prepared for each area of the environment that the project could potentially impact. In-field surveys (e.g., for wetlands, geotechnical, cultural resources, aesthetics, etc.) as well as thorough background and literature searches are aiding in the alternatives analysis and design of the pedestrian bridge. Once a preferred alternative is identified, the project team will complete the impact analysis portion of each technical report, which will then be incorporated into the NEPA DCE. A draft DCE is anticipated to be submitted to WSDOT in the third quarter of 2014, with final approval in the first quarter of 2015.

Legislative Approvals

Both the Seattle City Council and Sound Transit Board have taken legislative action committing to this project and its funding. On June 25, 2012, the Seattle City Council passed Resolution 31389 agreeing to commit \$10 million for improvements in non-motorized access in the Northgate light rail station area. On June 28, 2012, Sound Transit adopted Motion M2012-42 authorizing provision of \$10 million for non-motorized access improvements in the Northgate light rail station area.

State and Regional Planning Approvals

The Northgate Light Rail Station Non-motorized Access project is included in the regional Metropolitan Transportation Plan (MTP), *Transportation 2040*, and has also been included in both the State and Regional Transportation Improvement Program (TIP). The project is a result of the region’s HUD Sustainable Communities Initiative partnership, PSRC’s Growing Transit

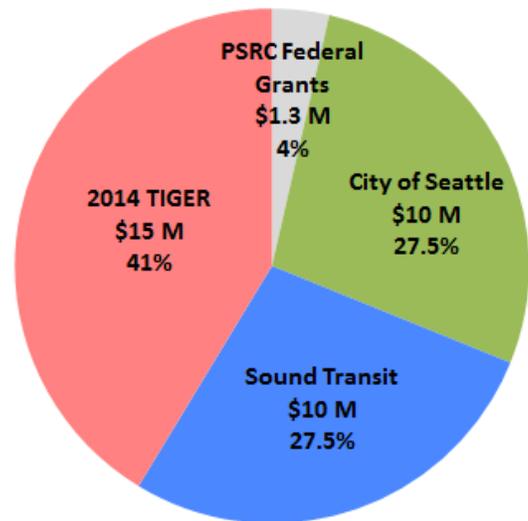
Communities. These improvements are also included in a number of city planning documents, including Seattle’s Bicycle, Pedestrian and Transit Master Plans, as well as the local transportation plan for the Northgate regional growth center, the Northgate Coordinated Transportation Improvement Plan.

Financial Feasibility

This \$15 million 2014 TIGER grant request represents the final funding for the Northgate Light Rail Station Non-motorized Access project, allowing Seattle to proceed to construction. All TIGER funds will be used on the construction phase of the project. Regionally-managed CMAQ and TAP funding has been awarded for planning, design and the environmental phase of these improvements in the Northgate station area, and the TIGER grant will allow completion of these improvements.

Seattle will obligate funds immediately upon the completion of design, by the 2016 obligation deadline for the 2014 TIGER grant program. This TIGER grant will leverage \$20 million in committed local funding for these improvements from Seattle and Sound Transit (\$10 million each), in addition to \$1.3 million in secured grant funding. Sound Transit funds come from its voter-approved revenues. The City’s revenues will come from municipal bonds that will be repaid using a mix of general and transportation-specific revenue sources. Seattle’s transportation revenue sources include commercial parking tax revenues, which continue to grow steadily, as well as a vehicle license fee. It is critical that Seattle obtain these funds to complete the project due to the expiration of the City’s Bridging the Gap transportation funding levy in 2015. Expiration of the levy reduces the amount of dedicated funding for transportation.

The TIGER funds requested will have an impact far beyond leveraging the local funding dedicated to the non-motorized access improvements at the Northgate Light Rail Station. They will support Sound Transit’s North Link Light Rail extension, which will cost over \$2.1 billion to complete, including over \$145 million of federal funds, and will add 62,000 daily boardings (15,000 estimated at Northgate station) to the Link Light Rail system. This TIGER grant will strengthen the North Link extension and enhance the value of the federal investment in the line. The TIGER grant will also leverage federal investment in streetscape improvements along Fifth Avenue Northeast adjacent to the new Community Center and Library, connecting these improvements to the light rail station and the rest of the community.



Seattle is a proven manager of federal grant funds. SDOT has been authorized by WSDOT to serve as a Certified Agency (CA) since 1973, allowing it to develop, advertise, award and manage its own projects. SDOT is the oldest and largest CA in the State of Washington. In this capacity, Seattle has also served as CA for smaller agencies and non-profits, assisting them to deliver projects. As a recipient of two previous TIGER grants, as well as ARRA funding from a number of federal agencies, Seattle knows what is expected and is ready to move forward with this project. The City has put together a citywide accountability and reporting structure overseen by the Mayor of Seattle and City Council to assure the proper use of federal funds.

Benefit Cost Analysis Summary

The Northgate Light Rail Station Non-Motorized Access project will be a catalyst for a wide range of benefits to the surrounding neighborhoods and northern Seattle. Even under a conservative benefits analysis framework, the federal investment in this station area will facilitate an area-wide modal shift of nearly 10 percent for all bike trips and 4 percent for walking trips. This shift will facilitate nearly two million new bicycle and pedestrian trips annually in 2019. The project also provides significant health benefits, encourages physical activity and reduces household transportation costs.

The project will also result in numerous qualitative benefits that will improve the quality of life and economic competitiveness of the region. Using conservative figures, the Northgate Light Rail Station Non-Motorized Access proposal will result in \$46 million in quantified benefits with an estimated net present value of approximately \$29 million, representing an internal rate of return on investment (IRR) of 5%, in line with other previous TIGER grant awards for bicycle and pedestrian infrastructure. A summary of the BCA and the technical documentation are included as Appendices A and B.

Long Term Outcomes	Net Present Value	
	3% Discount Rate	7% Discount Rate
Quality of Life (Livability)	\$31,656,000	\$18,000,000
Household Travel Savings	\$ 19,444,000	\$ 11,068,000
Travel Time Savings	\$ 6,623,000	\$ 3,826,000
Improved Health Benefits	\$ 5,589,000	\$ 3,106,000
Environmental Sustainability		
Reduced Emissions	\$ 914,000	\$ 526,000
Economic Competitiveness		
Reduced Traffic Congestion Costs	\$ 2,459,000	\$ 1,437,000
Safety		
Reductions in Collision Savings	\$ 7,153,000	\$ 4,181,000
State of Good Repair		
Reduction in Road Maintenance Costs	\$ 3,353,000	\$ 1,960,000
Total Long Term Outcomes	\$45,535,000	\$26,104,000



City of Seattle
Edward B. Murray, Mayor

Department of Transportation
Goran Sparrman, Interim Director

CERTIFICATION OF COMPLIANCE WITH FEDERAL WAGE RATE REQUIREMENTS

I certify that the City of Seattle Department of Transportation will comply with the Federal wage rate requirements of subchapter IV of chapter 31, title 40 of the United States Code, as required by the FY 2014 Continuing Appropriations Act.

Goran Sparrman, P.E.
Interim Director, Seattle Department of Transportation