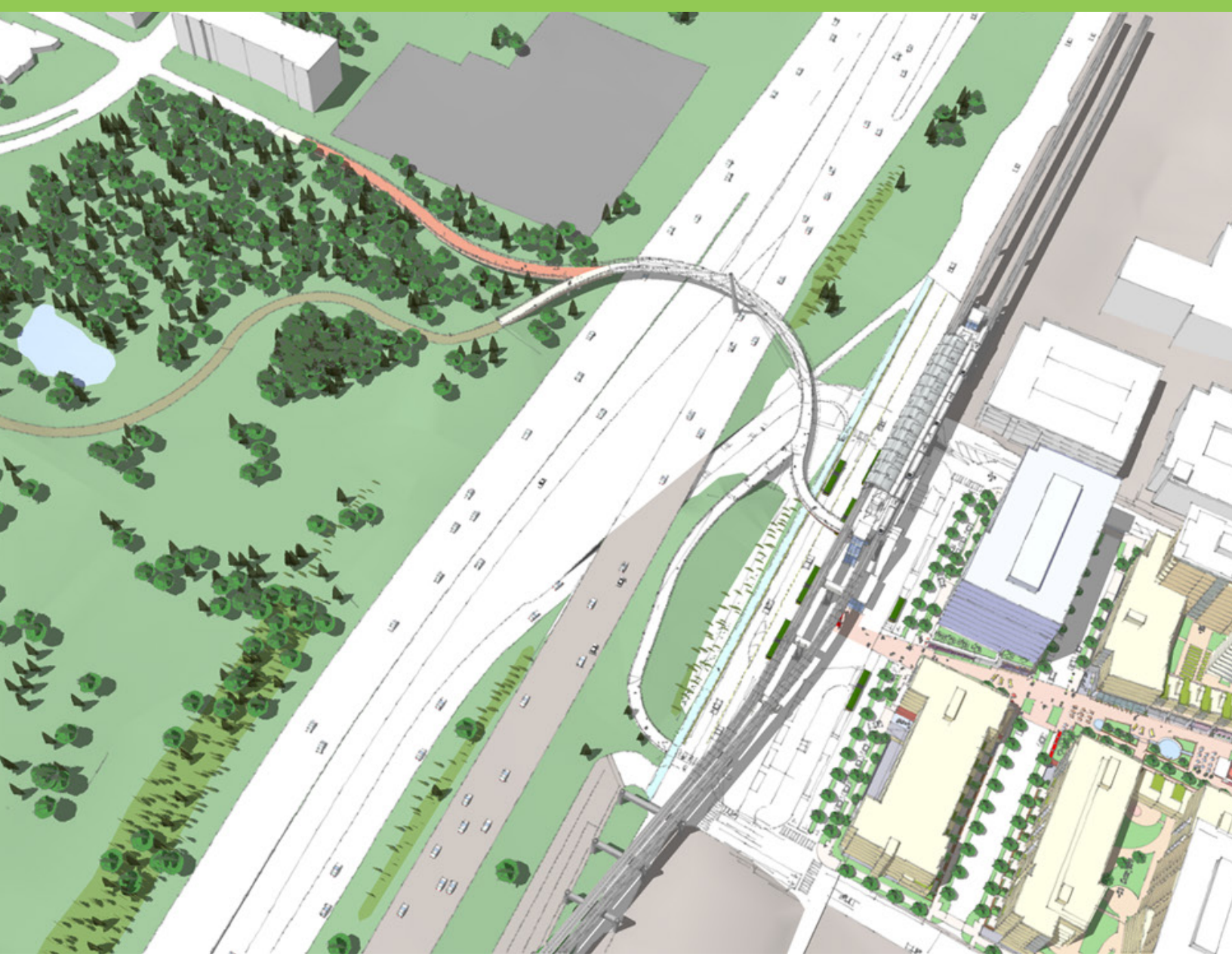




City of Seattle

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	
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➔ 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	
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➔ 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	
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➔ 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	
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→ 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

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→ 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	

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- A. Benefit-Cost Analysis – Executive Summary
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- 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 watershed 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.



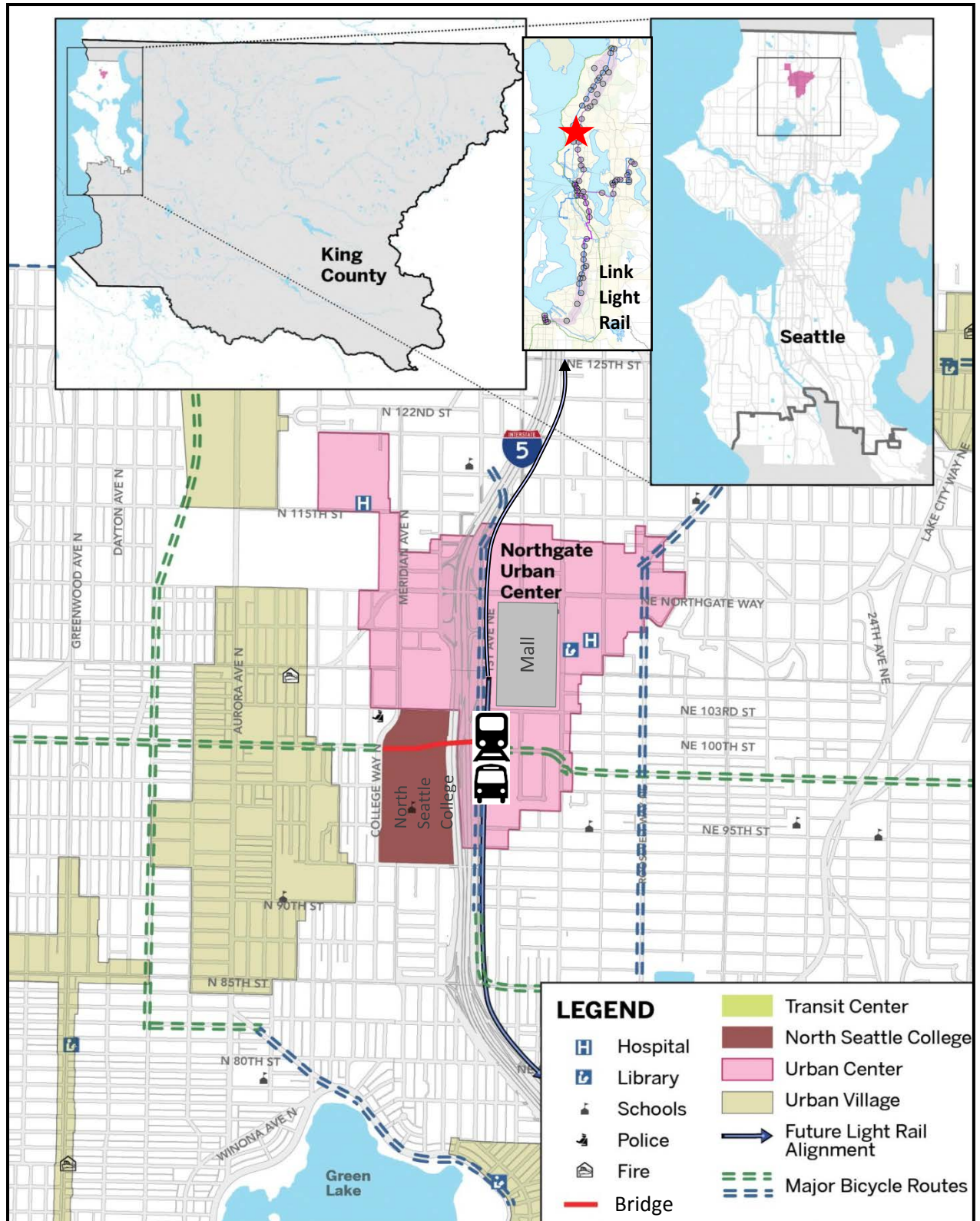
Northgate Way Under I-5 looking East

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



City of Seattle

- 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

- 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



Washington State
Department of Transportation

- 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

- 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



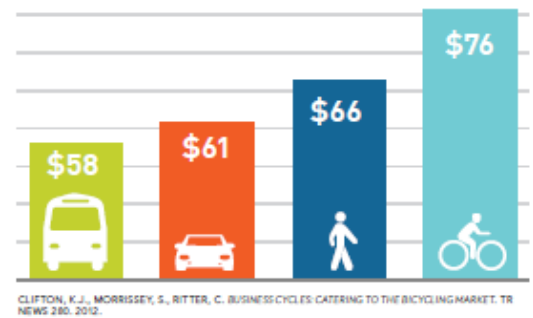
to the existing Northgate Transit Center and the Northgate Link Light Rail Station, resulting in increased light rail ridership and more use of active transportation modes.

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.

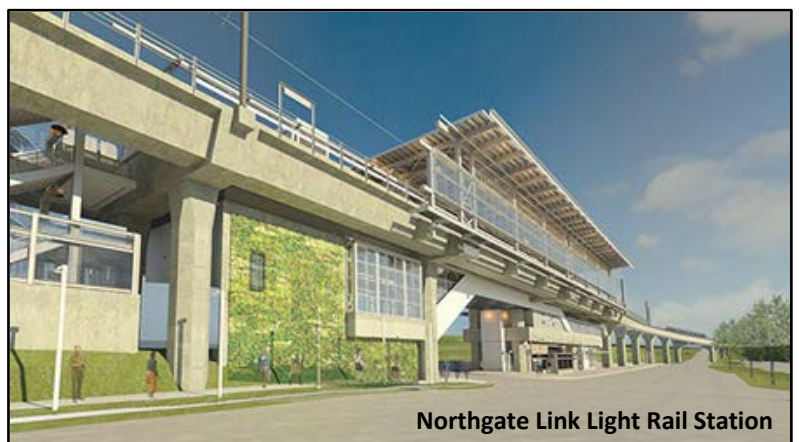
- Increase mobility and access for everyone
- Make transit the efficient, affordable choice for a variety of trips
- Make healthy travel choices the easy choices
- Increase efficient and affordable access to jobs and education

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.

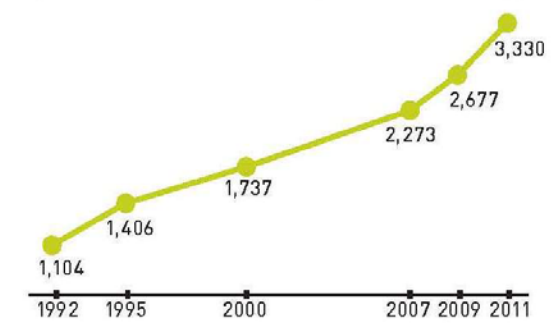
While the Northgate Transit Center has a very high level of transit service and very high ridership levels, currently it is located in an auto-oriented neighborhood, unlike much of Seattle. Despite the amount of transit service available, WalkScore has given the Northgate neighborhood a Transit Score 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.

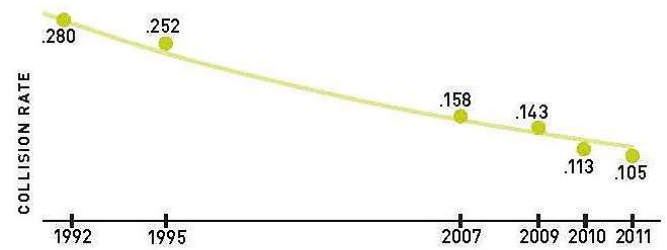
Number of daily bicycle commute trips

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.

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.



Broadway Protected Bicycle Lane

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,



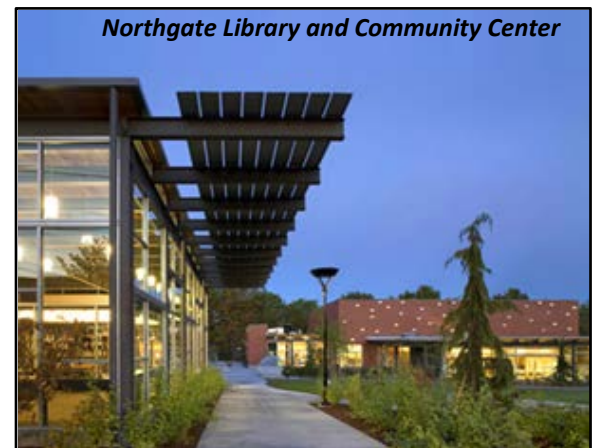
First Avenue NE at Northgate Way/I-5 Interchange looking east

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.



Northgate Library and Community Center

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.

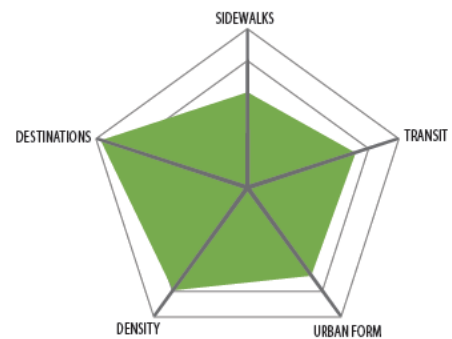
Development of Sound Transit's Northgate Link Light Rail extension provides a tremendous opportunity to complete the revitalization of this employment center, develop a sustainable, transit-oriented, mixed use community and to reach the targeted employment growth levels.

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.

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

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

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.

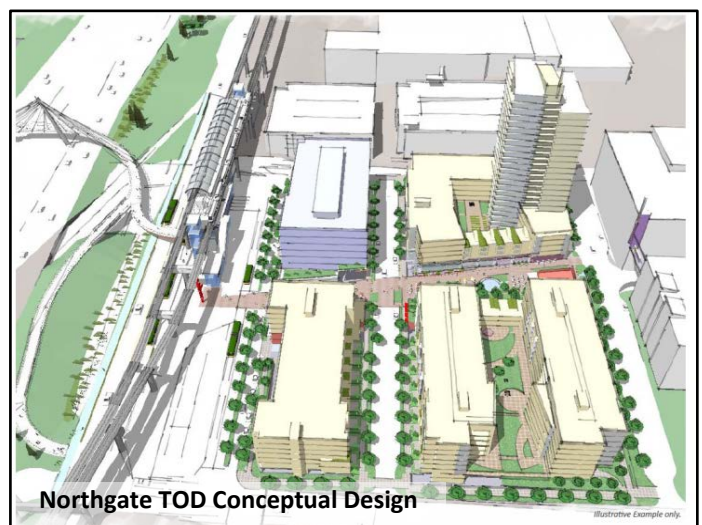
Seattle's 2004 Comprehensive Plan set a growth target of 2,500 new household units within the Northgate urban center by 2024. Through 2013, only about 750 of these units had been developed, leaving a need of about 1,750 new housing units. The 2013 Northgate Urban Design Framework provides a vision for 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

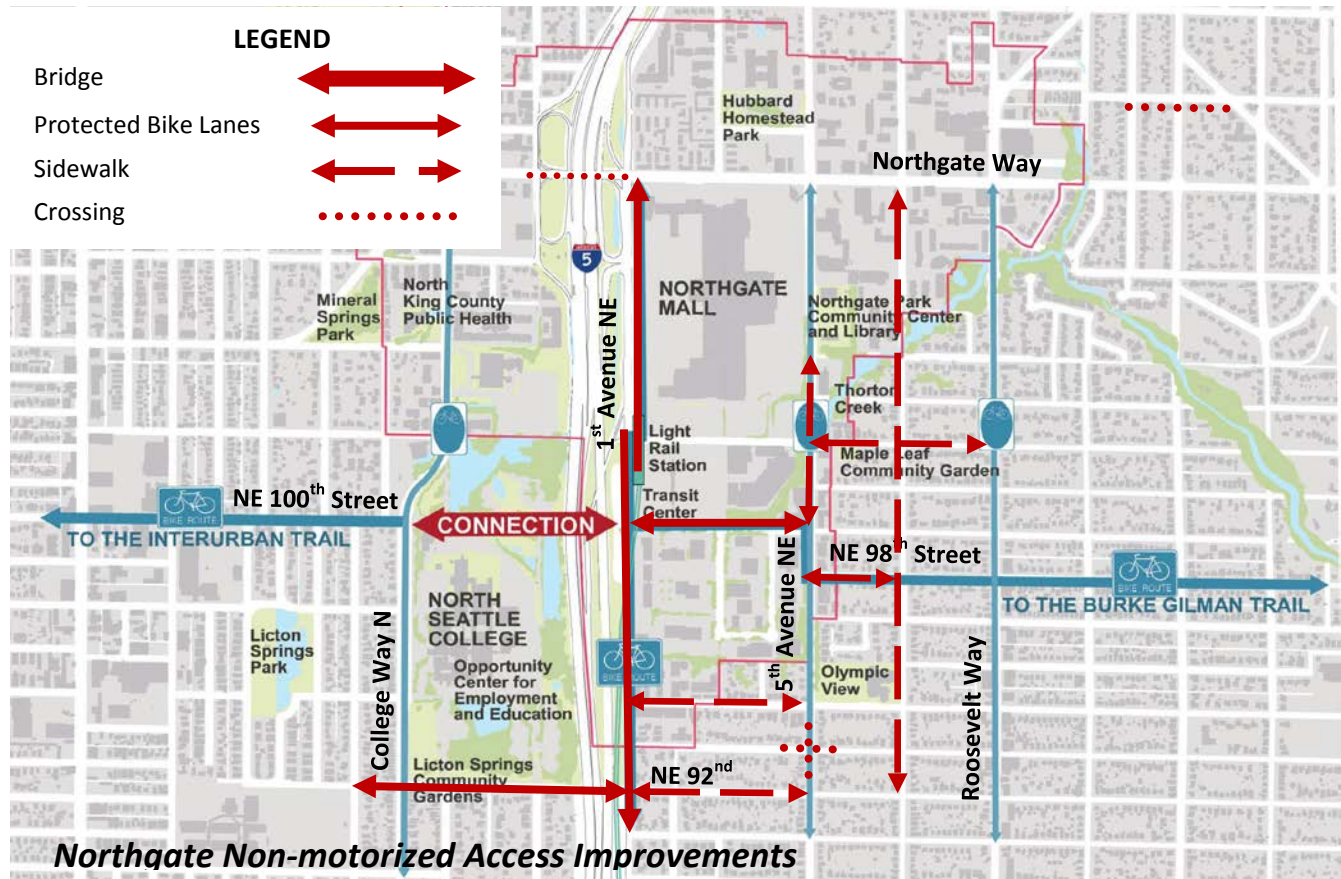
During a contract rezone process for the Northgate Apartments (217 units of lower-cost rental housing) in 2012, the owner agreed to dedicate land for a publicly subsidized affordable housing project at no cost as mitigation for the demolition of the existing units. This provides an opportunity to provide 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.



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 Lickton 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 Lickton Springs, making it easier for residents to grow their own food.

ENVIRONMENTAL SUSTAINABILITY

Energy Efficiency, Air Quality and Climate Protection

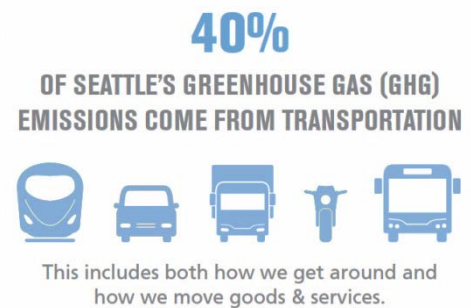
Seattle has made reducing emissions pollution a central unifying goal in its land-use and transportation strategies. Guided by its Climate Action Plan, Seattle is a recognized leader on environmental issues, showing the world that it's possible to grow economically while shrinking the city's carbon footprint. 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 Aljora 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.

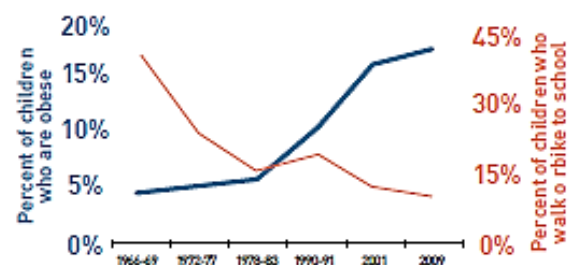
New sidewalks and walkways will make it easier for residents, employees and people using the Northgate Transit Center and future light rail station to safely and conveniently get to their destination. The project also includes improvements to existing sidewalks and crossing to increase safety. **As a 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.

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

National Rates of Walking and Bicycling to School and Childhood Obesity



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

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.

Catalyst Demonstration Projects



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

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.

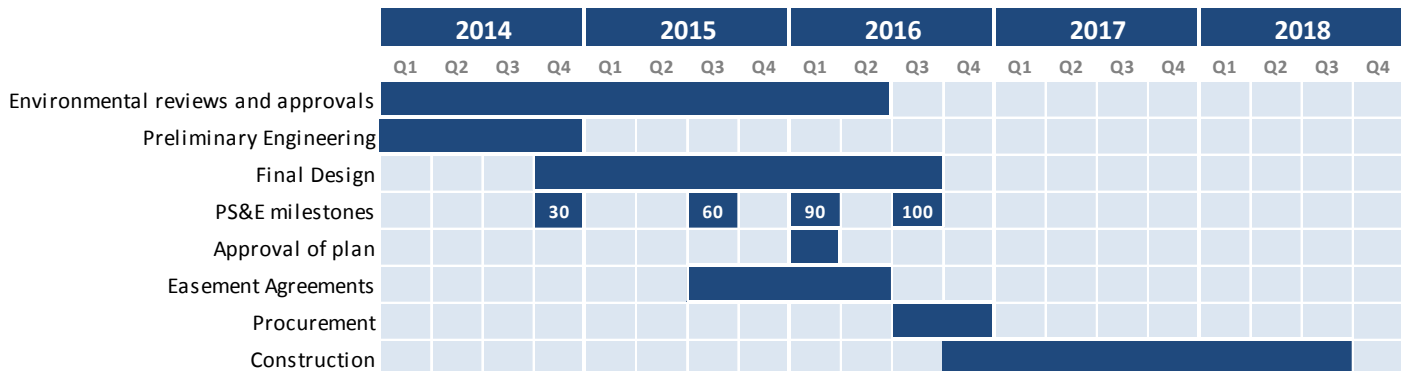
The goal for the spans over I-5 are to build an efficient structure for the least cost while maintaining an appropriate level of visual and experiential appeal as a gateway into the city. Figuring out how to provide weather protection as part of this bridge, while keeping life cycle costs low is critical.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

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

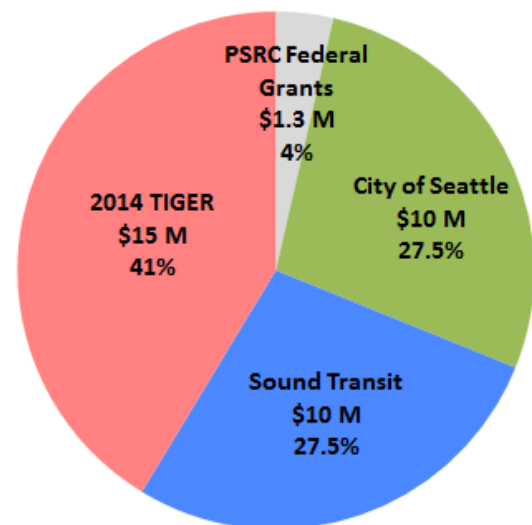
Communities. These improvements are also included in a number of city planning documents, including Seattle's Bicycle, Pedestrian and Transit Master Plans, as well as the local transportation plan for the Northgate regional growth center, the Northgate Coordinated Transportation Improvement Plan.

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

APPENDIX A

Northgate Light Rail Station Non-Motorized Access Benefit – Cost Analysis Executive Summary

CURRENT INFRASTRUCTURE BASELINE

Northgate is one of six Urban Centers established by the *Seattle Comprehensive Plan*. 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. The medical, retail and education sectors are the major employers in the center. 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.

The area surrounding the proposed project consists of a collection of pockets of commercial and institutional land uses, separated from each other by Interstate 5 (I-5), high volume wide arterial streets and large parking lots. This "superblock" type development creates an environment that is difficult to safely navigate by any means other than motor vehicles. Even in a car, traveling between the various pockets often requires long, circuitous trips, which can add at least a mile to any single trip. 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 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, with residents living on one side of the freeway and working on the other 50% less likely to walk or bike to work.

The Northgate Transit Center is the largest transit center in the King County Metro system. In the near future, the existing transit center will be enhanced by the construction of a light rail station with planned connections to downtown Seattle and as far south at SeaTac International Airport and as far north as Lynnwood, a distance of nearly 30 miles. With planned investments, the transit center will be a catalyst to transform the Northgate area from a district dependent on motorized transportation to a district that has multiple options to meet its transportation needs. The I-5 corridor divides the Northgate District and makes full utilization of the transit center and future light rail station from the west more difficult. Ten lanes of I-5 bisect the neighborhood creating a barrier between homes, jobs, schools, transit stops and vital community services. Currently, the two crossings of I-5 within the urban center are nearly one mile apart. This distance, combined with dangerous freeway entrances and an incomplete network of active transportation facilities makes it difficult or impossible for many people to access the light rail station area without a car or bus transfer. While slated for significant growth as part of both Seattle's Comprehensive Plan and the Puget Sound Regional Council's *Vision 2040* plan, growth in Northgate has lagged behind most other designated growth centers due to this auto-oriented built environment.

DESCRIPTION OF PROPOSED PROJECT

The Northgate Link Light Rail Station Non-motorized Access Project constructs a bicycle and pedestrian bridge crossing Interstate 5, a cycle track on First Avenue NE, and other non-motorized transportation safety improvements at the Northgate Transit Center and within the light rail station area. The project will connect the east and west sides of I-5, providing linkages and improved access to employment centers, neighborhood amenities, the North Seattle College (NSC), retail centers, medical facilities, community services and connections into the surrounding neighborhoods.

The project will extend the reach of the existing King County Metro transit center for pedestrians and bicycles. The transit center serves over 6,000 passengers a day, and the future Sound Transit Link light rail station is expected to service over 15,000 passengers each day. The project will allow large numbers of people to access the Sound Transit system and regional bus connections by walking and biking.

As part of many studies including the *Northgate Urban Design Framework*, the creation of a pedestrian and bicycle friendly connection between the east and west sides of I-5 has been a key component envisioned to improve access to the transit center and other assets of the neighborhoods. The report states that this connection in the form of a pedestrian and bicycle bridge is the single most important non-motorized connectivity infrastructure investment for the Urban Center.

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% 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.

PROJECT COSTS

The estimated design and construction cost of the pedestrian bridge, protected bicycle facilities, and associated improvements is \$36.5million. The cost estimates were prepared by KPFF Consulting Engineers in 2014. The model also assumes annual maintenance costs of \$29,000 per year.

PROJECT BENEFITS

The Northgate Bicycle and Pedestrian Bridge 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. The technical documentation for these benefits is included as Appendix B.

Long Term Outcomes	Net Present Value	
	3% Discount Rate	7% Discount Rate
Quality of Life (Livability)		
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

QUALITY OF LIFE (LIVABILITY)

Household Travel Savings – Net Estimated Benefits: \$ 19,444,000

The bridge will allow a freer flow of circulation within the area in ways that are separated from traffic. Pedestrians and people using bicycles will be able to find a safe, convenient, and comfortable route across the freeway. The bridge, combined with other improvements to sidewalks and trails, will result in a more complete network of non-motorized mobility. This will result in mode shift towards non-motorized travel, which will reduce vehicle miles traveled, and result in a significant reduction to household transportation spending.

Transportation costs are second only to housing costs as a percentage of household spending in North America. Spending on transportation is disproportionately high among low- and moderate-income families and bicycling and walking presents an affordable transportation option. Using walking and cycling for transportation reduces household spending on transportation, and in some cases, active transportation and transit use can eliminate the need for an extra vehicle. Bicycling, walking and transit

use will likely become even more attractive transportation options as fuel prices rise. The operating cost of a car is nearly \$9,000 while walking and bicycling are about \$100 and \$350 respectively. To put it in perspective, A German study found that a 23-minute commute, versus no commute, had the same effect on well-being as a 19 percent reduction in income (Stutzer). Bridge construction has the potential to significantly reduce travel costs for area residents and provides equitable transportation options consistent with stated city goals and policies.

Travel Time Savings – Net Estimated Benefits: \$6,623,000

The bridge will create a safe, convenient, comfortable, and more direct route across the freeway for bicycles. The bridge will reduce the distance from the transit center to NSC from 1.2 miles to approximately 0.25 miles. Based on the distance between the existing crossings, it was assumed that a bicyclist would have to detour approximately one mile out of their way to continue their journey. Transportation planners generally assume urban travel speeds of approximately 10 miles per hour, resulting in approximately six minutes of additional travel time on each bike trip. Additionally, research indicates bicyclists are only willing to add about an additional distance of about 25 percent to any trip. This means that if a bicyclist had to travel one mile out of direction, they would have to be going more than 4 miles to make the trip ‘worthwhile.’ While these are general rules of thumb, it is an indication of the benefit a direct connection will bring to area bicyclists.

Improved Health Benefits– Net Estimated Benefits: \$5,589,000

The pedestrian bridge 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 bicycle and pedestrian activity, which will result in reduced healthcare costs, a reduction in lost productivity, and a reduction in workers compensation costs.

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. Studies have found that employees who get more exercise by bicycling and walking to work take less sick leave than other employees. In the U.K., Sustrans 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 (euractiv.com). The Centers for Disease Control and Prevention (CDC) found that workplace health programs can increase productivity.

Quality Bike Products (QBP), a medium-sized employer in the Great Lakes region, encourages employees to bicycle to work with a credit for purchasing the products they sell. This “QBP Health Reward” has been found to improve a variety of health measures in employees. The company’s health care costs decreased by 4.4 percent from 2007 to 2011, a period during which companies across the United States experienced an average increase of 24.6 percent in health care costs (StreetsBlog).

Improved Access to Parks and Open Space – Net Estimated Benefits: Qualitative

The pedestrian and bicycle bridge will help connect residents to parks on both sides of Interstate 5, providing opportunities for those on the east to access green spaces on the west and vice versa. The economic value of Seattle parks has been measured by the Trust for Public Land. Although not quantified separately, the improved accessibility of parks and open spaces would result in increased economic value related to property value, direct use, health, and community cohesion.

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.

On the east side of the freeway, the Thornton Creek Water Quality Channel is the centerpiece of the Thornton Place transit-oriented development adjacent to the Northgate Transit Center. On the west, the North Seattle College includes 30 acres of greenbelt, wetlands, and trails that are used by the college as a teaching facility. The bridge design team has identified the opportunity include educational and interpretive way finding along the bridge and structure to narrate the important watershed features, natural features and resources.

Increased Property Values from Accessibility and New Infrastructure – Net Estimated Benefits: Qualitative

Although it is difficult to isolate the effects of the pedestrian bridge from existing transit-oriented development and the increase in transit service, it is reasonable to expect that the bridge will contribute to property value increases and lead to new transit-oriented development on the west side of the freeway. As a result of the project, over 300 properties will be within walking distance of the access point to the light rail station. Research examining the impact of transit-oriented development on property values has found that a good pedestrian environment, defined as including people-serving jobs, connected streets, and flat terrain, located in a transit station area can result in a residential price premium as high as 15%, and there is mutual dependence between pedestrian design and of transit proximity. Station proximity has a significantly stronger impact when coupled with a pedestrian-oriented environment (Duncan).

Improved Access for Disadvantaged Communities – Net Estimated Benefits: Qualitative

The increased connectivity will create more opportunities for economically disadvantaged persons, non-drivers, senior citizens, and persons with disabilities, to access services, amenities, and transportation options. 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. This improved access will create value, although not quantified, by increasing social equity in Seattle.

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 5th Avenue NE near the transit center, is the community's hub, providing access to a number of educational, social and recreational programs.

The residential area west of I-5 has a median household income well below the median household income for Seattle citywide; the two closest census blocks have median incomes of 39% and 84% of the citywide median of \$61,000. In this area 20% of individuals have incomes below the poverty level compared to 15% citywide. The area is racially diverse; 43% of the population consists of people of color, compared to 34% citywide. Approximately 32% of the population in the area west of I-5 speaks a language other than English at home, compared to 21% citywide. Approximately 16% of the population speaks limited English, compared to 10% citywide.

ENVIRONMENTAL SUSTAINABILITY

Reduced Emissions – Net Estimated Benefits: \$914,000

The project will result in a mode shift towards non-motorized travel, which will reduce vehicle miles traveled, leading to reduced greenhouse gas (GHG) emissions that impact air quality. The reduction in vehicle miles traveled will result in a reduction in hydrocarbons, particulate matter, and carbon dioxide, and carbon monoxide. Because every vehicle trip causes emissions due to cold starts and hot soak conditions, shorter trips generate respectively higher amounts of emissions (Victoria Transport Policy Institute). As such, trips that are shorter than 3 miles or one-half mile are easily ridden or walked if sufficient facilities exist.

ECONOMIC COMPETITIVENESS

Reduced Travel Congestion Costs – Net Estimated Benefits: \$2,459,000

Another advantage to reducing vehicle miles traveled is the reduction in congestion. The project will result in mode shift towards non-motorized travel, which will reduce vehicle miles traveled, leading to improvements to travel circulation and lower vehicular congestion. More travelers and commuters will choose not to travel in their automobiles; instead they will walk or bike to their destinations.

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. The City of Vancouver Transportation Plan Update has shown that traffic volumes entering downtown can be managed by providing alternatives to driving. Despite the growth in employment and population within downtown Vancouver (up 26 percent and 75 percent in the last 15 years, respectively), motor vehicles entering downtown have decreased by 20 percent within that time period and are now at 1965 levels (roughly 175,000 per day). During this period, person-trips entering downtown during the peak periods have increased by 15 percent. This increase has been accommodated by a shift to walking, cycling and transit, which now serve over 52 percent of all work trips to and from downtown Vancouver. Bicycling competes

very effectively with the automobile for trips under 3 miles, and could replace many trips to, from and within the Northgate area.

Improved Access to Job Centers and Employment Services – Net Estimated Benefits: Qualitative

Although not quantified, it is reasonable to assume a job creation benefit from the improved accessibility to job centers, education, and workforce development programs. These benefits are especially valuable for the underserved and underrepresented population of North Seattle.

Access to a quality education is a critical building block to a thriving and successful life. Currently there is established disparity in access to quality higher education opportunities across the region's communities. In the Northgate community Interstate 5 is one such barrier to higher 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 with a more convenient access to mass transit provided by the pedestrian and bicycle bridge, those seeking higher education will have an option for more options for school commuting. North Seattle College serves more than 14,000 students annually, many of whom are from economically disadvantaged populations. In addition, students and staff at NSC will benefit from easier access to activities on the east side of Interstate 5, such as a new library and community center.

North Seattle College is also home to Washington State's Opportunity Center for Employment and Education, an innovative pilot, combining various state human services, including employment and social services as well as educational services at one location. The Center provided employment services, such as job search assistance, Unemployment Insurance (UI) assistance, and employment and training services for veterans, to 16,643 people in its initial year of operation.

This project will also improve connections between people and job centers of employment. Northgate is a regional employment center with over 11,000 jobs and a growth target of 4,000 new jobs by 2024. Employers include Northwest Hospital, Group Health, North Seattle College, and the Northgate Mall.

Improved Connection of Neighborhoods with Retail Businesses – Net Estimated Benefits: Qualitative

Although not quantified, it is reasonable to assume an increase in retail economic activity for local businesses. The area near the bridge includes both Northgate Mall and other pockets of retail east of I-5. 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 became a regional shopping destination with several large shopping centers nearby. Smaller amounts of retailing and restaurants are also found along Fifth Avenue NE and in Thornton Place. Within these locations, there is a vast array of choices.

However, west of I-5 are a number of concentrations of higher density housing with no locally available shopping or restaurants. This requires residents to use the congested Northgate Way to fill their needs for goods and services, food and entertainment. Northgate Way is not conducive to walking or biking; a car is necessary to access these businesses. The proposed bridge will link the residential areas on the west with the shopping on the east with a safe, direct, convenient and pleasant route.

SAFETY

Reductions in Collisions – Net Estimated Benefits: \$7,153,000

The project will create a safe east-west connection and result in mode shift towards non-motorized travel, which will reduce 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.

A significant feature of this project is the inclusion of bike and pedestrian facilities that are completely separated from motor vehicles and provide travel options that are shown to be safe and attractive travel options for people of all ages and abilities. The project includes three protected bike lane facilities. Protected bicycle facilities emphasize comfort for cyclists and makes bicycling more appealing for a wider group, including both younger and older people. Even people who bicycle regularly prefer routes that are considered 'low-stress.' Researchers from Portland State University used global positioning system (GPS) devices to track the behavior of 166 cyclists in the Portland, Oregon region. The study found that a disproportionate share of utilitarian cycling trips occurred on streets with separate paths or bicycle boulevards. The findings support the need for a network of well-connected cycling routes that are protected from motor vehicle traffic as a means to encourage increased use of the bicycle (Broach).

Protected bicycle facilities provide the highest level of protection and are safer than bike lanes (Lusk). This is a key reason why people prefer separated facilities. Although cycle tracks are relatively new in North America, early evidence from cycle track projects in New York City, Minneapolis, and Vancouver show decreases in bicycle crashes following construction. Better safety reduces the severity and frequency of crashes, resulting in decreased human and financial costs.

STATE OF GOOD REPAIR

Reductions in Road Maintenance Costs – Net Estimated Benefits: \$3,353,000

This project will improve the condition of the existing roadway facilities by filling gaps in the current non-motorized pathways. 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 less wear and tear on the existing roadway system.

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Northgate Light Rail Station Non-Motorized Access – Benefit Cost Analysis Executive Summary Matrix

#	Current Status / Baseline & Problem to be Addressed	Change to Baseline/ Alternatives	Type of Impacts	Population Affected by Impacts	Economic Benefit	Summary of Results	Page Reference in BCA
1	Interstate 5 is a physical and psychological barrier for bicyclists and pedestrians accessing the light rail station, transit nodes, employment centers, North Seattle College, medical facilities, and neighborhood amenities. Existing freeway crossings are limited to a complicated urban interchange and a narrow vehicle bridge linking residential areas.	Non-motorized bridge connects east and west neighborhoods to each other, provides direct access to transit and light rail, and provides a link in the regional bicycle network.	Improved travel times	7,000 persons using the bridge daily	Savings in travel time and household travel time	\$6,623,000 + \$19,444,000	App. B Page 7
2	Interstate 5 is a physical and psychological barrier for bicyclists and pedestrians accessing the light rail station, transit nodes, employment centers, North Seattle College, medical facilities, and neighborhood amenities. Existing freeway crossings are limited to a complicated urban interchange and a narrow vehicle bridge linking residential areas.	The project will create a safe, direct connection across the freeway, resulting in mode shift and reduce travel times for bicyclists and pedestrians.	Improved health benefits	Nearly 2 million bicycle and pedestrian trips annually from a traveling population of 135,000.	Reduction in medical care costs, lost productivity, and workers compensation costs	\$5,589,000	App. B Page 7
3	Traveling between the various pockets crossing Interstate 5 often requires long, circuitous trips. Concentrated congestion impedes the overall area from performing as an integrated district.	The project will result in mode shift towards non-motorized travel, which will reduce vehicle miles traveled, leading to reduced emissions.	Reduced emissions	626,000 Seattle Residents	Reductions in CO2, NOX, and VOC	\$914,000	App. B Page 6
4	Traveling between the various pockets crossing Interstate 5 often requires long, circuitous trips. Concentrated congestion impedes the overall area from performing as an integrated district.	The project will create a safe east-west connection and result in mode shift towards non-motorized travel, which will reduce the number of collisions	Reduced collisions	262,000 persons in North Seattle	Reduced loss of life, injuries, and property damage	\$7,153,000	App. B Page 6
5	Concentrated congestion occurs at interstate crossings impedes the overall area from performing as an integrated district.	The project will result in mode shift towards non-motorized travel, which will reduce infrastructure maintenance costs.	Reduced maintenance costs	626,000 Seattle Residents	Reduced road maintenance costs	\$3,353,000	App. B Page 6

6	Concentrated congestion occurs at interstate crossings impedes the overall area from performing as an integrated district.	The project will result in mode shift towards non-motorized travel, which will reduce travel congestion costs.	Reduced travel congestion costs	262,000 persons in North Seattle	Reduced travel congestion costs	\$2,459,000	App. B Page 6
7	The use of park and green space in the area is inhibited by the lack of pedestrian friendly east-west connections over the freeway.	The pedestrian bridge will help connect parks on both sides of Interstate 5 providing opportunities for those on the east to access green spaces on the west and vice versa.	Improved quality of life	6,400 persons in Northgate Neighborhood	Not quantified separately		
8	Properties on the west side of the freeway lack proximity to the light rail station. Transit-oriented development is inhibited.	By improving proximity and access to the light rail station, the bridge will contribute to property value increases and lead to new transit-oriented development on the west side of the freeway.	Property value premiums	342 properties	Not quantified separately		
9	The Northgate community has a higher than average proportion of economically disadvantaged residents. The area west of the freeway has limited access to amenities and transportation options. Access to college, workforce development, and social service assets are hampered by lack of public transportation connections	The increased connectivity will create more opportunities for economically disadvantaged persons, non-drivers, senior citizens, and persons with disabilities, to access services, amenities, and transportation options.	Increased social equity	6,400 persons in Northgate Neighborhood	Not quantified separately		
10	Inconvenient access to mass transit is a barrier for education and workforce development programs at North Seattle College and access to job centers.	Improved accessibility to job centers, education, and workforce development programs.	Economic Competitiveness	262,000 persons in North Seattle	Not quantified separately		

APPENDIX B

Benefit – Cost Analysis Technical Documentation

The Northgate Light Rail Station Non-motorized Access Study Methodology and Results

Executive Summary

The *Northgate Light Rail Station Non-motorized Access* (NGLRT) benefit-cost analysis (BCA) expands on the methodology suggested by National Cooperative Highway Research Program (NCHRP) Report 552: *Guidelines for Analysis of Investments in Bicycle Facilities* by incorporating local demographic information and utilizing new data and research that has become available since the *Guidelines for Analysis* were published in 2006.

One notable enhancement is the consideration of benefits from both bicycling and walking activity, using different impact areas for each mode. By comparison, NCHRP methodology attempts to measure only bicycling benefits, and does not quantify pedestrian benefits for shared-use paths. Another key improvement is the estimate of utilitarian (non-commute) and access to transit in addition to work commute trips. This addition helps capture the full range of walking and bicycling activity in the project area. The NGLRT benefit-cost analysis also considers local travel patterns, trip distances and public health data to create a detailed, complete picture of benefits generated by the proposed bicycle and pedestrian facilities.

A major advantage of this benefit-cost analysis approach is the ability to quantify benefits at a line-item level for each distinct type of benefit associated with the project. This allows benefits to be quantified and compared for each TIGER grant selection criterion. This also means the NGLRT benefit-cost analysis omits calculation of recreational benefits of the project from the analysis, so that it can be evaluated solely on its merits as a transportation facility in accordance with TIGER grant selection guidelines. By contrast, the standard NCHRP benefit-cost analysis includes recreational benefits that often make up 90% of the calculated value of bicycle projects, due to savings from newly active people. These methodology improvements should be considered when comparing benefit-cost analysis results for this project with other TIGER grant applications.

Economic benefits have been evaluated on the basis of aggregate mode shift to walking and bicycling modes facilitated by the new multimodal transportation network created by the NGLRT project. Monetized benefits resulting from this shift has been estimated for the following benefit types:

- Land value increase due to infrastructure investment
- Reduced cost of vehicle emissions
- Reduced external costs of vehicle travel
 - Traffic congestion
 - Traffic crashes
 - Roadway maintenance
- Reduced healthcare costs
 - Reduction in medical care costs
 - Reduction in lost productivity
 - Reduction in workers compensation costs

- Travel time benefit
- Reduced household transportation spending

Monetized economic benefits for future years have been discounted at a 3% and 7% annual rate over a 20 year evaluation period with two years for project construction (2016-2018) and 20 years of project benefits (2019-2038). The residual benefit of the fully-maintained facilities built by the project is claimed as a lump sum at the end of the analysis period in 2038.

Baseline Data Inputs

Demographics

The NGLRT benefit-cost analysis considers several population groups within two project impact areas: a half-mile buffer area for walking impacts and a three-mile buffer area for bicycling impacts. These geographies are standard areas of influence used by bicycle and pedestrian planning professionals and were recently acknowledged by the Federal Transit Administration in the *Final Policy Statement on the Eligibility of Pedestrian and Bicycle Improvements Under Federal Transit Law* that went into effect August 19, 2011. Population groups within these areas were quantified using the following sources:

Employed Populations

BCA input: Employed population

Source:

2008-2012 American Community Survey (ACS) 5-Year Estimates, U.S. Census Bureau. *TCRP Report 153: Guidelines for Providing Access to Public Transit Stations*, 2012, Transit Cooperative Research Program. “Average station access mode share by station type”

Method: The number of employed people within the walking and bicycling impact areas was captured at a census block group level for block groups with their geographic center located within a half-mile or three mile buffer of proposed NGLRT projects, respectively. This population is used in conjunction with Journey to Work mode split data. A portion of the employed population that journey to work via transit were also assumed to access trips via cycling and walking. The assumed station type used was Urban Neighborhood with Parking.

Student Populations

BCA input: College student population

Source: 2008-2012 American Community Survey (ACS) 5-Year Estimates, U.S. Census Bureau.

Method: The populations of college-enrolled students living within the walking and bicycling impact area were captured for Census Block Groups with their geographic center located within the project impact areas. The data represent the most recent demographic estimates available for the area.

Travel Patterns – Mode Share

Baseline mode share data was collected for driving, bicycling and walking activity among the different demographic groups listed above. The following data sources were used to estimate mode split for each group:

Employed Populations

BCA input: Mode split of employed population (Journey to Work)

Source: 2008-2012 American Community Survey (ACS) 5-Year Estimates, U.S. Census Bureau.

Student Populations

BCA input: Mode split of college students

Source: *Data Extraction Tool*, 2009 National Household Travel Survey (NHTS)¹

Method: College student mode shares were based on travel survey data from the 2009 National Household Transportation Survey. National numbers were used in lieu of local college estimates, which aggregate bicycle and walking trips.

Travel Patterns – Trip Length and Purpose

Area residents will use the NGLRT bicycle and pedestrian transportation facilities for more than just work commute trips. To capture the full range of walking and bicycling activity, an estimated number of trips of other purposes were extrapolated from work trips based on data from the 2009 National Household Travel Survey (NHTS).² NHTS shows that for every work trip Americans make by bicycle, they also make an average of 1.61 utilitarian (non-commute) trips by bicycle. For walking, this ratio is 4.32.

To accurately estimate the relative benefits resulting from each type of bicycling and walking trip, each trip was weighted according to the average distance for a trip of that mode and purpose. Trip distance multipliers were also provided by NHTS Average trip distances were assigned as follows:

- Bicycling trips:
 - Work commute trips: 3.54 miles
 - College commute trips: 2.09 miles
 - Utilitarian trips: 1.89 miles
- Walking trips:
 - Work commute trips: 0.67 miles
 - College commute trips: 0.56 miles
 - Utilitarian trips: 0.67 miles

Travel Patterns – Trips over the Bridge

Trip generation was calculated as above for the walking and bicycling catchment areas on both the east and west sides of the bridge. Using the trip purpose and mode, a proportion of trips were distributed over the bridge, as given in Table 1. Few commute trips were assumed to cross the bridge, while a larger number of trips to access transit, particularly by walking, are assumed to cross when the bridge opens. The largest group assumed to cross the bridge are college trips, both walking and bicycling, generating from the east side of the bridge. This distribution is expected to increase, and a 3% growth rate was applied from the bridge opening in 2019.

¹ <http://nhts.ornl.gov/det/Extraction3.aspx>

² <http://nhts.ornl.gov/tables09/Login.aspx?ReturnUrl=/tables09/ae/TableDesigner.aspx>

Table 1. Bridge Trip Distribution

	West		East	
	Bicycling	Walking	Bicycling	Walking
Weekday commute trips				
Bicycling/walking trips	2.00%	1.00%	2.00%	1.00%
Walk- or bike-to-transit trips	1.50%	5.00%	1.00%	3.00%
College bicycle/walking trips	0.00%	5.00%	30.00%	30.00%
Daily utilitarian trips	2.00%	1.00%	2.00%	1.00%

The existing levels of walking and bicycling are likely to be lower than the existing demand due to substandard facilities. Conservatively, it was predicted that 80% of bicycle trips previously occurred without the bridge, while only 20% of pedestrian trips did. Therefore, the project receives high benefits in the first year it is open, while only the increase year-over-year is claimed for benefits in subsequent years.

Forecasts and Assumptions

Demographics

Future estimates were created by using linear growth rates to match Puget Sound Regional Council (PSRC) 2040 population and demographic forecasts by the 934 zone TAZ for the bicycling and walking impact areas. These growth rates were used to create annual estimates for each year evaluation period ending in 2038 through linear extrapolation between the base year (2012) and forecast year (2040).

Travel Patterns

The NGLRT project will have a strong influence on travel patterns in the bicycling and walking impact areas. Bicycling and walking mode shift curves were forecasted for each population group.

Employed Population

Mode shift forecasts for work commute trips within the bicycling and walking impact areas was based on mode shares documented by ACS Journey to Work data for other west coast communities that have made comparable investments in bicycling and walking transportation. According to the 2014 Alliance for Biking & Walking *2014 Benchmarking Report* Seattle has the fourth highest bicycling and walking commute levels of large US cities. A future mode share of 10% for cycling commute trips and 4% for walking trips were selected to reflect the changing land use and mode shift goals and targets observed elsewhere. Bicycle access to mode share was assumed to increase over time to levels consistent access mode share seen in other west coast cities as reported in the BART Bicycle Plan: Modeling Access to Transit, 2010, Bay Regional Transit Authority.

College Population

For college students, bicycling and walking growth rates were scaled to match the forecast growth rates for work commute trips.

Estimating Change From Baseline

For each year in the benefit-cost analysis period, forecasted mode shift was multiplied by demographic data to estimate increases over baseline for the following figures for both bicycling and walking modes:

- Work commute bicycling/walking users and number of trips, access to transit trips for work purposes
- College commute bicycling/walking users and number of trips
- Number of utilitarian (non-commute) bicycling/walking trips, based on NHTS trip purpose ratios from number of work and college bicycling/walking users

Trip distances are estimated according to the transportation mode and purpose of the trip from NHTS 2009 data.

Each new bicycling and walking trip was assumed to have a chance to replace a trip of any other mode equal to the baseline mode split for that trip type, with bicycling or walking removed from the total mode split. For example, if baseline drive alone mode share was 80% for college trips, with baseline bicycling mode share at 5%, a trip shifted to bicycling was assumed to have a 80% of out 95% chance (100% mode split – 5% bicycling, removed) of replacing a drive alone trip, or about 84.2%. These assumptions allow estimates for the following figures:

- Reduced vehicle trips
- Reduced VMT

The number of bicycling/walking users and VMT reduced were used in conjunction with benefit multipliers to monetize the benefits of the forecasted mode shift by year.

Benefit Multipliers

Based on available research, the following types of benefits were quantified using the increased number of bicycling/walking users and reduced VMT forecast annually:

- Land value increase due to infrastructure investment
- Reduced cost of vehicle emissions
- Reduced external costs of vehicle travel
 - Traffic congestion
 - Traffic crashes
 - Roadway maintenance
 - Economic costs of oil imports
- Reduced healthcare costs
 - Reduction in medical care costs
 - Reduction in lost productivity
 - Reduction in workers compensation costs
- Travel time benefit
- Reduced household transportation spending

Multipliers used to translate new bicycling/walking users and reduced VMT into the benefits listed above were drawn from the following sources:

Vehicle Emissions Rates

*Emission Facts: Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks (EPA report 420-F-05-022).*³

- Carbon dioxide: 369 g/VT
- Carbon monoxide: 12.4 g/VT
- Hydrocarbons: 1.36 g/VT
- Particulate matter: 0.0052 g/VT (PM10) and 0.0049 g/VT (PM2.5)
- Nitrous oxides: 0.95 g/VT

Emissions Costs

- From NHTSA Corporate Average Fuel Economy for MY 2011 Passenger Cars and Light Trucks, Table VIII-5⁴
Volatile organic compounds: \$1,700/ton
- Particulate matter: \$168,000/ton
- Nitrous oxides: \$4,000/ton

Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (May 2013; revised November 13), page 18

- Carbon dioxide cost appreciation: 2.5%/year

Carbon dioxide: Variable. See Tiger Benefit-Cost Analysis (BCA) Resource Guide for additional information.

External Vehicle Travel Costs

*Crashes vs. Congestion – What's the Cost to Society? AAA, 2008. (Figure ES.2, pg ES-4 and Figure ES.3, pg ES-5).*⁵

- Traffic crashes: \$0.32/VT
- Traffic congestion: \$0.11/VT.

Notes: Cost of crashes divided by 7.21, ratio of crash to congestion costs.

Kitamura, R., Zhao, H., and Gubby, A. R. *Development of a Pavement Maintenance Cost Allocation Model*. Institute of Transportation Studies – University of California, Davis.⁶

- Roadway maintenance: \$0.15/VT

Notes: Adjusted to 2013 values using the Bureau of Labor Statistics Inflation Calculator.⁷

Vehicle Operating Costs

*Average Cost of Owning and Operating an Automobile. 2011 [most recent data year] Bureau of Transportation Statistics.*⁸

- Reduced household transportation cost: \$0.596/VT

³ <https://www.whatcomsmarttrips.org/pdf/Emission%20Facts%202005.pdf>

⁴ http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.d0b5a45b55bfb582f57529_cdba046a0

⁵ <http://newsroom.aaa.com/Assets/Files/20083591910.CrashesVsCongestionFullReport2.28.08.pdf>

⁶ http://pubs.its.ucdavis.edu/publication_detail.php?id=19

⁷ http://www.bls.gov/data/inflation_calculator.htm

⁸ http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_statistics/html/table_03_17.html

2012 *National Transportation Statistics* (Table 3-17: Average Cost of Owning and Operating an Automobile, 2012). Research and Innovative Technology Administration, Bureau of Transportation Statistics.⁹

- Appreciation: 2.12%/year

Notes: Average annual growth in cost of owning and operating a motor vehicle from 1994-2008; used to approximate the increasing cost of motor vehicle transportation and energy prices.

Cost of Travel Time

TIGER BCA Resource Guide (2014). FHWA. Recommended Hourly Values of Travel Time Savings.

- Hourly monetized value of \$12.98 for all surface transportation of all types was used

The distance between freeway bridges is currently 0.9 miles, which is longer than most average pedestrian trips. A travel time savings of 6 minutes per trip was awarded for to each bicycle trip crossing the bridge based on the assumption that a bicyclist traveling at an urban average of ten miles per hours avoid nearly one mile of out of direction travel.

Health Benefits

The health care reduction multiplier includes several factors:

Health Care Reduction Modifier: \$1,119.62

Method: The Health Care Reductions Multiplier was derived from the health care figures provided in the report cited above. This report references 1998 Behavioral Risk Factor Surveillance System (BRFSS) data^{10 11 12}. Detail on these application of these reports is included in the attached BCA spreadsheet.

Residual Benefits

The expected lifespan for the bridge is 75 years before the bridge will require substantial maintenance or replacement. Since this analysis only captures 20 years of benefits from the facility, a residual value of the investment is left over. The yearly maintenance on the bridge retains the facility in good repair, so the value of the investment is retained. Discounted to 2038, this value is worth \$4,123,602, which is added as a benefit in the final year of the analysis.

⁹ http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_statistics/html/table_03_17.html

¹⁰ Chenoweth, D. (2005). The Economic Costs of Physical Inactivity, Obesity, and Overweight in California Adults: Health Care, Workers' Compensation, and Lost Productivity. Topline Report.

<http://www.cdph.ca.gov/healthinfo/healthyliving/nutrition/Documents/CostofObesityToplineReport.pdf>

¹¹ Population Estimates Program, Population Division, U.S. Census Bureau (1999). ST-99-1 State Population Estimates and Demographic Components of Population Change: July 1, 1998 to July 1, 1999.

<http://www.census.gov/population/estimates/state/st-99-1.txt>

¹² Bureau of Labor Statistics. CPI Inflation Calculator. http://www.bls.gov/data/inflation_calculator.htm

Discounting

This prorated stream of benefits was then discounted using the 3% and 7% rate as endorsed in the Federal Register grant announcement, and compared with the stream of construction and maintenance costs associated with the project.

Benefit-Cost Analysis Results

The *NGLRT* project will deliver significant benefits, with an estimated net present value of \$30 million, representing an IRR of 5% and a 3% discount rate. The full, 20-year *NGLRT* benefit-cost analysis tables are available on the following pages. The original Excel document used to calculate this estimate is available in a .zip file within the BCA attachment.

Table 2. Summary of Net Benefits

Calendar Year	Project Year	Initial Project Costs (3)	Operations and Maintenance Costs (1)	Benefits (2)	Net Annual Benefits	Cumulative Benefits
2016	-2	\$ 12,100,000	\$-	\$-	\$-	\$-
2017	-1	\$12,100,000	\$-	\$-	\$-	\$-
2018	0	\$12,100,000	\$-	\$-	\$-	\$-
2019	1	\$-	\$25,766	\$1,822,494	\$1,797,478	\$(31,431,840)
2020	2	\$-	\$25,016	\$1,866,500	\$1,842,213	\$(29,589,627)
2021	3	\$-	\$24,287	\$1,910,552	\$1,886,972	\$(27,702,655)
2022	4	\$-	\$23,580	\$1,955,847	\$1,932,954	\$(25,769,700)
2023	5	\$-	\$22,893	\$2,001,190	\$1,978,964	\$(23,790,737)
2024	6	\$-	\$22,226	\$2,047,147	\$2,025,568	\$(21,765,169)
2025	7	\$-	\$21,579	\$2,093,620	\$2,072,670	\$(19,692,499)
2026	8	\$-	\$20,950	\$2,140,771	\$2,120,431	\$(17,572,069)
2027	9	\$-	\$20,340	\$2,189,084	\$2,169,336	\$(15,402,732)
2028	10	\$-	\$19,748	\$2,237,818	\$2,218,646	\$(13,184,087)
2029	11	\$-	\$19,172	\$2,287,251	\$2,268,637	\$(10,915,450)
2030	12	\$-	\$18,614	\$2,337,682	\$2,319,611	\$(8,595,839)
2031	13	\$-	\$18,072	\$2,388,495	\$2,370,949	\$(6,224,890)
2032	14	\$-	\$17,545	\$2,441,394	\$2,424,359	\$(3,800,531)
2033	15	\$-	\$17,034	\$2,494,851	\$2,478,313	\$(1,322,217)
2034	16	\$-	\$16,538	\$2,549,489	\$2,533,432	\$1,211,214
2035	17	\$-	\$16,057	\$2,605,375	\$2,589,786	\$3,801,001
2036	18	\$-	\$15,589	\$2,662,450	\$2,647,315	\$6,448,316
2037	19	\$-	\$15,135	\$2,721,436	\$2,706,742	\$9,155,058
2038	20	\$(17,217,681)	\$14,694	\$2,781,381	\$19,984,796	\$29,139,854
					Net Present Value:	\$29,139,854
					IRR:	4.68%

Notes:

- (1) Estimated annual maintenance cost of \$29,000. This maintenance level will preserve the full value and functionality of the facilities.
- (2) Includes all associated benefits of the project, including: one time land value increase, air quality benefits of reduced vehicle emissions; reduced costs of traffic congestion, crashes and road maintenance; healthcare cost savings; and reduced household transportation expenses.
- (3) Credit for residual benefit of fully functional, maintained transportation facilities at end of analysis period.

Worksheet for Table 2 in BCACalcs.xls Tab: Table 2

Table 3A: Net Present Value Discounted at 3% and 7%

	Household Travel Savings		Travel Time Savings		Improved Health Benefits	
Year	3%	7%	3%	7%	3%	7%
2019	\$ 742,228	\$ 613,486	\$ 284,090	\$ 234,814	\$ 146,706	\$ 121,259
2020	761,528	605,908	288,339	229,416	163,625	130,188
2021	781,552	598,594	292,744	224,214	179,990	137,855
2022	802,245	591,473	297,221	219,132	195,752	144,323
2023	823,686	584,578	301,814	214,200	210,997	149,747
2024	845,905	577,905	306,520	209,408	225,778	154,247
2025	868,908	571,428	311,334	204,746	240,012	157,842
2026	892,737	565,152	316,255	200,207	253,812	160,677
2027	917,427	559,070	321,295	195,794	267,107	162,772
2028	943,049	553,201	326,471	191,511	280,036	164,272
2029	969,562	547,491	331,741	187,327	292,520	165,180
2030	997,100	541,993	337,171	183,276	304,581	165,561
2031	1,025,625	536,657	342,702	179,319	316,268	165,487
2032	1,055,220	531,502	348,372	175,471	327,588	165,002
2033	1,085,911	526,514	354,172	171,724	338,547	164,148
2034	1,117,758	521,695	360,111	168,076	349,171	162,970
2035	1,150,812	517,043	366,190	164,524	359,471	161,505
2036	1,185,071	512,531	372,390	161,055	369,434	159,776
2037	1,220,622	508,172	378,727	157,672	379,114	157,833
2038	1,257,552	503,975	385,229	154,384	388,493	155,692
TOTAL Value	\$ 19,444,000	\$ 11,068,000	\$ 6,623,000	\$ 3,826,000	\$ 5,589,000	\$ 3,106,000

Worksheet for Table 3A in BCACalcs.xls Tab: Table 3

Table 3B: Net Present Value Discounted at 3% and 7%

Year	Reduced Emissions		Reduced Traffic Congestion Costs		Reductions in Accident Savings		Reduction in Road Maintenance Costs	
	3%	7%	3%	7%	3%	7%	3%	7%
2019	\$ 38,126	\$31,513	\$115,945	\$95,834	\$337,293	\$278,789	\$158,106	\$130,682
2020	38,787	30,861	116,490	92,685	338,880	269,629	158,850	126,389
2021	38,981	29,855	117,071	89,665	340,571	260,844	159,642	122,271
2022	40,155	29,605	117,676	86,759	342,330	252,391	160,467	118,308
2023	40,862	29,000	118,313	83,968	344,183	244,270	161,336	114,502
2024	41,585	28,410	118,982	81,286	346,129	236,468	162,248	110,844
2025	42,323	27,834	119,680	78,706	348,161	228,964	163,200	107,327
2026	43,079	27,271	120,410	76,226	350,283	221,748	164,195	103,944
2027	44,354	27,029	121,171	73,840	352,497	214,808	165,233	100,691
2028	45,150	26,485	121,969	71,548	354,820	208,140	166,322	97,566
2029	45,963	25,955	122,795	69,340	357,222	201,716	167,448	94,554
2030	46,799	25,438	123,661	67,218	359,742	195,545	168,629	91,662
2031	47,138	24,665	124,558	65,175	362,351	189,600	169,852	88,875
2032	48,529	24,444	125,492	63,209	365,067	183,880	171,125	86,194
2033	49,427	23,965	126,461	61,316	367,886	178,373	172,447	83,612
2034	50,347	23,499	127,467	59,493	370,814	173,071	173,819	81,127
2035	51,291	23,044	128,512	57,739	373,854	167,967	175,244	78,735
2036	52,258	22,601	129,591	56,047	376,991	163,045	176,715	76,427
2037	53,789	22,393	130,707	54,416	380,240	158,302	178,237	74,204
2038	54,811	21,966	131,866	52,847	383,611	153,736	179,818	72,064
TOTAL Value	\$914,000	\$526,000	\$2,459,000	\$1,437,000	\$7,153,000	\$4,181,000	\$3,353,000	\$1,960,000

Worksheet for Table 3B in BCACalcs.xls Tab: Table 3

Table 1. General Benefits

Benefit	Project Benefits*	Rounded (<i>nearest thousand</i>)
<i>Increased Bicycling Trips</i>	12,587,693	12,588,000
<i>Increased Walking Trips</i>	35,236,889	35,237,000
<i>Reduced Vehicle Trips</i>	32,065,913	32,066,000
<i>Reduced Vehicle Miles Traveled</i>	35,047,667	35,048,000

Benefits by Selection Criteria

Sustainability Benefits	Project Benefits*	Rounded (<i>nearest thousand</i>)
<i>Reduced Hydrocarbons (pounds)</i>	105,083	105,000
<i>Reduced Particulate Matter (pounds)</i>	780	1,000
<i>Reduced Nitrous Oxides (pounds)</i>	73,404	73,000
<i>Reduced Carbon Monoxide (pounds)</i>	958,109	958,000
<i>Reduced Carbon Dioxide (pounds)</i>	28,511,479	28,511,000
<i>Reduced Hydrocarbons Emissions Costs</i>	\$56,967	\$57,000
<i>Reduced Particulate Matter Emissions Costs</i>	\$76,276	\$76,000
<i>Reduced Nitrous Oxides Emissions Costs</i>	\$156,833	\$157,000
<i>Reduced Carbon Dioxide Emissions Costs</i>	\$623,677	\$624,000

Economic Competitiveness Benefits

<i>Reduced Traffic Congestion Costs</i>	\$2,458,819	\$2,459,000
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Livability Benefits

<i>Household Travel Savings</i>	\$19,444,499	\$19,444,000
<i>Property Value Increase</i>	\$0	\$0
<i>Travel Time Savings Costs</i>	\$6,622,889	\$6,623,000

Livability Benefits (Health Benefits)

<i>Reduction in Medical Care Costs</i>	\$2,198,954	\$2,199,000
<i>Reduction in Lost Productivity</i>	\$3,280,028	\$3,280,000
<i>Reduction in Workers Compensation Costs</i>	\$110,023	\$110,000

Safety Benefits

<i>Reduced Vehicle Crash Costs</i>	\$7,152,927	\$7,153,000
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State of Good Repair Benefits

<i>Reduced Roadway Maintenance Costs</i>	\$3,352,934	\$3,353,000
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* Increase over baseline; totals through 20 year evaluation period. All dollar values discounted.

Table 2. Cumulative Benefits

Calendar Year	Project Year	Operations and Maintenance				Net Annual Benefits	Cumulative Benefits
		Initial Project Costs (3)	Costs (1)	Benefits (2)			
2016	-2	\$ 12,100,000	\$ -	\$ -	\$ -	\$ -	\$ -
2017	-1	\$ 12,100,000	\$ -	\$ -	\$ -	\$ -	\$ -
2018	0	\$ 12,100,000	\$ -	\$ -	\$ -	\$ -	\$ -
2019	1	\$ -	\$ 25,766	\$ 1,822,494	\$ 1,797,478	\$ (31,431,840)	
2020	2	\$ -	\$ 25,016	\$ 1,866,500	\$ 1,842,213	\$ (29,589,627)	
2021	3	\$ -	\$ 24,287	\$ 1,910,552	\$ 1,886,972	\$ (27,702,655)	
2022	4	\$ -	\$ 23,580	\$ 1,955,847	\$ 1,932,954	\$ (25,769,700)	
2023	5	\$ -	\$ 22,893	\$ 2,001,190	\$ 1,978,964	\$ (23,790,737)	
2024	6	\$ -	\$ 22,226	\$ 2,047,147	\$ 2,025,568	\$ (21,765,169)	
2025	7	\$ -	\$ 21,579	\$ 2,093,620	\$ 2,072,670	\$ (19,692,499)	
2026	8	\$ -	\$ 20,950	\$ 2,140,771	\$ 2,120,431	\$ (17,572,069)	
2027	9	\$ -	\$ 20,340	\$ 2,189,084	\$ 2,169,336	\$ (15,402,732)	
2028	10	\$ -	\$ 19,748	\$ 2,237,818	\$ 2,218,646	\$ (13,184,087)	
2029	11	\$ -	\$ 19,172	\$ 2,287,251	\$ 2,268,637	\$ (10,915,450)	
2030	12	\$ -	\$ 18,614	\$ 2,337,682	\$ 2,319,611	\$ (8,595,839)	
2031	13	\$ -	\$ 18,072	\$ 2,388,495	\$ 2,370,949	\$ (6,224,890)	
2032	14	\$ -	\$ 17,545	\$ 2,441,394	\$ 2,424,359	\$ (3,800,531)	
2033	15	\$ -	\$ 17,034	\$ 2,494,851	\$ 2,478,313	\$ (1,322,217)	
2034	16	\$ -	\$ 16,538	\$ 2,549,489	\$ 2,533,432	\$ 1,211,214	
2035	17	\$ -	\$ 16,057	\$ 2,605,375	\$ 2,589,786	\$ 3,801,001	
2036	18	\$ -	\$ 15,589	\$ 2,662,450	\$ 2,647,315	\$ 6,448,316	
2037	19	\$ -	\$ 15,135	\$ 2,721,436	\$ 2,706,742	\$ 9,155,058	
2038	20	\$ 17,217,681	\$ 14,694	\$ 2,781,381	\$ 19,984,796	\$ 29,139,854	
Net Present Value:							\$29,139,854
IRR:							4.68%

Notes:

(1) Estimated annual maintenance cost of \$29,000. This maintenance level will preserve the full value and functionality of the facilities.

(2) Includes all associated benefits of the project, including: one time land value increase, air quality benefits of reduced vehicle emissions; reduced costs of traffic congestion, crashes and road maintenance; healthcare cost savings; and reduced household transportation expenses.

(3) Credit for residual benefit of fully functional, maintained transportation facilities at end of analysis period.

TABLE 3A: Net Present Value of Benefits Discounted at 3% and 7%

	Household Travel Savings			Travel Time Savings			Improved Health Benefits		
Year	Value	3% Discount	7% Discount	Value	3% Discount	7% Discount	Value	3% Discount	7% Discount
2019	\$ 860,445	\$ 742,228	\$ 613,486	\$ 329,339	\$ 284,090	\$ 234,814	\$ 170,072	\$ 146,706	\$ 121,259
2020	909,305	761,528	605,908	344,292	288,339	229,416	195,377	163,625	130,188
2021	961,211	781,552	598,594	360,038	292,744	224,214	221,366	179,990	137,855
2022	1,016,260	802,245	591,473	376,510	297,221	219,132	247,973	195,752	144,323
2023	1,074,723	823,686	584,578	393,798	301,814	214,200	275,303	210,997	149,747
2024	1,136,826	845,905	577,905	411,937	306,520	209,408	303,427	225,778	154,247
2025	1,202,772	868,908	571,428	430,959	311,334	204,746	332,233	240,012	157,842
2026	1,272,830	892,737	565,152	450,904	316,255	200,207	361,875	253,812	160,677
2027	1,347,272	917,427	559,070	471,833	321,295	195,794	392,255	267,107	162,772
2028	1,426,447	943,049	553,201	493,817	326,471	191,511	423,580	280,036	164,272
2029	1,510,545	969,562	547,491	516,841	331,741	187,327	455,737	292,520	165,180
2030	1,600,053	997,100	541,993	541,061	337,171	183,276	488,763	304,581	165,561
2031	1,695,201	1,025,625	536,657	566,435	342,702	179,319	522,744	316,268	165,487
2032	1,796,441	1,055,220	531,502	593,081	348,372	175,471	557,696	327,588	165,002
2033	1,904,151	1,085,911	526,514	621,043	354,172	171,724	593,645	338,547	164,148
2034	2,018,796	1,117,758	521,695	650,400	360,111	168,076	630,642	349,171	162,970
2035	2,140,849	1,150,812	517,043	681,222	366,190	164,524	668,723	359,471	161,505
2036	2,270,719	1,185,071	512,531	713,539	372,390	161,055	707,873	369,434	159,776
2037	2,409,004	1,220,622	508,172	747,450	378,727	157,672	748,214	379,114	157,833
2038	2,556,345	1,257,552	503,975	783,091	385,229	154,384	789,727	388,493	155,692
TOTAL 2014 Value		\$ 19,444,000	\$ 11,068,000		\$ 6,623,000	\$ 3,826,000		\$ 5,589,000	\$ 3,106,000

TABLE 3B: Net Present Value of Benefits Discounted at 3% and 7%

Year	Reduced Emissions			Reduced Traffic Congestion Costs			Reductions in Accident Savings			Reduction in Road Maintenance Costs		
	Value	3% Discount	7% Discount	Value	3% Discount	7% Discount	Value	3% Discount	7% Discount	Value	3% Discount	7% Discount
2019	\$ 44,199	\$ 38,126	\$ 31,513	\$ 134,412	\$ 115,945	\$ 95,834	\$ 391,016	\$ 337,293	\$ 278,789	\$ 183,289	\$ 158,106	\$ 130,682
2020	46,314	38,787	30,861	139,095	116,490	92,685	404,640	338,880	269,629	189,675	158,850	126,389
2021	47,941	38,981	29,855	143,983	117,071	89,665	418,859	340,571	260,844	196,340	159,642	122,271
2022	50,867	40,155	29,605	149,069	117,676	86,759	433,654	342,330	252,391	203,275	160,467	118,308
2023	53,315	40,862	29,000	154,371	118,313	83,968	449,081	344,183	244,270	210,506	161,336	114,502
2024	55,886	41,585	28,410	159,902	118,982	81,286	465,169	346,129	236,468	218,048	162,248	110,844
2025	58,586	42,323	27,834	165,665	119,680	78,706	481,936	348,161	228,964	225,907	163,200	107,327
2026	61,421	43,079	27,271	171,675	120,410	76,226	499,419	350,283	221,748	234,103	164,195	103,944
2027	65,135	44,354	27,029	177,944	121,171	73,840	517,654	352,497	214,808	242,650	165,233	100,691
2028	68,293	45,150	26,485	184,490	121,969	71,548	536,697	354,820	208,140	251,577	166,322	97,566
2029	71,609	45,963	25,955	191,311	122,795	69,340	556,540	357,222	201,716	260,878	167,448	94,554
2030	75,098	46,799	25,438	198,440	123,661	67,218	577,280	359,742	195,545	270,600	168,629	91,662
2031	77,912	47,138	24,665	205,876	124,558	65,175	598,911	362,351	189,600	280,740	169,852	88,875
2032	82,618	48,529	24,444	213,642	125,492	63,209	621,503	365,067	183,880	291,329	171,125	86,194
2033	86,670	49,427	23,965	221,750	126,461	61,316	645,091	367,886	178,373	302,386	172,447	83,612
2034	90,933	50,347	23,499	230,220	127,467	59,493	669,732	370,814	173,071	313,937	173,819	81,127
2035	95,417	51,291	23,044	239,071	128,512	57,739	695,479	373,854	167,967	326,006	175,244	78,735
2036	100,131	52,258	22,601	248,309	129,591	56,047	722,355	376,991	163,045	338,604	176,715	76,427
2037	106,157	53,789	22,393	257,962	130,707	54,416	750,436	380,240	158,302	351,767	178,237	74,204
2038	111,419	54,811	21,966	268,057	131,866	52,847	779,803	383,611	153,736	365,533	179,818	72,064
TOTAL 2014 Value		\$ 914,000	\$ 526,000		\$ 2,459,000	\$ 1,437,000		\$ 7,153,000	\$ 4,181,000		\$ 3,353,000	\$ 1,960,000

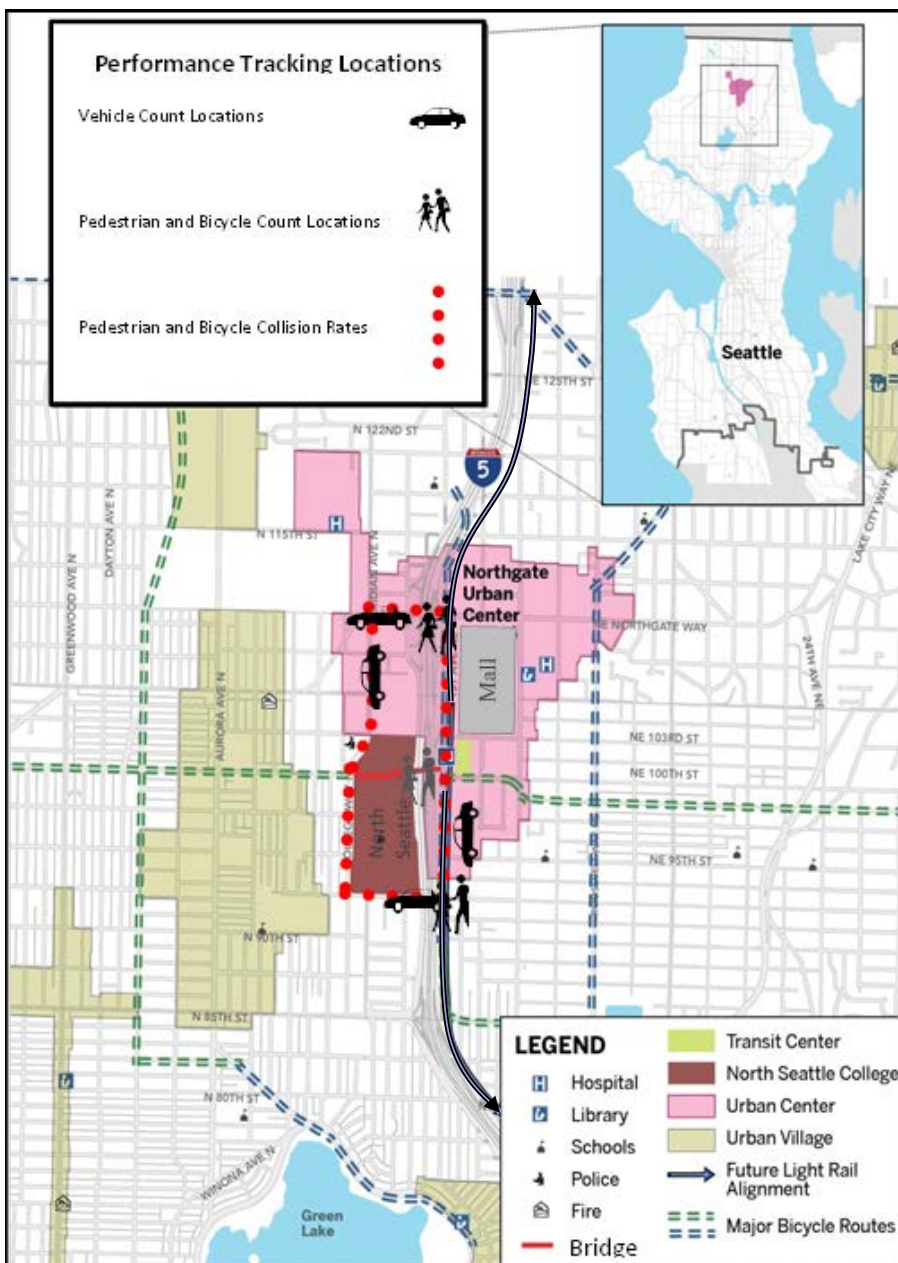
Appendix C

Project Performance Evaluation

SDOT will collect traffic data in advance of project to create a baseline, and on an annual basis following completion of the project to evaluate project performance. This will include vehicle and pedestrian and bicycle volumes, and pedestrian and bicycle collision rates in the vicinity of the project.

Pedestrian and bicycle counts will be collected quarterly at key locations: N 92nd St and east of Corliss Ave N, and on N Northgate Way at the underpass under I-5. Once the new pedestrian bridge is completed, a count will be added at that location as well. These counts will be collected and evaluated in accordance with the National Bicycle & Pedestrian Documentation Project (NBPDP) methodology. Vehicle counts also will be collected quarterly at key locations within the vicinity of the new structure.

Data from these counts will be analyzed at regular intervals and used to revise signal timing and traffic operations, to better assist pedestrian and bicyclist access to the bridge. Pedestrian and bicycle collision data will also be analyzed on an annual basis.



Under the Washington State Commute Trip Reduction (CTR) Act, King County surveys employee travel behavior, including mode choice, for larger employers. SDOT will monitor the mode shares for CTR-affected employees to gauge the overall success of the efforts to increase the share of trips made by bicycling and walking.



The Honorable Anthony R. Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Ave. SE
Washington, DC 20590

Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER application

Dear Secretary Foxx:

The Cascade Bicycle Club strongly supports the application of the City of Seattle for funding through the U.S. Department of Transportation TIGER grant program for the remaining funds needed to construct bicycle and pedestrian projects in the Northgate Urban Center area. The Northgate Urban Center includes two key transit hubs, the current bus transit center for King County Metro and the future light rail station for Sound Transit.

Founded in 1970, Cascade Bicycle Club (Cascade) is the largest regional bicycle advocacy organization with nearly 16,000 members. Cascade supports the regional expansion of Sound Transit's link light rail system and improving pedestrian and bicycle access to the light rail stations.

In 2012, more than 500 Cascade members and hundreds of neighborhood residents urged Sound Transit to shift station-access investments from building a parking garage toward investing in bicycle and pedestrian infrastructure at the future Northgate Light Rail Station.

For Cascade and the neighbors, the most important project among the planned bicycle and pedestrian investments was the construction of the Northgate Bicycle/Pedestrian Bridge across Interstate 5, creating a connection from the North Seattle Community College and the UW Medicine Center directly into the mezzanine of the future Link light rail station. Without that connection, both the community college (with its 14,000 students) and the medicine center would be beyond a reasonable walking distance of 20 minutes.

As a result of the community's advocacy to get a greater investment in bicycle and pedestrian access to the station, Sound Transit and the City of Seattle agreed to each invest \$5 million in the bicycle/pedestrian bridge – and an additional \$5 million each for other pedestrian and bicycle improvements in the Northgate Urban Center. The TIGER VI grant would fill the remaining construction costs, as well as other needed pedestrian and infrastructure outlined in the Northgate Coordinated Transportation Investment Plan, Seattle Bicycle Master Plan, and the Northgate Urban Design Plan. These projects are all well within the Federal Transit Administration's three-mile and half-mile rules for investments in bicycle and pedestrian infrastructure as part of a transit project.

A bridge across I-5 is the single most important non-motorized connectivity infrastructure investment for the Northgate Urban Center. The bridge would provide critical access to transit — whether it's today's Metro Transit Center or the future Link light rail station — for thousands of students, workers, and residents who are currently cut-off by the I-5 freeway, which prevents transit from being within a reasonable walking distance.

Creating A Better Community Through Bicycling

A station-access study by Sound Transit shows the bridge is one of the most effective infrastructure investments for increasing ridership on its future light rail line. Once the light rail and the bridge are built, college students will be able to easily travel between different college campuses in the region, including North Seattle Community College, the University of Washington, Seattle Central Community College, Seattle University, and Highline Community College.

For bicyclists, the bridge will provide a key east-west connection. Seattle's topography limits the number of east-west routes across the city that can be relatively flat for bicyclists, and the I-5 freeway further limits those options. The city's Bicycle Master Plan calls for building the Northgate Bicycle/Pedestrian Bridge as it is one of the few opportunities to create an east-west connection. Other city and neighborhood plans call for the building the bridge as a way to re-integrate the neighborhood bisected by I-5.

The Northgate Urban Center is dominated by a suburban shopping mall and car-traffic. Through the City of Seattle's land use planning and the region's increased investment in transit, bicycle, and pedestrian infrastructure, Northgate will soon be transformed into a truly urban hub that's a great place to live, work, and play.

The City of Seattle has presented a strong case-for statement for securing the remaining needed funds to build the pedestrian and bicycle infrastructure, especially the bicycle/pedestrian bridge across I-5. This is why neighbors, businesses, and advocacy organizations like Cascade all support this grant application. On behalf of our nearly 16,000 members, we urge you to approve the City of Seattle's TIGER VI grant application.

If you have any questions about Cascade's support for this project, feel free to contact me at 206-856-4788 or brock.howell@cascadebicycleclub.org.

Sincerely,

Brock Howell
Policy & Government Affairs
Cascade Bicycle Club

CC:

Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray, Seattle

Congress of the United States
House of Representatives
Washington, DC 20515

April 23, 2014

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Foxx:

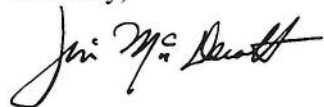
I write to express my strong support for the City of Seattle's application for TIGER funding from the U.S. Department of Transportation to fund construction of the Northgate Link Light Rail Station Non-Motorized Access Project. This project includes a bicycle and pedestrian bridge crossing Interstate 5 (I-5) and other safety improvements at the Northgate Transit Center and Sound Transit's Link Light Rail Northgate Extension project.

Bisecting the neighborhood, I-5 currently hinders growth and development around Seattle's Northgate Urban Center, a designated regional growth center. As I-5 runs north and south through the neighborhood, it inhibits access between the amenities and services on the west and east side of the Interstate. North Seattle College and Northwest Hospital are located on the west side of the freeway, while the east side boasts a new community center and library, a regional shopping center, other medical facilities, and the future home of the Northgate Link Light Rail Station – not to mention residential areas and parks on both sides. The lack of any reasonable bicycle and pedestrian connection across I-5 limits the potential of both areas and limits access to the transit-oriented development that is anticipated to follow the opening of the Link Rail segment.

Northgate is one of Seattle's more affordable neighborhoods and includes a higher proportion of economically disadvantaged populations than the city as a whole. By improving access throughout the neighborhood we will help ensure that this population can have better access to job centers throughout the region.

I urge you to strongly consider the City of Seattle's application for TIGER funding. With proper support, we have an opportunity to transform an auto-oriented neighborhood into a significant mixed use area that will provide great social and environmental benefits for the community.

Sincerely,



Jim McDermott
Member of Congress



feet first

promoting walkable communities

314 First Avenue S
Seattle WA 98104

p 206.652.2310
f 206.381.1631

feetfirst.org

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@FeetFirstWalks

April 14, 2014

The Honorable Anthony Fox
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Mr. Fox:

Since 2001, Feet First has been working to ensure that all communities in Washington are walkable. We are particularly interested in promoting the development of walkable transit-oriented communities. Therefore, we strongly support the **City of Seattle's 2014 TIGER grant application for the Northgate Bicycle/Pedestrian Bridge**.

The Northgate Bicycle/Pedestrian Bridge will provide a direct pedestrian connection between Sound Transit's future Northgate Link Light Rail station and North Seattle College (NSC), home to 9,000 students, faculty, and staff. The station site and the college are currently divided by the I-5 freeway, creating a barrier to walking between these two important destinations. The nearest pedestrian crossings of the freeway, Northgate Way to the north and NE 92nd Street to the south, are not safe, easy, or inviting; they do not provide reasonable walking connections.

The proposed Northgate Bicycle/Pedestrian Bridge will greatly increase the number of people walking in the Northgate area. People living and working west of the freeway are currently separated from the Northgate urban center. The bridge will integrate these people into the community, dramatically expanding the fifteen-minute walkshed around Northgate to include NSC, several office buildings along Meridian Avenue North, and a sizable part of the Licton Springs residential neighborhood. Sound Transit's recently-completed pedestrian access study forecasts that over 1,300 people will use the bridge to walk and bike to and from the station every day, significantly boosting transit ridership. Many more people beyond this figure will use the bridge to walk to other Northgate destinations, for example NSC students who want to grab lunch or shop between classes.

The Northgate Bicycle/Pedestrian Bridge will be a win for all concerned: Sound Transit, local businesses, bicyclists, the Licton Springs community, and NSC students, staff, and faculty. Should you have any questions about our support for this project, feel free to contact me directly by calling 206.652.2310 ext. 6 or emailing lisa@feetfirst.org.

Sincerely yours,

Lisa Quinn
Executive Director

cc: Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray

Received by email

April 24, 2014

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER application

Dear Secretary Foxx:

I am writing in strong support of the application for TIGER grant funding for the Northgate pedestrian and bicycle bridge. I write from the perspective of having a visual impairment and using a cane as a walking aid. I walk or use transit to get where I need or want to go. As Vice-chair of the Seattle Pedestrian Advisory Board and active member of advocacy groups such as Transportation Choices Coalition and the Transit Riders Union I have been involved in many of the discussions and planning around this project to date.

The existing I-5 crossings in this area have many issues. They are unsafe, have hills, broken sidewalks, no sidewalks, highway on and off ramps that are difficult to cross. Having this bridge will be the best, safest, easiest – the only good way for crossing I-5. Northgate is an area of big blocks that has been designed around car usage for a long time. There have been some changes at Northgate for people but more work is needed on sidewalks and pedestrian features.

This bridge is a very important one-time lifetime project. It is like the 50's when Northgate was farm land country. Then I-5 was built and the mall and then things changed to be built around the car. Now it is 2014 and we are building a light rail train system and station that is supposed to be for people, not parking garages and cars. I have a saying "It is Sound Transit not Sound Parking". We need to get Northgate designed for the 21st century which is for people, sidewalks and transit, not cars. This bridge will be a very big element for change of the Northgate area and for any one that walks, bikes or takes transit.

I urge your consideration and approval of this application.

Sincerely,

Jacob Struiksma

cc: Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle



King County

Metropolitan King County Council

King County Courthouse
516 Third Avenue, Room 1200
Seattle, WA 98104-3272

206-296-1000 TTY 206-296-1024
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April 25, 2014

The Honorable Anthony Fox
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Foxx:

We support the City of Seattle's application for a United States Department of Transportation TIGER grant. This grant would help fund the Northgate Link Light Rail Station Non-motorized Access Project, including the Northgate Pedestrian and Bicycle Bridge, a vital connectivity project that will connect the two Districts we represent on the King County Council across a 2,000 foot span over Interstate 5.

Northwest companies like Amazon, Microsoft, and Boeing are thriving and expanding, bringing new faces to our region each day. In March, the United States Census Bureau announced that King County was the fourth fastest growing large county in the country over the past three years, having added 37,000 new residents or a 1.8% population increase in 2013 alone. This population growth has exacerbated our region's transportation challenges. Today, our transit agencies are seeing near record levels of ridership, our roadways are congested, and our economy is being impacted from the delay in moving people and goods.

That is why the expansion of light rail north along Interstate 5 is such a pivotal project for our region. Our ongoing investments in transportation infrastructure help our region harness the potential that comes with the influx of new residents. But as our population continues to grow, providing access to transportation infrastructure that is quick, reliable, and attractive is vital. Without it, we risk isolating thousands of potential transit users and large swaths of our community.

The proposed Northgate Pedestrian and Bicycle Bridge is a case in point. Residents on the east side of I-5 and those on the west will be able to safely access key community assets on each side of the interstate. These assets include a college, community center, library, NW Hospital and medical facilities, and the Northgate Mall. Without this vital bridge over I-5, most of these facilities will not be able to safely access the light rail station. The bridge, with its direct connection to the Northgate Link light rail station, will also provide access to regional rail service for a much greater proportion of North Seattle. Non-motorized access to Northgate's

April 25, 2014

Page 2

many bus routes will be a more attractive option for the economically disadvantaged neighborhoods of Licton Springs, Bitter Lake and North Park.

The improvements would also greatly expand access to North Seattle College, with its two-year and four-year degree programs, over 50 certificate programs and over 14,000 students. The college, home to the Opportunity Center for Employment and Education, a one-stop shop for social, educational and employment services, could be reached in a reasonable time from much further away than at present, benefitting students, Center patrons and the region. Non-motorized access is an important rung on the ladder of opportunity, presenting a low cost, healthy means of transport with beneficial environmental effects.

For these and many other reasons, we urge you and the Department of Transportation to support the City of Seattle's application for TIGER funds for the Northgate Pedestrian and Bicycle Bridge.

Sincerely,

A handwritten signature in blue ink, appearing to read "Larry Phillips", with a long horizontal flourish extending to the right.

Larry Phillips, Chair
King County Council

A handwritten signature in blue ink, appearing to read "Rod Dembowski", with a long horizontal flourish extending to the right.

Rod Dembowski, Councilmember
King County Council



King County

Department of Transportation

Harold S. Taniguchi, *Director*

KSC-TR-0815

201 South Jackson Street

Seattle, WA 98104-3856

206.477.3800 TTY Relay: 711

www.kingcounty.gov/kcdot

April 21, 2014

Secretary Anthony Foxx
U.S. Department of Transportation
1200 New Jersey Avenue S.E.
Washington, DC 20590

RE: City of Seattle Northgate Pedestrian and Bicycle Bridge TIGER Discretionary Grant Application

Dear Secretary Foxx:

The King County Department of Transportation is pleased to provide this letter of support for the City of Seattle's application for the U.S. Department of Transportation 2014 TIGER Discretionary Grants program. Funding from this grant will help to build the Northgate Pedestrian and Bicycle Bridge, a component of the Northgate Link Light Rail Station Non-motorized Access Project.

King County supports the proposed pedestrian bridge that will provide a safer and direct connection across Interstate 5 (I-5) to King County Metro's Northgate Transit Center and the future Sound Transit Link Light Rail Station. This bridge will connect the community west of I-5, including the North Seattle Community College, with the amenities and services of the Northgate Urban Center, on the east side of I-5.

A new pedestrian bridge will provide a safe and convenient connection over I-5 that will reduce non-motorized interaction with the high levels of vehicle traffic and congestion that exists in the Northgate area, and will reduce the walking distance from King County Metro's Northgate Transit Center and Sound Transits Light Rail Station to the community college from 1.2 miles to approximately 0.25 miles.

The improved non-motorized access to the transit center and future light rail station will encourage increased transit ridership and reduce single occupancy vehicle congestion on arterial streets surrounding the Northgate Urban Center and on I-5.

Additionally, the pedestrian bridge will result in lower emissions of greenhouse gases, fossil fuel consumption, and help to reduce the demand for parking near the transit center and light rail station, further reducing the costs required for construction of parking facilities.

Secretary Anthony Foxx

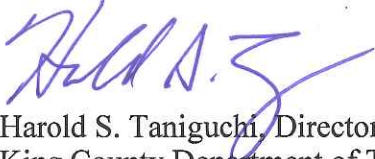
April 21, 2014

Page 2

The proposed pedestrian and bicycle bridge will make it safer and easier to travel between the community assets of the Northgate Urban Center on the east side of I-5 that includes a community center, library, bus and light rail transit facilities, and the large retail center with those on the west side of I-5 that includes North Seattle College, NW Hospital and medical facilities, parks, and neighborhood commercial areas. The pedestrian bridge, with its direct connection to the Northgate Light Rail station, will create walkable access to the regional rail service. It will also make non-motorized access to Northgate's many bus routes more attractive for those in Seattle's Licton Springs, Bitter Lake and North Park neighborhoods, which have an above average number of residents from economically disadvantaged populations.

I am pleased to support the City of Seattle's Northgate Pedestrian and Bicycle Bridge TIGER proposal, and would strongly urge the U.S. Department of Transportation's consideration of their application.

Sincerely,



Harold S. Taniguchi, Director
King County Department of Transportation

cc: The Honorable Patty Murray, United States Senate
The Honorable Maria Cantwell, United States Senate
The Honorable Jim McDermott, United States House of Representatives
The Honorable Edward Murray, City of Seattle



King County

Dow Constantine

King County Executive

401 Fifth Avenue, Suite 800

Seattle, WA 98104

206-296-9600 Fax 206-296-0194

TTY Relay: 711

www.kingcounty.gov

April 22, 2014

The Honorable Anthony Foxx
Secretary, U.S. Department of Transportation
1200 New Jersey Ave. SE
Washington, DC 20590

Dear Secretary Foxx:

I am writing today in support of the City of Seattle's application to the U.S. Department of Transportation's 2014 TIGER Discretionary Grants Program for funding for the Northgate Link Light Rail Station Non-motorized Access Project, which includes a bicycle and pedestrian bridge crossing Interstate 5 (I-5) and other safety improvements near the Northgate Transit Center and Sound Transit's Link Light Rail Northgate Extension project..

King County supports funding for this proposed bridge, which is a component of the Northgate Link Light Rail Station Non-motorized Access Project. The project will provide a safer and more direct connection across Interstate 5 between the community west of the freeway and King County Metro's Northgate Transit Center, and the future Sound Transit Link Light Rail Station. It would also improve pedestrian and bicycle access between the North Seattle Community College campus and the Northgate Urban Center, located on opposite sides of I-5.

Using current bridges or underpasses, the walking distance between the community college and the transit center is 1.2 miles. The construction of this bridge would cut that distance to approximately .25 miles. This project would reduce interaction between bikers/walkers and the heavy vehicle traffic in the Northgate neighborhood and would encourage transit ridership in the neighborhood east of Interstate 5.

By making non-motorized transportation quicker, easier, and safer, this bridge will result in lower greenhouse gas emission and fossil fuel consumption and reduce parking demand, allowing for the construction of smaller and less expensive parking facilities. It will also improve non-motorized access to the transit center for residents of Seattle's Bitter Lake, Licton Springs, and North Park, which are home to an above-average number of economically disadvantaged residents.

The Honorable Anthony Foxx

April 22, 2014

Page 2

I strongly urge the U.S. Department of Transportation's consideration of this grant proposal.

Sincerely,

A handwritten signature in black ink that reads "Dow Constantine". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

Dow Constantine

King County Executive



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Council

April 22, 2014

The Honorable Anthony Fox
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER application

Dear Secretary Foxx:

The City of Seattle is applying for a US Department of Transportation TIGER grant for the Northgate Link Light Rail Station Non-motorized Access Project, including the Northgate Pedestrian and Bicycle Bridge. The Lake City Neighborhood Alliance, representing 21 Lake City community organizations, strongly endorses this proposal.

Lake City consists of five Seattle neighborhoods (Cedar Park, Matthews Beach, Meadowbrook, Victory Heights, Olympic Hills) and several micro-communities (Douglas Park and Little Brook), all surrounding the Lake City Hub Urban Village (HUV). Many of our residents commute via bicycle or bus. The Northgate Pedestrian and Bicycle Bridge will be a tremendous asset to Lake City residents and businesses. The Northgate community is immediately west of our Lake City community. The Sound Transit Northgate Link Light Rail Station will be our closest Light Rail Station and the Northgate Transit Oriented Development site will be our closest transit site.

This TIGER FY 2014 grant would provide the remaining funds needed to construct these improvements which have been acknowledged in a number of plans including:

- The Northgate Coordinated Transportation Investment Plan (2007)
- Seattle's Bicycle Master Plan (2013)
- Puget Sound Regional Council's Growing Transit Communities effort
- PSRC's Regional Bike Network
- Northgate Urban Design Plan

The centerpiece of this Project—the proposed pedestrian and bicycle bridge—will make it safer and easier to get between the community assets on the east side of I-5 (community center, library, rapid transit facilities, the shopping center) and those on the west (the North Seattle College, NW Hospital and medical facilities, parks and neighborhood commercial areas). The bridge, with its direct connection to the Northgate Link station, will provide access to the regional rail service for a much greater proportion of North Seattle. It will also make non-motorized access to Northgate's many bus routes much more attractive for those in Seattle's Lake City, Licton Springs, Bitter Lake, and North Park neighborhoods, which have an above average number of residents from economically disadvantaged populations.

Per the 2010 publically available census data, the Lake City HUV has an ever-increasing population density with a very large percentage (78%) of rental units. Many of these residents do not have cars. The under-served families, youth, and

seniors who live in the Lake City HUV and the residents living in the Lake City neighborhoods would benefit from this Non-Motorized Access Project.

The improvements would also greatly expand access to the North Seattle College, with its two-year and four-year degree programs, over 50 certificate programs and over 14,000 students. The college, home to the Opportunity Center for Employment and Education, a one-stop shop for social, educational and employment services could be reached in a reasonable time from much further away than at present, benefitting Center patrons and the region. Non-motorized access is an important rung on the ladder of opportunity, presenting a low cost, healthy means of transport (with beneficial environmental effects).

In summary, LCNA strongly endorses this proposal. If you have any questions, please do not hesitate to contact me.

Very sincerely,

A handwritten signature in blue ink that reads "Sandra Adams Motzer". The signature is fluid and cursive, with the first name "Sandra" being the most prominent.

Sandra Adams Motzer

Chair

sandymotzer@aol.com

206.819.8056

cc: Senator Patty Murray, Senator Maria Cantwell, Governor Jay Inslee, Congressman Jim McDermott, Mayor Edward B. Murray Seattle

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590



Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER application

Dear Secretary Foxx:

The Licton Springs Community Council wishes to express its strong support for the TIGER grant funding of the subject pedestrian and Bicycle Bridge. The proposed bridge would provide essential passage over an interstate that separates our community from a neighborhood shopping complex and regional transit hub.

Our community is located across an interstate (I-5) from the Northgate Link Regional Transit Station, which currently serves as a regional park-and-ride hub for buses, and will include a rapid transit station that is currently under construction. The two roadway crossings that otherwise provide the only crossing of the highway and access to the rapid transit center and the associated development are located $\frac{1}{2}$ mile north, and $\frac{1}{2}$ mile south of the transit center, resulting in a minimum travel distance of approximately $\frac{3}{4}$ mile just to cross I-5 and reach the edge of our community.

The proposed bridge is roughly central between these crossings and will provide a sensible remedy, making it far easier and safer for our citizens to travel to existing and proposed community assets on the east side of I-5, which include the transit center, a community center, library, restaurants, drug store, groceries, shopping centers, etc. Likewise, it will provide commuters and students safer passage into our community and access to the North Seattle College, NW Hospital and medical facilities, parks and neighborhood commercial areas, and two new schools (elementary and middle) that will be constructed by 2017.

The new Northgate Link Station across the interstate from our community is being developed with significantly less parking than current park-and-ride stations due to the projected decrease in car trips. This means pedestrian and bicycle travel to the station will be even higher than current rates. However, the current distance of travel required of pedestrians to reach the east side of the interstate is prohibitive.

Some of the communities benefitting from the proposed bridge have an above average number of residents from economically disadvantaged populations. The proposed pedestrian bridge is centrally located, and will provide much safer and more direct connection between our community and the Northgate Link station and surrounding amenities.

We urge you to consider this project for funding.

Sincerely,

 for:
Licton Springs Community Council

cc:

Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray, Seattle



Meadowbrook Community Council

11010 28th Ave, NE
Seattle, WA 98125

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D.Keefe/M. Reinhardt (Alt.)

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www.meadowbrookcouncil.org

April 23, 2014

The Honorable Anthony Foxx
Secretary

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: NORTHGATE LINK LIGHT RAIL STATION NON-MOTORIZED ACCESS PROJECT -TIGER application City of Seattle

Dear Secretary Foxx:

The Meadowbrook Community Council represents the residents and businesses in NE Seattle from Lake Washington to Lake City Way NE. Our community has long requested more sidewalks and pedestrian amenities. The public meetings about proposed sidewalk projects are historically among the best attended meetings of the Meadowbrook Community Council.

Our Council has previously strongly supported the designation by the City of Seattle of NE 105th Street as an east/west pedestrian corridor. In addition, we have requested and obtained the installation of many new sidewalk sections along NE 105th Street where none has existed before. The goal is to allow east – west pedestrian travel in North Seattle where none has previously existed. Unfortunately, while the City of Seattle has paved sidewalks in the central part of the City, there are few paved sidewalks in North Seattle because when the City annexed the area north of 85th Street, there were few sidewalks. Since annexation, the City has had only limited funding to install isolated sidewalk sections in north Seattle.

The City of Seattle's North District Neighborhoods' Plan, which involved input from over 10,000 residents in NE Seattle and was adopted in 1999, had as one of its goals, creating a pedestrian corridor

along NE 105th. The Plan stated: “Strategy3: Enhance pedestrian-related amenities to encourage both “walk-to-shop” and recreational walking. Our priorities, in order, for sidewalks are: 1) sidewalks installed on streets adjacent to schools and on identified safe routes to schools, 2) sidewalks installed within the core business area, 3) sidewalks in multifamily neighborhoods, and 4) east/west pedestrian corridors at NE 105th Street. The corridor was requested by the residents of north Seattle, because there were NO continuously paved east-west pedestrian routes in NE Seattle in the 40 block area north or south of 105th Street! Since the adoption of the Plan by the City of Seattle, the City has installed sidewalks in a number of sections along the 105th corridor where there had been no sidewalks.

The proposed creation of a new pedestrian bridge across Interstate 5 between 100th and 103rd would be a huge benefit to opening up east-west pedestrian travel in north Seattle. Interstate 5 (I-5) runs north/south through Seattle and is a significant barrier to east-west pedestrian and bicycle circulation.

The bridge’s proposed location next to North Seattle Community College (located on the west side of I-5) should encourage college students, who are of an age where their low income and fitness makes them ideal candidates - to walk or bicycle to class from the residential areas east of the campus. There are no dorms for the students, so all 14,000 students must commute to class and this will be a big inducement for them to commute by foot or bicycle instead of using their car.

On the east side of I-5 and the proposed bridge, is Northgate Shopping Center, the largest enclosed shopping center in the northern half of the City. Creating this attractive pedestrian bridge across I-5 will encourage residents on the western side of I-5 to walk/bicycle to the shopping center, instead of using their cars.

105th Street has a number of public parks, public lands, public schools, and City Community Centers which border it on the north or south side of the street, making it a major draw for pedestrians and bicyclists.

When the federal government created Interstate 5, it was a great benefit to north-south vehicular traffic, to the great detriment of east-west pedestrian/bicycle circulation. Little was done to ameliorate the harm to pedestrian and bicycle circulation in north Seattle. Now the federal government has a chance to help mitigate the damage done to pedestrians and bicyclists from the construction of this north-south freeway, which cut our City in half.

We hope you will recognize the need and fund this much needed improvement to the pedestrian/bicycle environment in Seattle. The City

has installed a number of sidewalks along 105th street since the adoption of the Plan in 1999, but without this funding Interstate 5 will remain a major barrier to achieving the goal of an attractive east/west corridor for pedestrians and bicyclists. Based on feedback we have received over the years from our constituents, we believe this project has broad public backing and we strongly support it!

Sincerely,
Meadowbrook Community Council

Signed

Daniel Keefe, President

cc:
Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee

04/24/2014

To: Krista Bunch
Email: krista.bunch@seattle.gov
Fm: Colleen Mills, Mullally Development Company
Email: cmills@m-d-c.com
Re: Letter to the Honorable Anthony Fox

Attached is the letter to The Honorable Anthony Fox. We strongly support the pedestrian bridge at Northgate and if we can be of further assistance feel free to contact me.

MULLALLY DEVELOPMENT COMPANY

REAL ESTATE DEVELOPMENT & MANAGEMENT

2825 EASTLAKE AVENUE E., SUITE 250
SEATTLE, WASHINGTON 98102
OFFICE (206) 362-1600
FAX (206) 362-4052

April 24, 2014

The Honorable Anthony Fox
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

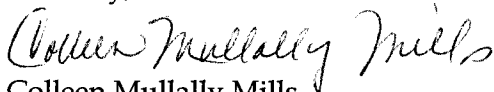
Dear Secretary Fox:

Mullally Development Company supports the City of Seattle's application for a U S Department of Transportation TIGER grant for the Northgate Link Light Rails Station Non-motorized Access Project, including the Northgate Pedestrian and Bicycle Bridge.

John Mullally and I participated in the Northgate Stakeholders for over ten years. During this time the Northgate Coordinated Transportation Investment Plan (CTIP) was written to include the pedestrian bridge, although no funding was available. Expanding access would help with the CTIP goals of Safety, Neighborhood livability, Pedestrian mobility, Bicycling mobility, Transit rider mobility, Housing and economic development, Infrastructure preservation/maintenance, and Environmental sustainability.

Mullally Development Company owns/manages Meridian Place Apartments located on the west side of I-5 and Northgate Apartments directly north of the Northgate Mall. Since Meridian Place Apartments was completed in the late 1980's management has seen the use of the bicycle increase dramatically. Many of the residents attend North Seattle College, and biking is cheaper and better for the environment than the automobile. A pedestrian/bicycle bridge encourages people to get out of their cars and walk or bicycle to their destination. With more density coming and Northgate designated as a Urban Center it is important to have infrastructure in place to accommodate modes of transportation outside the use of the automobile.

Sincerely,


Colleen Mullally Mills

Cc:

Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle



North Seattle College
Office of the President
9600 College Way North
Seattle, WA 98103-3599
(206) 934-3601 • Fax: (206) 934-3606

April 23, 2014

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER application

Dear Secretary Foxx:

North Seattle College (NSC), strongly voices its support for the \$15,000,000 application by the City of Seattle for the **Northgate Pedestrian and Bicycle Bridge** project from the *Transportation Investment Generating Economic Recovery, TIGER, Discretionary Grant Program*.

The pedestrian bicycle bridge will connect two portions of a regional growth center whose neighborhoods have been bisected by Interstate 5. Neighborhoods have been isolated and residents inhibited from safe access across I-5 for pedestrians and bicycles to commercial, business, medical, employment and higher educational services.

This project would provide North Seattle College and surrounding neighborhoods with a vital link to the Northgate Link Light Rail and Transit Center Station area. The bridge would dramatically improve east-west accessibility and provide a direct safe access to the station area. The connection to the light rail station will enhance student access to the NSC campus and expand resident and employee travel options.

The transportation plan is well grounded in connecting essential transportation corridors to: a regional commercial shopping center; mixed use residential neighborhoods; pedestrian and recreational access; NW Hospital and other medical facilities; a local library and North Seattle College. The NSC campus is a regional higher education center which also houses the Opportunity Center for Employment and Education (OCE&E), a national model for employment and support services.

The innovative planning partnership between the City of Seattle, King County and Sound Transit is meritorious and exemplary of thoughtful collaborative investment and commitment to good transportation and land use planning.

North Seattle College is proud to support this effort and be a partner in helping to achieve this vital transportation project.

Respectfully,

Mary Ellen O'Keeffe, Ed.D.
Interim President

cc: Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle

Phillip Duggan
Pinehurst Community Council
1430 NE 120th St
Seattle, WA 98125

April 23, 2014

Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER application

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Foxx:

The City of Seattle is applying for a U.S. Department of Transportation TIGER grant for the Northgate Link Light Rail Station Non-motorized Access Project, specifically the Northgate Pedestrian and Bicycle Bridge.

Pedestrian infrastructure is on everybody's mind in our community as we lost a 17-year-old in a tragic pedestrian accident last week. She was a student of North Seattle College and was walking to a bus heading to the Northgate Transit station. Our neighborhood lacks in basic infrastructure like sidewalks so we need to do everything we can to make our area safer for pedestrians.

The Pinehurst Community Council has been working for years to move this project forward. We worked to secure funding from both the city of Seattle and Sound Transit for the proposed Northgate Pedestrian and Bicycle Bridge. We need this grant to secure the rest and make sure the project can be finished.

This project has been in all the community planning that has been done over the years. Interstate-5 cuts our region in half in this area and there are few convenient ways around, especially for pedestrians and bikes. The bridge will connect the large college in the area with the regional mall and transit center as well as the future light rail station. The bridge would also expand access to regional medical facilities as well as parks. All the studies support that it is one of the best investments we can do in the area, in terms of bringing more riders to the station.

This TIGER FY 2014 grant would provide the remaining funds needed to construct these improvements, which have been acknowledged in a number of plans including:

- The Northgate Coordinated Transportation Investment Plan (2007)

- Seattle's Bicycle Master Plan (2013)
- Puget Sound Regional Council's Growing Transit Communities effort
- PSRC's Regional Bike Network
- Northgate Urban Design Plan

Thanks,

Phillip Duggan

Pinehurst Community Council

cc:

Senator Patty Murray

Senator Maria Cantwell

Governor Jay Inslee

Congressman Jim McDermott

Mayor Edward B. Murray Seattle



April 11, 2014

The Honorable Anthony Foxx
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave. SE
Washington, DC 20590

RE: Northgate Link Light Rail Station Non-motorized Access Project TIGER VI Application

Dear Secretary Foxx:

On behalf of the Puget Sound Regional Council, I am pleased to write in support of the City of Seattle's application for the U.S. Department of Transportation TIGER VI grant program. Funding from this grant will be dedicated to the Northgate Link Light Rail Station Non-motorized Access Project.

The Northgate Link Light Rail Station Non-motorized Access Project includes a pedestrian and bicycle bridge that will make it safer and easier to get between the community assets on the east side of I-5 (community center, library, rapid transit facilities, the shopping center) and those on the west (the North Seattle College, NW Hospital and medical facilities, parks and neighborhood commercial areas). The bridge, with its direct connection to the Northgate Link station, will provide access to the regional rail service for a much greater proportion of North Seattle. It will also make non-motorized access to Northgate's many bus routes much more attractive for those in Seattle's Lichten Springs, Bitter Lake and North Park neighborhoods, which have an above average number of residents from economically disadvantaged populations.

The improvements would also greatly expand access to the North Seattle College, with its two-year and four-year degree programs, over 50 certificate programs and over 14,000 students. The college, home to the Opportunity Center for Employment and Education, a one-stop shop for social, educational and employment services could be reached in a reasonable time from much further away than at present, benefitting Center patrons and the region. Non-motorized access is an important rung on the ladder of opportunity, presenting a low cost, healthy means of transport (with beneficial environmental effects).

This project supports the implementation of PSRC's U.S. Partnership for Sustainable Communities-funded Growing Transit Communities Program by addressing specific mobility needs in several of the station areas identified in that effort. In addition, the project is consistent with the region's long-range metropolitan transportation plan, Transportation 2040, and with the regional investment strategies and policies in VISION 2040. If funding is awarded, PSRC will expedite processing of the funds into the State Transportation Improvement Program.

I am pleased to support the Northgate Link Light Rail Station Non-motorized Access Project, and would strongly urge the U.S. Department of Transportation's consideration of their application.

Sincerely,

A handwritten signature in blue ink, reading "J. W. Brown". The signature is fluid and cursive, with the first name "J." and last name "Brown" clearly legible.

Josh Brown, Executive Director
Puget Sound Regional Council



Edward B. Murray
Mayor

Tim Burgess
President, Seattle City Council

April 21, 2014

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

RE: City of Seattle Northgate Link Light Rail Station Non-motorized Access Improvements TIGER application

Dear Secretary Foxx:

The City of Seattle, along with its partners at King County Metro and Sound Transit hereby submit the accompanying request for 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 bicycle and pedestrian bridge crossing Interstate 5 (I-5) and other safety improvements at the Northgate Transit Center and Sound Transit's Link Light Rail Northgate Extension project.

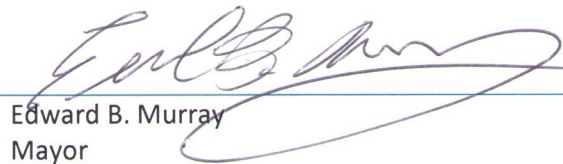
This project is a direct result of our region's participation in the joint DOT/ HUD/EPA Sustainable Communities program. Under that program, the Puget Sound region received a HUD Regional Planning Grant for its Growing Transit Communities planning effort which, in part, funded a broad community engagement identifying several priorities for transforming this regional employment and residential growth center into 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. TIGER funding would extend the reach of the light rail station for pedestrians and bicycles, giving more people access to the Sound Transit system and regional bus connections. Sound Transit's non-motorized access study shows that over 3,000 people per day would use this package of improvements to access the station.

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. Ten lanes of I-5 bisect the neighborhood 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 light rail station area walkshed/bikeshed to reach 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 bisected by freeway entrances. While slated for significant growth as part of both Seattle's Comprehensive Plan and the Puget Sound Regional Council's Vision 2040 plan, growth in Northgate has lagged behind most other designated growth centers due to this auto-oriented built environment.

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 - greatly expands access to the North Seattle College, which is home to Washington State’s Opportunity Center for Employment and Education, an innovative pilot, combining various state human services, including employment and social services as well as educational services at one location. The bridge is an essential link for people accessing these services using the existing King County Northgate Transit Center, in addition to the 14,000 students and over 400 staff at North Seattle College.

Seattle, Sound Transit and the community are committed to completing this package of improvements. This TIGER FY 2014 grant would provide the remaining funds needed, leveraging significant amounts of public and private investment in the regional transit system, workforce development and sustainable infrastructure. It will make it safer and easier for residents, employees and students to get between community assets on both sides of I-5, including the college, medical facilities, a community center, library, shopping, parks and open space. We hope the US Department of Transportation will consider this request in light of the opportunities these improvements would provide in allowing the community and the region to meet its vision for a transit-oriented sustainable community.

Sincerely,



Edward B. Murray
Mayor



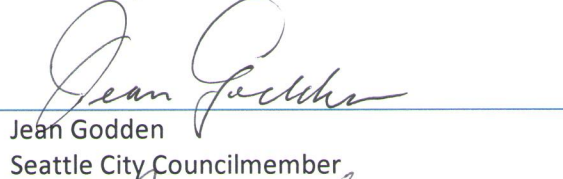
Tim Burgess
President, Seattle City Council



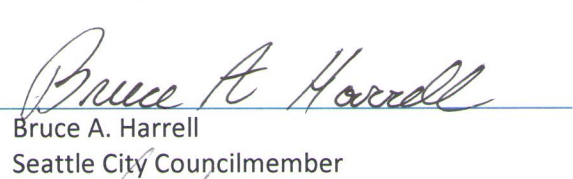
Sally Bagshaw
Seattle City Councilmember



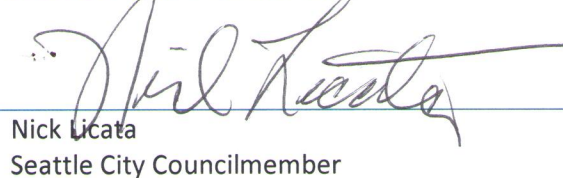
Sally J. Clark
Seattle City Councilmember



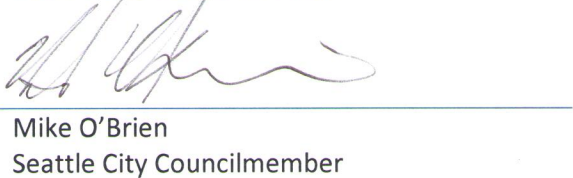
Jean Godden
Seattle City Councilmember



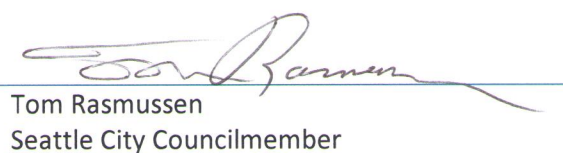
Bruce A. Harrell
Seattle City Councilmember



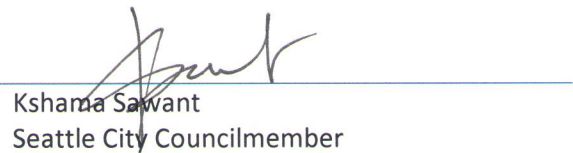
Nick Licata
Seattle City Councilmember



Mike O'Brien
Seattle City Councilmember



Tom Rasmussen
Seattle City Councilmember



Kshama Sawant
Seattle City Councilmember

CC: Senator Patty Murray
Senator Maria Cantwell
Congressman Jim McDermott
Governor Jay Inslee



*Stewards of the
Pedestrian Master Plan*

Lydia Heard, Chair
Jacob Struiksma, Vice Chair
Lily Berticevich, Secretary
Devor Barton
Joanne Donohue
Dottie Faris
David Goldberg
Lorena Kaplan
Mark Landreneau
Jeffrey Linn
Jennifer Olegario
Anna Spooner

April 24, 2014

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER application

Dear Secretary Foxx:

On behalf of the Seattle Pedestrian Advisory Board, I am writing in strong support of the application for TIGER grant funding for the Northgate pedestrian and bicycle bridge. The need for this project was identified in the Pedestrian Master Plan adopted by the City in 2009, as well as in many other plans. This Board has, along with and at the request of other stakeholders, observed and provided input for the planning process to date. We were pleased to see the proposal for a bridge remain in the individual plans of the various agencies involved; pleased to see the agencies increasingly work together on planning; and pleased when funds were committed to the project.

This is a bridge both literal and figurative, which has generated many discussions and insights among stakeholders and implementing agencies over modal hierarchies, needs of various users, and how best to balance current and future transit ridership generators. Such balance is not easy, and having come to this level of planning agreement is a positive indicator of successful project completion once sufficient funding is provided.

It is a rare and wonderful occurrence when a single project has such broad support and can provide such a wide range of significant benefits, including transportation connectivity, safety, educational opportunity, housing and land use, economic, social equity, environmental and health benefits, both local and regional. The positive impacts will extend beyond the bridge and station locale, generating other connectivity and network access improvements. This project, years in planning, now has a brief time window and an additional funding gap to be bridged to bring it to fruition.

The Seattle Pedestrian Advisory Board is excited about the possibilities this project will create and strongly urges your consideration and approval of this application.

Sincerely,

Lydia Heard, Chair
Seattle Pedestrian Advisory Board

cc: Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle

The Seattle Pedestrian Advisory Board shall advise the City Council, the Mayor and all the offices of the city on matters related to pedestrians and the impacts which actions by the city may have upon the pedestrian environment; and shall have the opportunity to contribute to all aspects of the city's planning insofar as they relate to the pedestrian safety and access.

~City Council Resolution
28791

SMT, 700 Fifth Avenue, Suite 3800
Seattle, WA 98124-4996

www.seattle.gov/spab email: pedboard@seattle.gov

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180 Nickerson Street, Suite 202
Seattle, WA 98109



22 April 2014

The Honorable Anthony Foxx
Secretary, U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: City of Seattle Northgate Pedestrian and Bicycle Bridge TIGER Application

Dear Secretary Foxx:

The Sierra Club has long championed the development of walkable, livable transit oriented communities as a key to sustainable living. Therefore, we enthusiastically support the **City of Seattle's 2014 TIGER grant application for the Northgate Pedestrian/Bicycle Bridge**. We believe the bridge will serve as a critical link to catalyze the full development of the Northgate Urban Center.

The 10 lane I-5 highway presents a huge barrier to the connectivity of the surrounding community. The Pedestrian/Bicycle Bridge can provide a direct pedestrian connection between Sound Transit's future Northgate Link Light Rail Station, King County Metro's Transit Center, and the Northgate Urban Center on the east and North Seattle College, Northwest Hospital and medical facilities, parks and neighborhood residential and commercial areas on the west. Presently, west side residents, students, employees and visitors are forced to travel north to Northgate Way or south to 92nd St., which are 18 blocks apart, to cross I-5 and then traverse an equivalent distance on the east side of the highway to connect to the Urban Center and transit center and site of the future light rail station. If the Bridge is not built, a consequence would be increased demand for costly parking spaces to serve those who wish to access the Link Light Rail station. The lack of a Bridge would also increase congestion on Northgate Way, making timely access to the Light Rail Station more difficult, thus adversely affecting ridership demand. This increased congestion would also adversely affect the reliability of transit routes using Northgate Way or 92nd St.

The proposed Pedestrian/Bicycle Bridge will enable a much larger number of people to walk or bike in the Northgate area on both sides of I-5. Sound Transit recently completed a pedestrian access study which forecasts over 1,300 people will use the bridge to walk and bike to and from the station daily. However, that figure doesn't include pedestrians or bicyclists wishing to access the King County Metro transit center or the many other facilities in the growing Urban Center. We are pleased that the City of Seattle will be developing a broader access study to fully document the impact of the proposed bridge beyond the Light Rail station, particularly the North Seattle College students and NW Medical Center patrons wishing to access the Metro Transit Center and the further planned transit-oriented development (TOD) in the area.

The Northgate Pedestrian/Bicycle Bridge is a prime example of a non-motorized facility that will greatly enhance transit in an Urban Center that is quickly developing beyond its auto-dominated roots. The Sierra Club is pleased to support this TIGER grant application as the critical resource to assure the completion of the pedestrian/bicycle bridge

Sincerely yours,

Dan Schwartz, Chair
Sierra Club Seattle Group

cc: Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle

Thursday, April 24, 2014

The Honorable Anthony Fox
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER
application

Dear Secretary Foxx:

I am writing to express the support of Northgate Mall Partnership for the City of Seattle's grant application for TIGER funds to construct a pedestrian and bicycle bridge over Interstate 5.

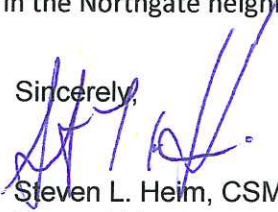
The proposed pedestrian and bicycle bridge will provide a safer, easier pedestrian connection between communities on both sides of I-5.

We support the neighborhood's desire for more efficient ways for residents and employees to move between the east and west sides of I-5, and have more convenient access to restaurants, theaters, the library and other neighborhood attractions.

The bridge, with its direct connection to the Northgate Link station, will provide greater access to transportation options for a greater proportion of North Seattle. While the bridge would not alleviate the need for Sound Transit to increase the amount of parking planned at the Northgate Link light rail station to accommodate the large anticipated increase in car and motor traffic to the site, it will help pedestrians and bicyclists reach the station from a larger area more safely and pleasantly.

Thank you for considering federal funding support for the proposed pedestrian and bicycle bridge in the Northgate neighborhood.

Sincerely,



Steven L. Helm, CSM
General Manager
Northgate Mall

cc:

Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle



April 17, 2014

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: City of Seattle Northgate Pedestrian and Bicycle Bridge TIGER Application

Dear Secretary Foxx:

Sound Transit is pleased to support the City of Seattle TIGER grant application for the Northgate Link Light Rail Station Non-motorized Access Project, including the Northgate Pedestrian and Bicycle Bridge. Sound Transit envisions a world-class transit hub at Northgate that will be one of the highest performing stations in the whole Link Light Rail system. A big part of Sound Transit's commitment is providing easy, safe access to Northgate Station for riders arriving by all modes. That commitment includes providing \$10 million in local funds towards access improvements in the Northgate neighborhood including the pedestrian and bicycle bridge project. A TIGER grant would provide the remaining funds needed to construct this project.

The need for this project has been identified in a number of local and regional plans including the Northgate Coordinated Transportation Investment Plan and Seattle's Bicycle Master Plan as a priority facility improvement. Strong community demonstrated through the Puget Sound Regional Council's Growing Transit Communities effort and the project is also identified as a key connection within the Regional Bicycle Network.

The pedestrian and bicycle bridge will provide a safe, convenient and direct connection to Sound Transit's Northgate Link Station from destinations on the east side of I-5 (community center, library, rapid bus transit facilities, regional shopping center) as well as the west side of I-5 (North Seattle College, NW Hospital and medical facilities, parks and neighborhood commercial areas). With two and four-year degree programs, North Seattle College serves more than 14,000 students.

With its direct connection to the Northgate Link station, the Northgate Pedestrian and Bicycle Bridge will also provide safe and easy access to regional light rail service for a much greater proportion of North Seattle residents including those of Licton Springs, Bitter Lake and North Park neighborhoods, which have an above average number of residents from economically disadvantaged populations. Non-motorized access is an important rung on the ladder of opportunity, presenting a low cost, healthy means of transport (with beneficial environmental effects).

A federal partnership on this critical regional project is essential to leverage needed resources to move the project forward. I strongly support the Northgate Pedestrian and Bicycle Bridge project and the benefits it provides for local and regional transit users.

CHAIR

Dow Constantine
King County Executive

VICE CHAIRS

Paul Roberts
Everett Councilmember

Marilyn Strickland
Tacoma Mayor

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Redmond Mayor

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Pierce County Executive

Joe McDermott
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Mary Moss
Lakewood Councilmember

Lynn Peterson
Washington State Secretary of Transportation

Larry Phillips
King County Council Chair

Peter von Reichbauer
King County Councilmember

CHIEF EXECUTIVE OFFICER

Joni Earl

Thank you for your consideration of the City of Seattle's TIGER application.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Michael Harbour', with a large, sweeping loop at the end.

Michael Harbour
Deputy Chief Executive Officer

CC: Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle



The Urbanist

Examining Urban Policy to Improve Cities and Quality of Life
www.theurbanist.org | info@theurbanist.org | 424-234-6936

The Honorable Anthony Foxx
Secretary U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590
Re: City of Seattle Northgate Pedestrian and Bicycle Bridge TIGER Application

Dear Secretary Foxx:

This 2014 TIGER grant represents one of the best opportunities for Seattle to secure funding for the Northgate Link Light Rail Station Non-motorized Access Project, including the Northgate Pedestrian and Bicycle Bridge. This project is primarily a pedestrian and bicycle bridge that will make it possible to get from the community on the east side of Interstate 5 to the west side of I-5 and access the light rail station that is being built. The bridge will connect directly to the station and make it possible for communities on both sides of the highway to access the station and other amenities, including bus routes, a community center, a shopping center, a library, North Seattle College, and a hospital.

The Urbanist is a local publication and grassroots organization consisting of concerned citizens, planners and activists. We strongly endorse the need to build this project. In order to achieve many vital urban goals we need to expand non-motorized access to urban amenities, especially for economically and politically disempowered groups. This bridge would greatly increase access and opportunities for individuals to attend classes, find jobs and further integrate our communities. Non-motorized access is specifically important because it is more reliable, less financially burdensome, minimizes environmental impact, is fundamentally equitable, improves public health and empowers the disempowered.

The Puget Sound Region is pursuing many projects to improve non-motorized access and this is a critical part of other goals. The bridge is specifically mentioned in the following plans:

- The Northgate Coordinated Transportation Investment Plan (2007)
- Seattle's Bicycle Master Plan (2013)
- Puget Sound Regional Council's Growing Transit Communities effort
- PSRC's Regional Bike Network
- Northgate Urban Design Plan

The Urbanist hopes you support Seattle and our urban goals, accepting the grant application for this project.

Sincerely,

Owen Pickford
Executive Director

cc:

Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle

Thornton Creek Alliance
Post Office Box 25690
Seattle, WA 98165-1190

April 23, 2014

The Honorable Anthony Fox, Secretary
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Re: City of Seattle NORTHGATE PEDESTRIAN AND BICYCLE BRIDGE TIGER Application

Dear Secretary Foxx:

We are writing to you today to voice our support of the City of Seattle's application. As a volunteer group hard at work for over 20 years to improve the health of Seattle's largest watershed, Thornton Creek Alliance strongly supports this bridge, which will help protect Thornton Creek by connecting the communities divided by Interstate 5 without increasing motorized transportation and its incumbent pollution.

Furthermore, on completion, this project will make non-motorized access to Northgate Mall station's many bus routes much easier and more pleasant for those on the other side of the freeway, including students at North Seattle College and in Seattle's Licton Springs, Bitter Lake and North Park neighborhoods, which have an above average number of economically disadvantaged residents.

The bridge, with its direct connection to the Northgate Sound Transit station, will provide access to the regional rail service for a much greater proportion of North Seattle residents.

Thornton Creek Alliance has been in support of this pedestrian bridge ever since it was first proposed. We sincerely hope you will grant this final piece of the funding requirement and help make this environmentally sustainable component to the Northgate Urban Design Plan a reality.

Thank you for your consideration.

Sincerely,

Ruth Williams, President
Thornton Creek Alliance

Thornton Creek Alliance is an all-volunteer grassroots, nonprofit organization of 100 members dedicated to preserving and restoring an ecological balance throughout the Thornton Creek watershed. Our goal is to benefit the watershed by encouraging individuals, groups, schools, businesses, and government to work together in addressing the environmental restoration of the creek system including: water quality, stabilization of water flow, flood prevention, and habitat improvement through education, collaboration, and community involvement.

cc:

Senator Patty Murray
Senator Maria Cantwell
Governor Jay Inslee
Congressman Jim McDermott
Mayor Edward B. Murray Seattle



Washington State Legislature

The Honorable Anthony Foxx, Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20509

Re: Northgate Light Rail Station Non-motorized Access Project and Ped-Bike Bridge

Dear Secretary Foxx:

As state legislators representing the 46th Legislative District in the City of Seattle, we are pleased to write in support of the city's application for the U.S. Department of Transportation TIGER Grant. Funding from this grant will be dedicated to the construction of a pedestrian-bicycle bridge over Interstate 5 (I-5) and related non-motorized access to the future Northgate Light Rail Station.

Seattle's Northgate Urban Center (in the 46th district) is designated as a regional growth center in the Puget Sound Regional Council's Vision 2040 Plan. However I-5 is blocking the growth and development of this area as it bisects the neighborhood and inhibits access, particularly for bicycles and pedestrians. With a pedestrian and bicycle bridge, North Seattle College would be a mere several hundred yards from the transit center, instead of a 25-30-minute bus ride.

North Seattle College, residential areas, and significant parks are located on the West side of the freeway, separated from the current Northgate Transit Center and the future Northgate Link Light Rail Station, scheduled to open in 2021, as well as Northgate's recently built community center, library, employment centers and regional shopping center. This will increase access to North Seattle College's Opportunity Center for Employment and Education, which helps people who are unemployed and low-income find human service and employment resources. Many people rely on transit to access these resources. The proposed pedestrian and bicycle bridge is also an investment in the economy and community of North Seattle reducing commute time for students, faculty, and the access of the important services at the Opportunity Center. The current lack of any reasonable pedestrian and bicycle connections across I-5 limits the potential regional development of the Northgate neighborhood and limits access to the transit-oriented development that's anticipated to follow the opening of the North Link Light Rail.

The centerpiece of this project – the proposed pedestrian and bicycle bridge - will make it safer and easier to get between the community assets on the East side of I-5 and the multi-modal transit center on the West serving the greater Seattle region. The bridge, with direct connection to the Northgate Link Light Rail station, will provide increased access to the regional rail service and make non-motorized access to Northgate Transit Center's many bus routes accessible for the surrounding North Seattle neighborhoods; which have an above-average number of residents from economically disadvantaged populations.

The need for this project has been identified as a priority in a number of city and regional plans. Seattle has created a wide coalition of support amongst neighborhoods, pedestrian and bicycle advocacy groups, North Seattle College, Sound Transit and King County. The TIGER Grant will ensure already-committed funds remain dedicated to this critical project. We urge your support of the Northgate Light Rail Station Non-motorized Access Project.

Thank you for your consideration,



Sen. David Froct



Rep. Jessyn Farrell



Rep. Gerry Pollet



**Washington State
Department of Transportation**

Lynn Peterson
Secretary of Transportation

Transportation Building
310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300
360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

April 21, 2014

The Honorable Anthony Foxx
Secretary, U.S. Department of Transportation
1200 New Jersey Ave SE
Washington, DC 20590

Dear Secretary Foxx:

The Washington State Department of Transportation is pleased to support the City of Seattle's 2014 TIGER grant application for the Northgate Link Light Rail Station Non-motorized Access project.

The proposed project will provide a vital link between the community assets on the east side of Interstate-5 and those on the west. Improving access between these two areas is a priority for the city of Seattle and the residents, businesses and other institutions in the Northgate area. The bridge will be built in WSDOT right-of-way and the city is coordinating with WSDOT on the use of the right-of-way to better connect this community.

I hope you will give this project serious consideration.

Sincerely,

A handwritten signature in blue ink, reading "Lynn Peterson".

Lynn Peterson
Secretary of Transportation

RESOLUTION

31389

A RESOLUTION supporting the adoption of a Northgate Station Access Strategy by the Sound Transit Board, and stating that the City of Seattle intends to commit \$5 million to pedestrian and bicycle improvements as a match to \$5 million provided by Sound Transit and, additionally, up to \$5 million to fund 25% of the cost of the proposed pedestrian/bicycle bridge over Interstate 5 at Northgate as part of a consortium of funders, including Sound Transit; the City would commit these funds between 2013 and 2018.

WHEREAS, the City of Seattle strongly supports the construction of the North Link extension from the University of Washington station at Husky Stadium to the planned Northgate Station; and

WHEREAS, the City of Seattle has worked closely with Sound Transit to coordinate construction of the light rail line, design and construction of stations along the line, plans for transit oriented development around stations, and strategies for ensuring that transit riders will be able to access the planned stations, and intends to work cooperatively as the project proceeds; and

WHEREAS, the City encourages Sound Transit to develop pricing strategies for parking lots under its control to manage demand and to consider designs that would enable a parking garage to support other uses in the future; and

WHEREAS, the City of Seattle, King County, and Sound Transit have been working to develop an access strategy for the Northgate Station; and

WHEREAS, the Board of Sound Transit will consider a proposal to develop a coordinated, multi-modal access strategy for Northgate; and

WHEREAS, the proposed Sound Transit access strategy will include:

- Evaluating possible pedestrian and bicycle access facilities;
- Developing a 450 stall parking garage that will support park-and-ride facilities, preferably shared use, with possible private funding used to provide additional parking garage stalls and potentially free existing surface parking for future development;
- Matching up to \$5 million in City investments in bicycle and pedestrian facilities around the Northgate station; and
- Committing up to \$5 million as a 25% share in a bicycle/pedestrian bridge between the Northgate station and North Seattle Community College; and

WHEREAS, the investment of \$10 million in pedestrian and bicycle facilities around Northgate will be a major step towards making the Northgate Station work for pedestrians and bicyclists, would be consistent with the intent of the Northgate Area Comprehensive Plan and the Coordinated Transportation Investment Plan for Northgate, and will greatly assist the Northgate Urban Center and the surrounding neighborhoods in realizing the dreams and goals of the City and the Neighborhood Plan; and

WHEREAS, the Northgate Area Comprehensive Plan and the Coordinated Transportation Investment Plan for Northgate both advocated the construction of a pedestrian/bicycle bridge across Interstate 5, the Northgate Sound Transit Station has been designed to accommodate the landing of this bridge, North Seattle Community College and the Seattle Community Colleges have indicated their support for the proposed bridge, and this bridge would not only create a link that would facilitate light rail serving the 9,000 students, faculty, and staff at North Seattle Community College, but would also provide excellent access for transit riders located west of Interstate 5 who could reach light rail without entering congested Northgate area traffic and contributing to further congestion in the existing crossings at North 92nd and Northgate Way (there are no crossings of I-5 between these two points); NOW, THEREFORE,

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SEATTLE, THE
MAYOR CONCURRING, THAT:**

Section 1. The City of Seattle endorses the proposed Northgate Access Strategy and urges the Sound Transit Board to adopt it.

Section 2. The City of Seattle intends to commit \$5 million to pedestrian and bicycle improvements as a match to \$5 million provided by Sound Transit and, additionally, up to \$5 million to fund 25% of the cost of the proposed pedestrian/bicycle bridge over Interstate 5 at Northgate as part of a consortium of funders, including Sound Transit. The City of Seattle agrees that if a full funding agreement for the implementation of the pedestrian/bicycle bridge cannot be completed by July 2015, the Sound Transit Board will reallocate any unspent bridge funds to other priority pedestrian pedestrian/bicycle projects identified through the connectivity and access study processes.

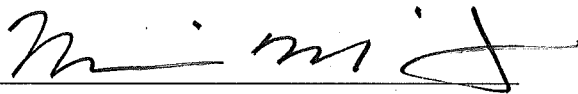
Section 3. The City of Seattle would commit these funds between 2013 and 2018, and will participate in a full funding agreement for the pedestrian/bicycle bridge by July 2015.

Adopted by the City Council the 25th day of June, 2012, and signed by
me in open session in authentication of its adoption this 25th day
of June, 2012.




President _____ of the City Council

THE MAYOR CONCURRING:



Michael McGinn, Mayor

Filed by me this 27th day of June, 2012.



Monica Martinez Simmons, City Clerk

(Seal)

MOTION NO. M2012-42

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to complete a Northgate access improvement study to identify potential additional pedestrian and bicycle access improvements to enhance access to the current Northgate Transit Center and future Northgate Station inter-modal transit facility as part of the Northgate Link Extension Project. The Northgate access improvement study would include:

- a) A two-step study process that will include a connectivity analysis followed by an access study to identify and prioritize specific improvements that could be funded by Sound Transit in partnership with the City of Seattle, King County Metro, and other local, state, and federal sources.
- b) Sound Transit's funding contribution for proposed Northgate pedestrian and bicycle access improvements would be capped at \$10 million, which includes credits for current Project commitments as included in the baselined Northgate Link Extension Project budget; and
- c) Before Sound Transit dollars will be authorized towards the improvements, the City of Seattle must match Sound Transit's \$10 million funding contribution, must complete appropriate environmental review for the proposed pedestrian and bicycle access improvements, and must have full funding partnership agreements in place to complete the improvements by 2021.

BACKGROUND:

Sound Transit is preparing to act on the region's long-promised vision of Link light rail service at Northgate. The agency envisions a world-class transit hub at Northgate that will be one of the highest performing stations in the whole system. Bringing light rail to Northgate will dramatically improve commute times to and from North Seattle and will also leverage and encourage smart growth development in the station area consistent with the City of Seattle's comprehensive plan.

A big part of Sound Transit's commitment is providing easy, safe access to Northgate Station for riders arriving by all modes. The integrated access modes include:

- Link light rail system, with connections north to Snohomish County, south to downtown Seattle, the airport and further stations south, and east to Bellevue and Redmond
- A safe and inviting pedestrian environment
- Bike access
- King County Metro and Sound Transit bus service
- Future TOD
- Passenger drop-off/pick-up
- Park-and-ride facilities

The current plans by Sound Transit and King County Metro for Northgate Station and the transit facility include:

- Integrated inter-modal transit facilities – easy connections between bus and rail
- Bicycle parking/access
- Light rail station with connection for a future pedestrian/bicycle bridge over I-5
- Implementing transit-oriented development (TOD) using existing publicly-owned property
- Accommodation of city's sidewalk/bike access improvement plans
- Park-and-ride facilities including a new parking garage that accommodates 450 park and ride stalls, preferably in shared use. Private funding could be used to provide additional parking garage stalls and potentially free existing surface parking for future development. The 450 stalls and any additional stalls may be used to replace parking now provided at the King County-owned park and ride surface lot currently east of the proposed station. This

will allow that lot to be made available within the next few years for TOD that will bring ridership to North Link and support the added vitality of the Northgate Urban Center. Sound Transit will work with King County and the City of Seattle to implement this replacement as quickly as practicable.

To continue Sound Transit's commitment to an integrated access plan for Northgate Station and to ensure access to the station is prioritized according to need, Sound Transit staff will identify potential additional pedestrian and bicycle access improvements to enhance access to the current Northgate Transit Center and future Northgate Station inter-modal transit facility. The initial work will be a two-step process that will include a connectivity analysis followed by an access study to identify and prioritize specific improvements that could be funded by Sound Transit in partnership with the City of Seattle and King County.

The connectivity modeling would assess Northgate area pedestrian and bicycle access issues to help identify potential travel obstacles and potential improvements that will enhance walk and bike access to the Northgate Station. Ideally, the modeling would map the walk travel sheds (5, 10 and 15 minutes) and the bike travel shed (15 minutes) of the station to assess effectiveness of alternative connection improvements.

Upon completion and analysis of the connectivity modeling, a follow-on access study will be completed that will identify how future improvements (such as TOD and/or I-5 pedestrian/bicycle bridge) would affect the ridership to the station with and without the improvements identified in the connectivity analysis.

The results of the access analysis along with the connectivity modeling will be shared with the Northgate Executive Steering Committee and other stakeholders to:

- assess feasibility of the candidate improvement projects,
- assess relative cost-effectiveness of the potential improvements, and
- identify priority improvement projects to consider for funding.

This analysis will provide a framework for allocating funds for access improvements in and around the station consistent with the Northgate Link Extension Project EIS requirements and applicable codes. Sound Transit will fund and manage the consultant modeling analysis work in collaboration with the City of Seattle. Sound Transit's funding commitment for the improvements will be as follows:

1. Twenty-five percent of the cost of a pedestrian/bicycle bridge across I-5 up to a maximum of \$5 million. Sound Transit costs associated with designing and constructing the Northgate Station to accommodate a connection for the pedestrian/bicycle bridge will be credited against this contribution. The City of Seattle will match Sound Transit's \$5 million contribution towards the I-5 pedestrian/bicycle bridge costs. The City will also seek other funding partners to secure full funding to complete design and construction of the bridge (total cost approximately \$20 million). If a full funding agreement for the implementation of the I-5 pedestrian/bicycle bridge cannot be completed by July 2015, the Sound Transit Board will reallocate any unspent bridge funds to other priority pedestrian/bicycle projects identified through the connectivity and access study processes.
2. Match up to \$5 million in City investments in pedestrian/bicycle facilities in and around Northgate Station consistent with the improvements identified and recommended by the connectivity analysis and access study. The City of Seattle will credit toward this Sound Transit contribution the cost of any discretionary conditions and discretionary mitigation requirements, and any street use fees and any fees for temporary loss of on-street parking,

should they be imposed by the City through permitting of the Northgate Link Extension Project. Discretionary conditions or mitigation requirements are any conditions or requirements that exceed published City codes, standards and Director's Rules. Sound Transit and the City will mutually determine the extent to which Director's Rules are discretionary. Sound Transit will also be credited against this contribution for its incremental investment in designing and constructing its guideway in the Northgate area to accommodate the City's implementation of the cycle track along 1st Avenue NE, if Sound Transit and City of Seattle staff agree that this investment exceeds \$1 million. City of Seattle staff will work collaboratively with Sound Transit staff to minimize Sound Transit's costs to accommodate the cycle track. Any Sound Transit costs to accommodate the cycle track over \$1 million will be credited against Sound Transit's \$5 million match.

The non-credited portion of these Project funds will be directed to the City of Seattle for implementation of these priority improvements. Improvements must be completed by the City prior to or at the start of light rail service in 2021. Expenditure of these funds by Sound Transit will be authorized only after completion of environmental review and funding for the entire cost of these improvements have been identified and appropriate agreements have been fully executed.

MOTION:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to complete a Northgate access improvement study to identify potential additional pedestrian and bicycle access improvements to enhance access to the current Northgate Transit Center and future Northgate Station inter-modal transit facility as part of the Northgate Link Extension Project. The Northgate access improvement study would include:

- a) A two-step study process that will include a connectivity analysis followed by an access study to identify and prioritize specific improvements that could be funded by Sound Transit in partnership with the City of Seattle, King County Metro, and other local, state, and federal sources.
- b) Sound Transit's funding contribution for proposed Northgate pedestrian and bicycle access improvements would be capped at \$10 million, which includes credits for current Project commitments as included in the baselined Northgate Link Extension Project budget; and
- c) Before Sound Transit dollars will be authorized towards the improvements, the City of Seattle must match Sound Transit's \$10 million funding contribution, must complete appropriate environmental review for the proposed pedestrian and bicycle access improvements, and must have full funding partnership agreements in place to complete the improvements by 2021.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on June 28, 2012.



Julia Patterson
Board Vice Chair

ATTEST:



Marcia Walker
Board Administrator

Northgate Pedestrian Bridge Feasibility Study Report

DRAFT

July 2011



King County Department of Transportation
Road Services Division
Bridge and Structural Design Unit

201 South Jackson Street
Seattle, Washington 98104

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Appendix A - Initial Bridge Alignments Studies

Appendix B - Recommended Alignments for Further Considerations

Appendix C-1 to C-4 - North and South Alignments and Structural Plan, Elevation, and Section

Appendix D-1 to D-3 - Bridge Rendering (cable-stayed and steel truss)

Appendix E - Typical Bridge Options for Approach Spans & Future Bridge Extension

Appendix F - Typical Wall and/or Fill Sections

Appendix G - Stair and Elevator Options

Appendix H - WSDOT I-5 Corridor Topo Map & Recommended Bridge Pier Locations

Appendix I - Preliminary Northgate Light Rail Station (Sound Transit)

Appendix J - Estimated Project Design and Construction Schedule

Appendix K - Project Cost Estimates

1. EXECUTIVE SUMMARY

The overall objective of this study is to evaluate and recommend alternatives for bridge design and alignment for a new pedestrian and bicycle bridge crossing Interstate 5 (I-5) and linking North Seattle Community College and the surrounding area on the west side of the freeway to a future regional transit center on the east side of the freeway. The first phase of the project will be to construct a bridge that crosses the freeway and extends as far as the parking lot at the east side of the freeway. The second phase will be to extend the bridge to connect to the future Sound Transit North Link station. This study addresses the first phase of the project.

The proposed location for the new bridge is just north of North Seattle Community College on the west end and between Northeast 100th Street and Northeast 103rd Street on the east end. Three alternative alignments were selected for initial study and after scrutiny, two final alignments were chosen for more detailed evaluation. Consideration was given to potential bridge span lengths, horizontal and vertical clearance from I-5 lanes and city streets, Americans with Disabilities Act (ADA) requirements for slopes and landings, impacts to traffic on I-5 during construction, street access via stairways and elevators, aesthetics, economics, environmental impacts, constructability, and durability.

Various bridge structures and configurations have been reviewed and evaluated. For the main bridge spans over I-5, cable-stayed or steel truss structures are feasible. For the approach bridge spans, conventional structures including precast concrete Box girder, I-girder, Bulb-T girder, and steel plate girder are viable and economic solutions. At the earth-filled bridge approach, a flexible retaining wall system or a combination of wall and sloped fill can be considered to minimize project costs.

The recommended bridge cross section has a concrete deck surface with a minimum width of either 14 feet or 12 feet depending on structure type and economics. The minimum clear height for pedestrians and bicycles using the bridge will be ten feet to any overhead structure. The current criteria assumed for this study are handrail heights at 4'-6", and 8'-0" to 10'-0" high screens on each side of the bridge over I-5 lanes.

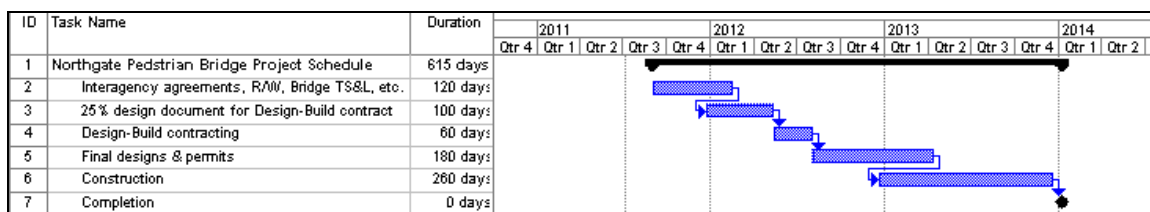
A table that summarizes and compares various bridge alignments, structural types, and other factors, including design, constructability, aesthetics, future maintenance, and traffic and environmental impacts has been included in Section 10 of this report. In addition, the table provides construction and project cost data that should be useful for consideration of an appropriate balance among cost, function, and aesthetics for the project. The estimated cost for the project, including design costs and construction costs, is in the range of \$16,300,000 to \$18,500,000.

One considerable advantage for this project is the fact that the property for the right-of-way (ROW) is expected to be obtained for no cost. The alignments for the bridge are located on public lands owned either by North Seattle Community College or the State (I-5 ROW). We expect the ROW for the new pedestrian bridge to be donated by these public agencies, with no ROW needing to be obtained from private lands.

In order to minimize the time required for design and construction, an alternative process involving a design-build contract could be considered for this project. The design-build contract is an alternative approach to the conventional design-bid-build process normally used by the County for new projects. The design-build approach can result in a reduction of the overall time required to complete the project since the design engineers and the builder work together allowing critical design decisions to be made with regard to structure configuration and materials in a collaborative environment where all parties participate at the same time. This process often can also result in a reduction of the overall cost to design and construct the project if the design-build contract is properly prepared.

To assist project planning, a preliminary design and construction schedule for either the steel truss bridge or the cable-stayed bridge, based on a design-build approach, is shown below. The schedule incorporates a rough breakdown of tasks and the estimated duration for each task in months:

<i>Items</i>	<i>Est'd duration (Month)</i>
Interagency agreements, R/W, Bridge Type, Size & Location	4 - 6
25% Design Document for Design-Build Contract	4 - 6
Design-Build Contracting	3
Project Final Designs & Permits	8 - 10
Project Construction	12 - 16
Estimated project design and construction	2.5 - 3.0 yrs



A more detailed breakdown of the tasks and estimated duration has been included in an appendix.

2. INTRODUCTION AND PROJECT GOAL

King County will implement a transit oriented development plan of regional significance in Seattle's 500-acre Northgate Regional Growth Center, one of 27 designated regional centers intended to accommodate a significant amount of growth. The Northgate Transit Oriented Development (TOD) plan, partially funded by the U.S. Dept. of Housing and Urban Development's Sustainable Communities Regional Planning grant for 2011-2013, will combine workforce TOD housing, enhanced multimodal access for transit users, and pedestrian and bicycle improvements. This will also directly support regionally adopted growth management plans that emphasize high-density, transit-supported mixed-use growth centers.

A new pedestrian bridge, as part of the Northgate TOD Catalyst Investment Strategy, and in partnership with the City of Seattle, Sound Transit, Seattle Housing Authority, North Seattle Community College (NSCC), and other key public agencies is intended to be an integral part of dramatic mobility improvements and regional accessibility benefitting the transit-dependent community college population, the local neighborhoods, and retail/service workers in the Northgate area as well as the public at large. KCDOT has led pre-development and conceptual design work for this project. This effort is aligned with the critical path set by Sound Transit's Northgate Station design completion in the next two to three years with construction to begin in 2016.

A recent study of an overcrossing of I-5 at this location indicates that there would be a 30% 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. This study is to identify favorable alignments for the bridge and to recommend structure types that meet the project requirements with respect to the following criteria:

- Provide pedestrian and bicycle bridge to enhance multimodal access to regional transit center.
- Support city's larger growth strategy for transforming Northgate into a full-fledged urban center.
- Least environmental impact.
- Aesthetics
- Minimal disruption to traffic during construction.
- Sustainability and minimum maintenance.
- Economical
- Public safety

The project is intended to reduce the walking distance from the transit center to the community college from 1.2 miles down to approximately 0.25 miles. The effect will be to reduce single-occupancy vehicle congestion on the surrounding streets, reduce greenhouse gas emissions, and reduce the consumption of fossil fuels. In addition, construction of the pedestrian bridge will result in a lower demand for parking adjacent to the transit center and a reduction in costly investments required for construction of parking facilities.

3. PROJECT LOCATION

The project is located along the I-5 corridor between North Seattle Community College west of I-5 and the Northgate park-and-ride lots on the east side of I-5. The proposed alignments fall in a zone from Northeast 100th Street on the south to Northeast 103rd Street on the north. The attached Figure 1 shows the project location relative to the surrounding roads and streets.

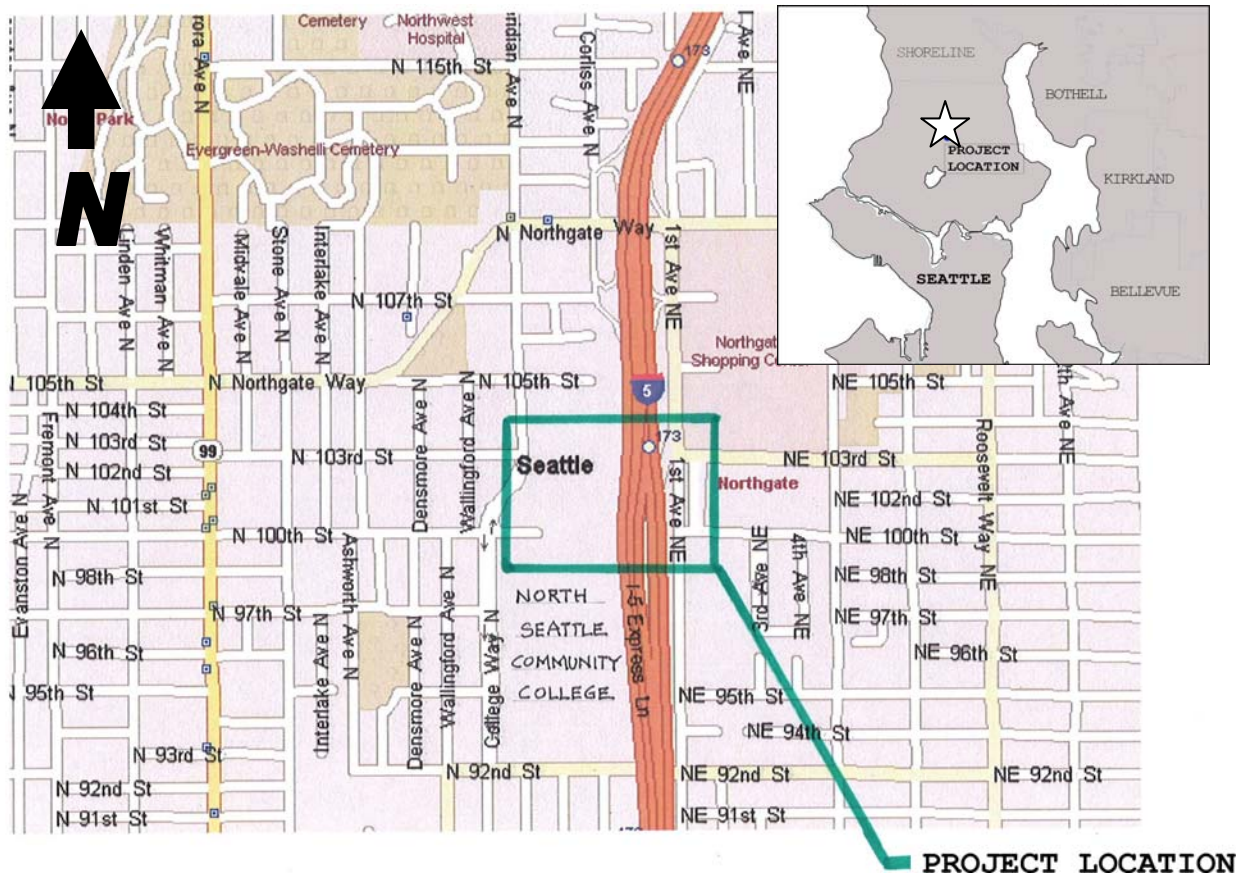


FIGURE 1 – PROJECT LOCATION

4. DATA RESEARCH AND REFERENCES

Information providing the basis of this study was obtained in part from the following sources and/or documents:

4.1 Northgate TOD Catalyst Project Description and Project Diagram

This information was obtained early in the study and shows a conceptual layout for the proposed bridge location and the proposed location for the future Sound Transit North Link station.

4.2 Washington State Department of Transportation (WSDOT)

Right-of-Way Plans for I-5 corridor showing north-bound and south-bound lanes and express lanes. In addition, areas in the landscaped zones located between the lanes are shown where bridge column supports could be considered. In addition, the state has provided the following information and documents:

- Soil boring logs and foundation type for the Northeast 103rd Street over-crossing bridge.
- I-5 corridor topographic map between Northeast 103rd Street and Northeast 100th Street. This map provides information of acceptable new bridge pier locations (see Appendix).
- Northeast Northgate Way Overcrossing No. 5/588 E&W, and First Avenue NE and NE 103rd Street signal structure foundation and soils information.
- Mountlake Terrace Freeway Station plans and cost data.
- WSDOT Design Manual M 22-01.07 regarding design guidelines for Pedestrian Bridge width, vertical clearance, and grade considerations.

4.3 North Seattle Community College (NSCC)

NSCC has provided information regarding potential locations for the west portion of the bridge, including possible wetland locations, approach fills, and the history of the area. NSCC also provided information regarding the extent of soft soils and peat due to the likely presence of a lake sometime in the past.

4.4 City of Seattle

The Seattle Department of Transportation provided the required minimum lateral and vertical clearance dimensions for city streets and obstructions such as light poles along 1st Avenue Northeast relative to potential bridge pier locations. They also provided a copy of the Seattle Right-of-Way Improvement Manual.

4.5 Sound Transit

Preliminary layout plans and elevations for the future Sound Transit North Link station were obtained from Sound Transit. These plans and elevations provided information regarding the location and potential elevation of the future connection between the pedestrian bridge and the station. However, it was decided that the final determination would have to be made in the future when the station plans become more finalized.

4.6 King County

A preliminary site survey was completed by King County survey crews to supplement I-5 corridor data provided by WSDOT and help establish existing elevations along proposed alignments.

4.7 Others

Case Histories, Plans, Specifications, and cost estimates from various past pedestrian bridge projects were obtained to help determine appropriate structure types and relative costs. Some of these references are:

- Sound Transit Canyon Park Pedestrian Bridge Overcrossing from Tetra Tech INCA, including project plans and cost estimates.
- Delta Ponds Pedestrian Bridge, City of Eugene, OR. (OBEC Engineers) (cable-stayed pedestrian bridge).
- I-5 Gateway Pedestrian Bridge, Oregon Dept. of Transportation (OBEC Engineers), including cost data for cable-stayed pedestrian bridge.
- Steel Truss Pedestrian Bridges by Contech Construction Products, Inc. This information included various kinds of truss options for long-span pedestrian bridge structures. The data included fabrication costs and truss plans and sections for their Gateway Truss and Keystone Truss type structures.
- Interurban Trail 124th Street Bicycle/Pedestrian O’Xing bridge plans by ABKJ.

4.8 Design Codes and Guidelines

- American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Guide Specifications for the Design of Pedestrian Bridges, December 2009.
- AASHTO LRFD Bridge Design Specifications, 4th Edition, 2007, with latest interims.
- International Building Code (IBC) latest edition (for the elevator/stair structure).
- National Cooperative Highway Research Program (NCHRP) Synthesis 353, Inspection and Maintenance of Bridge Stay Cable Systems, Transportation Research Board, 2005.
- Federal Highway Administration Technical Advisory 5140.25, Cable Stays of Cable-Stayed Bridges, June 17, 1994.
- Manufacturer’s data for prefabricated truss bridges.
- Manufacturer’s data for cable stays.
- Washington State Department of Transportation (WSDOT) Bridge Design Manual (2010).

5. PROJECT DESIGN CONSIDERATIONS

5.1 Bridge Design Criteria

The design criteria for the proposed pedestrian bridge include the following:

- Minimum vertical clearance on I-5 lanes shall be 20 feet. Minimum vertical clearance over city streets shall be at least 16'-6".
- All new bridge piers or abutments shall be located at least 15 feet away from existing traffic lanes and shall consider future additional lane and full shoulder in the south bound I-5 direction and allow for some widening of north bound off ramps.
- Preferable clear width of the walking surface on the bridge shall be 14 feet. A 12-foot width may be acceptable if significant cost reductions and reduced traffic impact during construction can be achieved.
- The bridge shall have screens and handrails with a height approved by the State Architect. Current criteria assumed for this study has handrail heights at 4'-6" and a wire mesh screen height of 8'-0" to 10'-0".
- Design loads should allow for sign structures to be placed on the bridge (details to be discussed during final design stage).
- Bridge shall meet ADA requirements (profile grade and landing, etc.). This includes a maximum 5-percent slope without landings and a maximum 8-percent slope (6.25-percent is preferred) with landings spaced at 30 feet maximum. The length of landings shall be at least 60 inches.
- No construction staging will be allowed on the freeways.
- Night time closure of lanes on the freeway between 10 PM and 5 AM could be considered as long as two lanes each way remain open at all times. For express lanes, closure of one lane may be acceptable. Short term (2 to 4 hours) closures are possible but should be reviewed and approved by State Department of Transportation (DOT).
- Consideration should be given to ease of bridge inspection and inspection frequency.
- Current design study shall include a stairway and elevator at the east end of the bridge near the park-and-ride lot to allow access to and from street level. The design shall also allow for a future connection to the proposed future light rail station. This may entail an extra stop for the elevator and/or an extra landing for the stairway.
- All new bridge piers or abutments to be located adjacent to city streets shall comply with clearances as required by City of Seattle DOT. This includes minimum clearance of 3'-0" from face of curb to face of column, and a minimum clear sidewalk width of 5'-0".
- Design of the bridge shall allow for a concrete walking surface, and shall allow for access by bicycles.
- Bridge type and aesthetics shall be reviewed and approved by State Architect.
- Design shall minimize environmental impacts to wetlands and sensitive areas.
- Design shall take into account constructability and durability, and shall consider lower cost alternatives as well as "signature type" structures.

- Design shall comply with the AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, December 2009. The dynamic response of the bridge structure to pedestrian loads and to wind loads must be considered in the design.
- Where applicable, the design shall comply with the AASHTO LRFD Bridge Design Specifications, 4th Edition 2007, including all current interims. Fatigue and fracture resistance shall be considered, and for cable-stayed bridge types, the most current recommendations from the Federal Highway Administration, Post Tensioning Institute (PTI), and other recognized technical experts shall be considered for the design of the stay cables and for corrosion protection of the stay cables.
- Design shall provide for lighting system along the bridge for public night time access and safety.

5.2 Design Criteria for Alignments

A number of factors were considered as follows:

- Routes providing the shortest clear-span lengths for crossing the freeway. This involved researching potential locations for intermediate piers located on the State ROW.
- Routes providing the shortest over-all length for the elevated sections of the bridge.
- Routes that take advantage of the natural hillside adjacent to North Seattle Community College to gain elevation using a path constructed on grade or on shallow fill. This affected both the horizontal and vertical aspects for the alignment.
- Routes that provide the most direct connection to the desired destination point on the east side of the freeway and to the area that can minimize impacts to the existing road and school parking on the west of the freeway.
- Routes that are on a tangent alignment that could allow erection of long span steel trusses by launching methods.
- Consideration was given to the maximum slope of the walkway per ADA requirements without having intermediate landings. We considered the alignment length versus the length required to meet a prescribed elevation at the connection to the future light rail station given the slope limitation per ADA requirements. The height of the structure required to provide the necessary clearance of twenty feet above the freeway was also considered for several different alignments. The truss superstructures require a somewhat higher vertical alignment than the cable-stayed superstructure due to the depth of the trusses.
- Additional factors included potential changes in the location where the bridge would connect to the future light rail station, possible areas of wetlands, potential staging areas for construction, etc.

5.3 Bridge Types and Approach Fills

Since the span lengths for the main spans over the freeway are quite long compared to the typical approach spans, different bridge sections were studied for the main spans and for the approach spans. The main spans over the freeway vary from about 140 feet to 230 feet depending on the particular alignment chosen. The spans for the approaches were generally assumed to be about 100 feet in length. The typical bridge sections selected for this study for the main spans include steel trusses of various configurations with concrete decks, and cable-stayed structures constructed with segmental precast deck units. The cable-stayed sections include post-tensioning of the segmental deck units that will provide added durability and resistance to cracking. Corrugated steel decking should not be used to support a cast-in-place concrete deck slab due to corrosion concerns after the galvanized coating of the corrugated steel deck loses effectiveness and because of inspection difficulties for the deck slab.

It is recommended that structural steel for the steel truss bridge alternate be coated with a high quality paint system to provide corrosion resistance. As an alternate, the steel truss members could be hot-dipped galvanized and then painted; a double protection system to corrosion that can minimize future maintenance efforts and can increase structural lifespan.

Approach spans could be made continuous for live loads. This will increase the efficiency and eliminate expansion joints which will make the structure more durable and maintenance free.

Walls at the west end of the alignment approaches are shown on the bridge alignment profile views but it could be constructed on fills if grading is acceptable to school. Structural earth walls (SEW walls), gravity block walls, or mechanically reinforced steepened slopes (landscaped slopes) may be considered to support the taller fill sections. Due to a possibility of poor soils (peat) in the area, over-excavation, pre-loading of the soils, light-weight fill material, and/or soil improvements such as rammed-aggregate piers may be evaluated and considered to limit potential settlement of the fills.

Additional information on bridge types and approach fills has been included in Section 6.

5.4 Right-of-Way

The current proposed alignments are located entirely on public property. The west portion of the bridge and the approaches are located on property owned by North Seattle Community College. The remaining portions of the bridge over the freeway and terminating in the parking lot just east of the freeway are located on State-owned property (WSDOT ROW and the park-and-ride lot). We expect the ROW for the new pedestrian bridge to be donated by these public agencies, with no ROW needing to be obtained from private lands. This will result in a considerable cost savings for the project.

5.5 Utilities

Based on information provided by the State DOT, it is expected that no major utilities are located along the proposed bridge alignments or at the proposed locations for pier and abutment foundations. A more thorough investigation for possible utilities should be made during the final design phase.

5.6 Permits and Environmental Impacts

The current proposed alignments are intended to avoid impacts to wetlands. The area just north of the north parking lot for North Seattle Community College contains wetlands. The proposed alignments are intended to skirt these wetland areas. Other environmental impacts that will need to be considered include the following:

- The effect of lighting along the bridge alignment, especially any decorative stay/pylon lighting. This may affect the surrounding residential areas and also the traffic on I-5.
- Potential for increased traffic and parking west of I-5 due to the access provided by the new bridge.
- Safety of aviation and approval due to height of cable-stayed pylons.
- Additional studies and permitting that may be required before project construction include the following list:

SEPA Environmental Review (State Environmental Policy Act of 1971)

ECL (Environmental Checklist)

DNS (Determination of Non Significance)

NAT (Notice of Action Taken)

NEPA Environmental Review (National Environmental Policy Act of 1969)

Documented CE (Categorical Exclusion)

ESA Evaluation (Endangered Species Act of 1973)

4(f)/6(f)

Cultural (Section 106)

Air

EJ (Environmental Justice)

Permits and Approvals

Ecology NPDES (National Pollutant Discharge Elimination System)

SWPPP (Storm Water Pollution Prevention Plan)

Seattle Building Permit

ROW Permits

Clearing and Grading Permit

Environmental Studies

Aquatic Environment

Wetland

Stream

Geotech Review

Air Quality Review

Noise Review

At the present time environmental studies have not been completed that address the environmental impacts of the proposed alignments. These studies will need to be completed prior to or during the final design phase for the project.

5.7 Bridge Foundation

This study has no detailed soils information at the proposed locations for abutments and piers along the proposed alignments. Geotechnical investigations at the proposed pier locations will need to be completed prior to the final design phase for the project. We have obtained soil boring information from the foundation plans for the existing bridge at Northeast 103rd Street Over-crossing on the north-bound lanes of the I-5 freeway in the immediate vicinity of the north alignment. In addition, based on inputs from North Seattle Community College, we understand that the area located west of the freeway may be underlain with soft soils and peat deposits. Foundation construction activities for some of the buildings at NSCC encountered these peat deposits.

Based on the above limited information, we anticipate the foundations for the bridge piers will require deep foundation elements. Most likely these elements will be drilled shafts that penetrate the soft soil layers and extend into the hard soils below. The shafts will be drilled and cased with steel casing if needed to avoid collapse of the side walls during excavation. After the shafts are completely cleaned of soft material at the bottom of the excavation, a cage of reinforcing steel will be installed and will extend the full depth of each shaft. The shafts will then be filled with concrete to complete the installation. The diameter of the shafts will vary depending on the loading demands of the structure. We anticipate a single shaft can be used for the piers under the approach spans with diameter between 6 and 8 feet. The piers under the long main spans will likely require two drilled shafts under each pier, and the diameter may range from 6 to 10 feet.

5.8 Seismic Hazard Areas

The seismic hazard at the bridge site can be characterized by the acceleration response spectrum for the site and the site factors for the relevant site class. The acceleration response spectrum can be determined per the AASHTO LRFD Bridge Design Specifications by either a General Procedure or a Site-Specific Procedure. A Site-Specific Procedure is required if any of the following conditions exist:

- Site is within 6 miles of an active fault.
- Site is classified as Site Class F (this applies if the depth of peat at the site exceeds 10 feet).
- Long-duration earthquakes are expected at the site.
- If the bridge is an important one requiring a lower probability of exceedance than normally used for typical design.

The General Procedure requires an analysis for earthquake ground motions that have a 7-percent probability of exceedance in 75 years. Bridges that are designed and detailed in accordance with these provisions may suffer damage, but should have a low probability of collapse due to seismically induced ground shaking. The geotechnical investigation will determine the Site Class and if any of the above conditions exist that will require a Site-Specific Procedure. In addition, the investigation will determine if there is a potential for liquefaction to occur during a strong earthquake. The Site-Specific Procedure is more involved and requires the development of ground motions that are more accurate for the local seismic and site conditions than can be obtained from national ground motion maps.

The City of Seattle has mapped the area associated with the Seattle Fault Zone. The location for the proposed pedestrian bridge does not fall within the mapped area of the Seattle Fault Zone. In addition, the City has mapped areas that may be subject to settlement from peat deposits. The proposed location for the bridge does fall within the predicted zone subject to peat settlement.

5.9 Traffic Impact

Impact to traffic on I-5 during construction of the new bridge must be kept to a minimum. Per discussions with WSDOT representatives, the following criteria must be met:

- No construction staging will be allowed on the freeways.
- Night time closure of lanes on the freeway between 10 PM and 5 AM could be considered as long as two lanes each way remain open at all times. For express lanes, closure of one lane may be acceptable. Short term (2 to 4 hours) closures are possible but should be reviewed and approved by State DOT.

5.10 Future Maintenance and Inspections

5.10.1 Maintenance

Maintenance needs will vary depending on the type of structure selected and the materials used to construct the bridge. In general, a steel structure will require more maintenance than a concrete structure. This is particularly true for precast prestressed concrete structures where maintenance requirements are usually minimal due to added prestressing or post-tensioning forces and its serviceability and sustainability have been well documented. Structural steel elements generally require painting at intervals determined by the type of coating system and the environmental conditions at the site. Stay cables may be vulnerable to corrosion unless they are protected. A variety of systems have been developed in recent years by cable suppliers that usually involve multiple barrier systems. One system employs epoxy coated and filled strands where the interstices of the strand are filled with epoxy, and then the strands may be sheathed in high-density polyethylene pipe. Another system uses a corrosion resistant barrier such as grease or wax combined with individually sheathed strands and finally

enclosed in a high-density polyethylene (HDPE) pipe. Cables protected by these multiple barrier systems have shown superior performance over previous single barrier systems.

5.10.2 Inspections

Future bridge inspections after the structure has been completed may disrupt traffic to enable the inspection crews to accomplish their work. The type of bridge superstructure selected for the final design and construction can affect the frequency of required inspections, particularly if the structure is classified as “fracture critical”. A fracture critical structure generally needs to be inspected twice as often as a non-fracture-critical structure. A vehicular bridge with a steel truss superstructure with two main trusses would likely be classified as “fracture critical”, however, since the live loads on a pedestrian bridge are generally smaller relative to the dead loads than for a vehicular bridge, it is unlikely that the steel truss alternate would be considered “fracture critical”. A cable-stayed superstructure that has been designed so that one of the stays can be removed without affecting the load-carrying ability of the bridge would not be considered as “fracture critical”.

5.11 Future Light Rail Station and Mezzanine

The proposed future light rail station is being planned at the intersection of 1st Avenue NE and NE 103rd Street with the station extending for some distance south of Northeast 103rd Street. In addition to the platform level, the station may have a mezzanine level midway between the street level and the platform level. Current preliminary plans indicate the mezzanine level to be at about elevation 282’-0”. This elevation locates the mezzanine approximately 22 feet above street level at Northeast 103rd Street.

At the time of this study, it is anticipated the new pedestrian bridge will eventually tie into the mezzanine level of the station at a location some distance south of Northeast 103rd Street. The final location is yet to be determined, and will be the subject of the second phase of construction for the pedestrian bridge. In the interim, the east end of the pedestrian bridge will terminate at an elevator and stair tower near the parking lots to provide street access.

6. BRIDGE ALIGNMENT AND TYPE EVALUATIONS

6.1 Alignments

6.1.1 Alignments Studied

Three trial alignments were initially reviewed as shown on Figure 2.

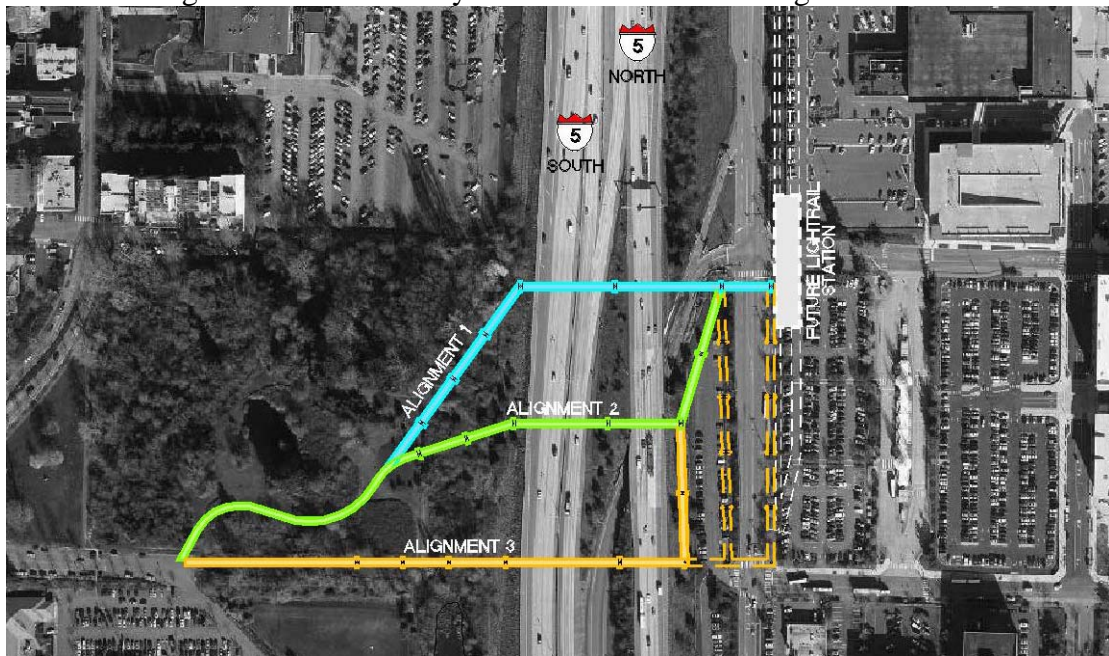


Figure 2 – Initial Alignment Study

The Alignment 1 at the extreme north shown in Figure 2 above allows somewhat shorter spans over the freeway, however the east end of the bridge on this alignment is very close to the location of the future light rail station and there is insufficient length to allow the vertical alignment to slope down to the desired elevation for the connection to the future station. Long ramps would be required to allow for the ADA connection. In addition, there is a difficulty to find a space to place a pier between I-5 lanes and the future connection will more likely be desired farther south and closer to mid-way between Northeast 103rd Street and Northeast 100th Street. For these reasons Alignment 1 was eliminated and the study concentrated on Alignment 2 and Alignment 3. At the south alignment (Alignment 3), three separate locations were considered where the bridge turns north and extends toward the future light rail station. The extension located farthest east parallels the east side of 1st Avenue Northeast. This extension was eliminated from further consideration because it is too close to the light rail line. Another extension was considered along the west side of 1st Avenue Northeast just east of the parking lot along the freeway. However, this location was determined to be a wetland and therefore this extension was eliminated also. The third extension is located between the freeway and the parking lot and this extension has been kept for further study.

6.1.2 Alignments Recommended for Further Consideration

Alignment 2 and Alignment 3 (as shown in Figure 2 above) are recommended for further consideration. For clarity, Alignment 2 has been re-named as the North Alignment and Alignment 3 has been re-named as the South Alignment. This study assumes that during the first phase of construction, the bridge will terminate near the parking lot at the east side of the freeway. The elevated connection from the parking lot to the future light rail station will be accomplished in a second phase of construction. The current study concentrates on the first phase of the project since there are a number of unknown issues regarding the connection for the second phase. It is assumed that the first phase will provide an elevator and stairway at the east terminus for the bridge to enable access to the street level. The North Alignment and the South Alignment are discussed in more detail in the following sections of this report.

a. North Alignment (Option 1)

The North Alignment was called Alignment 2 in the initial study phase. The west end of the North Alignment begins at the east end of North 100th Street (approximate elevation 257.70 ft.) , where the street becomes an approach road for the north parking lot at North Seattle Community College.

The alignment follows a curving path up the gentle hill side to a high point about 200 feet west of the freeway right-of-way (approximate elevation 277.2 ft.). This first section of the alignment is to be built on-grade with minimum fill sections where required. The curving path maintains a maximum grade of 5 percent per ADA requirements. From the high point at the top of the hill, the alignment turns slightly to the right and runs straight over the freeway to terminate at an elevator and stairway structure near the parking lot along the east side of the freeway. This section of the alignment is entirely elevated on the bridge structure. The highest point on the bridge deck occurs at Pier 4 for the cable-stayed and for the steel truss bridge with an elevation of about 307.0 feet. From the high point, the bridge deck slopes downward with a 5-percent grade to a final elevation at the east end of approximately 299.4 feet. The total length of the alignment is approximately 1124 feet for either bridge types. The elevated portion is comprised of four spans. The first two spans of 105 feet each are approach spans. The main spans crossing the freeway are 200 feet and 150 feet in length. Pier No. 4 is located in the landscaped zone between the express lanes and the northbound lanes of the freeway. The attached Figure 3 shows an aerial view of the North Alignment.

Plan, Elevation, and Section views can be found in Appendix C-1 and C-2. Rendering views of North Alignments with Cable-Stayed and Steel Truss Bridge over I-5 can be seen in the Appendix D.



Figure 3 - North Alignment (Option 1)

b. South Alignment (Option 2)

The South Alignment was called Alignment 3 in the initial study. The west end of the South Alignment begins at the same point as the North Alignment. From this beginning point, the alignment proceeds directly east on a tangent alignment for approximately 1024 feet for steel truss and 1008 feet for cable-stayed bridges. The alignment follows North 100th Street, but is offset about seven feet north of the centerline of the street to provide room for a pathway on grade. The same tangent alignment is maintained for crossing the freeway lanes to a point just east of the northbound lanes.

The beginning elevation at the west end of the South Alignment is approximately 258.2 feet. The first 228 to 244 feet of the alignment will be constructed with fill that is retained by structural earth walls on each side. In order to meet ADA requirements and minimize impacts to the existing roads, a maximum 8% slope with 6' landing spaced 30 feet are considered. The remaining portion of the alignment is all elevated on the bridge structure. The bridge structure consists of six spans of varying length. The slightly longer alignment is required for the truss bridge to account for the depth of the truss and the clearance required above the freeway.

Depending on the type of bridge structure, there will be either three or four approach spans of roughly 100 feet each at the west end of the elevated portion. The main spans over the freeway are approximately 230 feet and 140 feet. Uniform slopes of five percent are maintained for approaches and for the main spans. The high point occurs above Pier 6 which is located in the landscaped area between the express lanes and the northbound lanes of the freeway. The deck elevation at the high point will be

approximately 306.7 feet for the cable-stayed superstructure and 307.7 feet for the steel truss superstructure. The attached Figure 4 shows an aerial view of the South Alignment.

Plan, Elevation, and Section views can be found in Appendix C-3 and C-4. Rendering views of South Alignments with Cable-Stayed and Steel Truss Bridge over I-5 can be seen in the Appendix D.



Figure 4 - South Alignment (Option 2)

6.2 Structure Types

6.2.1 Bridge Types on the North Alignment

6.2.1.1 North Alignment with steel truss bridge over I-5

For the main spans over I-5 on this alignment we investigated a steel truss superstructure fabricated from steel tube sections. There are several companies that specialize in steel truss pedestrian bridge structures, and for this feasibility study we have used information provided to us by CONTECH Construction Products, Inc. This company has recommended their “Gateway” or “Continental” type trusses for the long spans crossing over I-5. The depth to span ratio of the trusses will be approximately 0.05 for structural needs, however it is expected that the shorter truss span height will be controlled by 10’ minimum vertical clearance between the top and the bottom truss bracing members or any light features.

6.2.1.2 North Alignment with cable-stayed bridge over I-5

The second type of structure we investigated for the long spans on this alignment is a precast segmental concrete cable-stayed type bridge. For this structure we contacted OBEC Consulting Engineers in Eugene, Oregon, where they have successfully designed and built at least two similar bridges. One bridge is owned by the Oregon DOT, and the other is owned by the City of Eugene. These bridges use a technology known as a cable-stayed stress ribbon deck which results in a very shallow thickness for the concrete deck. Because of the shallow structure depth, the deck can be located at a lower elevation relative to the freeway beneath the bridge and still provide the required vertical clearance. In addition, the thin deck reduces the dead weight of the structure which in turn reduces the demands on the substructure. The concrete deck segments are erected using a balanced cantilever method that does not require false-work for temporary support during construction since the deck panels are supported by the stays. The deck panels are supplied with adjustable connections that allow relatively quick erection. For the I-5 Pedestrian Bridge in Eugene, the panels were generally 10 feet in length. Approximately 18 panels were erected during three night shifts using a light crane to set the panels. Temporary lane closures were required during the erection of the panels. After the panels have been set, a topping slab is poured and full-length post-tensioning strands are placed in the topping slab. The bridge contains no deck joints, minimizing maintenance requirements.

For the North Alignment, only a single pylon was assumed with two cable-stayed spans, one at each side of the pylon. The span on the west side of the pylon is 200 feet, and the span on the east side of the pylon is 150 feet. Due to the restrictions on where piers can be located because of required clearance from the freeway lanes, the spans are of unequal length. This makes the design and construction slightly more complicated since the loading from the panels will not be symmetric and balanced about the pylon unless additional weight is added on the shorter span to help resist the tension in the stay cables. However, this type of bridge is feasible for this location.

6.2.1.3 North Alignment with cable-stayed truss bridge over I-5

Another option that can be considered for either North or South Alignment would be to provide a cable-stayed truss bridge. The advantage of this type of structure would be to allow the truss to be erected in a single lift instead of segmental construction. This would speed up erection time and minimize disruption to traffic on I-5. In addition, the trusses could be much lighter since they would be supported by the stays for the dead weight of the deck and for live loads. The deck could be constructed after the trusses have been erected and supported by the stays. If enclosure of the bridge with a roof for the long spans over the freeway is desirable, this system would make it very easy to add a roof on top of the bridge truss structure.

6.2.1.4 Structural modeling and verification

In addition to researching the bridges designed by OBEC Engineers, preliminary modeling and investigation has been performed for a cable-stayed segmental concrete bridge. We found the dynamic response of this type of bridge to pedestrian live loads was in a satisfactory range. In addition to the response from pedestrian loads, the dynamic response due to wind and earthquake forces should also be investigated for any bridge alternate that is selected for final design.

Figure 5 below shows the alternate bridge types for the North Alignment.

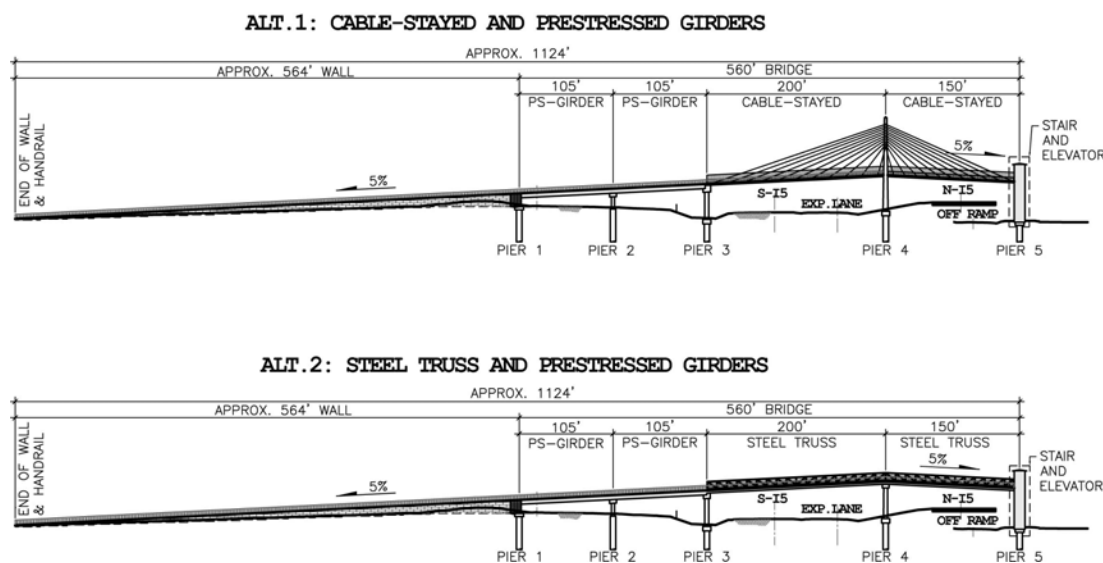


Figure 5 - Bridge Types at North Alignment

6.2.2 Bridge types on the South Alignment

6.2.2.1 South Alignment with steel truss bridge over I-5

For the main spans on this alignment we investigated a steel truss superstructure similar to the one investigated for the North Alignment. The main spans are 230' and 140'. The steel trusses for this alignment will be somewhat deeper and heavier than the trusses at the North Alignment due to the increase in span length. It is expected that the longer span truss and the light features may control the truss height.

6.2.2.2 South Alignment with cable-stayed bridge over I-5

For the main spans on this alignment we investigated a segmental precast concrete cable-stayed bridge similar to the bridge for the North Alignment. For this alignment we were able to achieve a more symmetric arrangement of the spans relative to the pylons. Two pylons are required at this location, with a main span

between the pylons equal to 230 feet, and end spans of 140 feet each. This arrangement allows a more balanced erection of the panels; however the overall number of panels will be larger. Figure 6 below shows the alternate bridge types for the South Alignment.

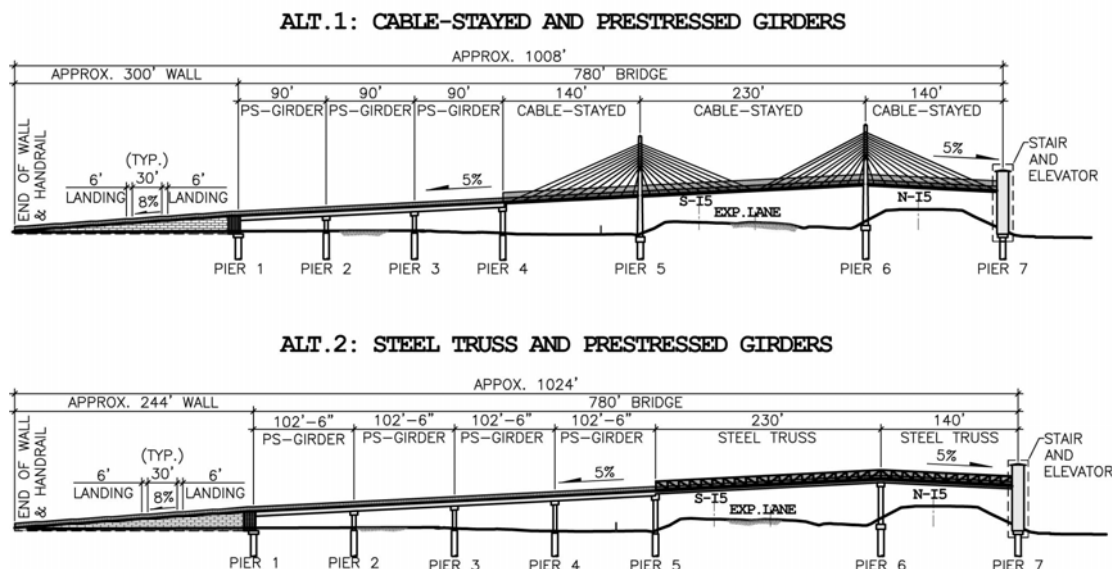


Figure 6 - Bridge Types at South Alignment

6.2.2.3 South Alignment with cable-stayed truss bridge over I-5

As noted above, another option would be a cable-stayed truss bridge on this alignment. All the advantages of this type of structure as described for the North Alignment would also apply for the South Alignment.

6.2.3 Approach bridge spans

The approach bridge spans vary in length from about 90 feet to about 102.5 feet. Our study assumes the approach spans will be constructed from standard WSDOT precast prestressed girders with cast-in-place concrete deck. The type of girder selected and the number of girders in the cross-section will depend on several factors including cost, aesthetics, deck width, continuity, and ease of erection. Standard precast prestressed wide-flange girders or precast prestressed bulb-tee girders will likely provide the most economical solution. However, for aesthetic reasons, precast prestressed trapezoidal tub girders with slightly higher costs may give a more desirable appearance. Any of the above choices can be made continuous for live loads. This will tend to reduce the required depth of the structure and provide a better appearance. In addition, the continuity will eliminate expansion joints and contribute to lower maintenance costs. From an aesthetics standpoint and also from a reduced maintenance standpoint, it will be desirable to set the girders on false-work and cast

the pier cross beams at the same level as the girders. This method also provides for continuity between spans for negative bending over the supports.

Based on a 14-foot wide deck, we anticipate a single trapezoidal tub girder can be used for the approach spans. The number and spacing for wide-flange girders and bulb tee girders can be optimized during final design. For the foundations, we anticipate a single drilled shaft can be used at each pier for the approach spans.

6.3 Approach wall & fill sections and pathway access

Both the north alignment and the south alignment will be constructed on fill sections from the west end of the alignments to a point where the fill approaches a maximum height of about 20 feet or less. The fill will be contained on both sides of the path by a retaining wall. Several wall types can be considered for this application. Possible wall types could include structural earth walls with precast concrete blocks, gravity block walls with or without a facing system that would allow planting (green wall), precast concrete crib-lock walls, and other types. Another couple of options for consideration include maximum 2:1 or steepened slopes on both sides of the approach fill sections if it is acceptable to North Seattle Community College. For the steepened sloped section, the soil fill would be reinforced with geogrid material at both sides of the fill. The steepened slopes can be constructed up to an angle of 70 degrees with respect to the horizontal. All sloped fills can be landscaped with grass or plantings. This approach might work well for the path on the north alignment that is constructed on the existing hillside since the landscaped slope would blend in with the existing hillside.

Due to a possibility of poor soils (peat) in the area, over-excavation, pre-loading of the soils, light-weight fill material (geo-foam fill), and/or soil improvements such as rammed-aggregate piers may be considered to limit potential settlement of the fills. For the alternate using geo-foam fill, the fill could be topped with concrete slab. The various options can be reviewed once soil information is available during final design.

7. CONSTRUCTION ACCESS, STAGING, ERECTION & TRAFFIC IMPACTS

Construction staging areas for crane pads and for on-site assembly of large sections of truss framework are likely to be required on both sides of the freeway. On the east side of the freeway, the most likely location for staging areas includes the parking lot located adjacent to the freeway. On the west side of the freeway, tree covered areas adjacent to the proposed alignments will need to be cleared for crane access and for assembly and lay-down areas. For example, a minimum 50-foot wide area along the north side of the South Alignment would be needed for providing large construction equipment access and staging for drilled shaft construction operation and during erection of the approach span pre-stressed girders on the west end of the bridge. A similar area would be required for approach spans on the North Alignment. For the long span truss structures, it may be possible to field-assemble the sections in the parking lot east of the freeway, then load the truss onto a truck of I-5, and subsequently position the truck on the freeway where two cranes can lift the truss into place during the night.

8. STAIR AND ELEVATOR

8.1 Stair and Elevator at East End of Bridge

For this study we assumed the first phase of construction for the bridge would be to build the portion from North Seattle Community College to a point just east of the I-5 ROW. A future phase will connect the bridge to the future light rail station. The east end of the bridge for the initial phase will terminate at an elevation that will be approximately 45 feet above the street level. An elevator and stairway will be required at this point until such time as the second phase of construction is completed. Several types of stair and elevator can be considered during the project final design phase depending on the space that is available at the east parking lot. Some photos of stair and elevator towers from similar projects are included in the appendix for reference.

8.2 Stair at West End of Bridge

Near the west end of the bridge, a simple stairway will provide access to an on-grade pathway that connects to the parking lot for the Medical Center buildings just north of the Community College.

9. COST ESTIMATES

Construction cost estimates for the various bridge types at both the north and south alignments are shown in the table below. The estimated total project costs are provided to aid project budget planning and preparation.

Refined details for construction cost estimates can be found in the Appendix.

Northgate Pedestrian Bridge Project Cost Estimates Summary

Alignment Options	North Alignment		South Alignment	
Main bridge span over I-5	Cable-Stayed	Gateway Steel Truss	Cable-Stayed	Gateway Steel Truss
Approach bridge span	Precast Box or I-girders	Precast Box or I-girders	Precast Box or I-girders	Precast Box or I-girders
Approach wall structure	Structural Earth Wall	Structural Earth Wall	Structural Earth Wall	Structural Earth Wall
Estimated Construction	\$9,514,170	\$9,278,182	\$10,261,513	\$10,104,434
Contingency/Conceptual (30%)	\$2,854,251	\$2,783,455	\$3,078,454	\$3,031,330
Inspection (20%)	\$1,902,834	\$1,855,636	\$2,052,303	\$2,020,887
Designs (30% Cable-S., 25% Truss)	\$2,854,251	\$2,319,545	\$3,078,454	\$2,526,109
Estimated Project Total =	\$17,125,507	\$16,236,818	\$18,470,723	\$17,682,760

Costs have been assumed based on the following:

1. Drilled shafts supporting bridge & min. soil improvements for walls.
2. No costs for R/W.
3. Future bridge extension to light rail station mezzanine is not included.
4. Estimated in 2011 \$.
5. Minimum lighting and architectural features on walls and bridges.
6. No cover or canopy on bridge.
7. No contaminated material along the construction site.

10. COMPARISON OF ALTERNATIVES

Northgate Pedestrian Bridge Option Data Comparisons

Description	North Alignment		South Alignment	
Type of bridge over I-5	Cable-Stayed	Steel Truss	Cable-Stayed	Steel Truss
Approach bridge spans	I or Box Girders	I or Box Girders	I or Box Girders	I or Box Girders
Walls & fills	SEW & fills	SEW & fills	SEW & fills	SEW & fills
Total length/new crossing	1124'	1124'	1008'	1024'
Total bridge length	560'	560'	780'	780'
Total length/walls & fills	564'	564'	228'	244'
Width of bridge	14'	12' - 14'	14'	12' - 14'
Est'd construction costs	\$ 9.5 M	\$ 9.3 M	\$ 10.3 M	\$ 10.1 M
Est'd total project costs	\$ 17.1 M	\$ 16.2 M	\$ 18.5 M	\$ 17.7 M
Construction duration	12 - 15 months	11 - 14 months	12 - 15 months	11 - 14 months
Bridge designs	Needs specialty for cable-stayed bridge models & designs.	More conventional bridge designs	Needs specialty for cable-stayed bridge models & designs.	More conventional bridge designs
Constructability	Requires special contractor for cable-stayed bridge span construction.	More conventional construction	Requires special contractor for cable-stayed bridge span construction.	More conventional construction
Bridge weight	About 30% to 40% less dead weight; less substructural demands	Heavier	About 30% to 40% less dead weight; less substructural demands	Heavier
Traffic impacts	Slightly higher	Less	Slightly higher	Less
Environmental impacts	About same	About same	About same	About same
Aesthetic	Signature structure	Conventional structure	Signature structure	Conventional structure
Future maintenance and inspection	Expects less maintenance & inspection efforts and less traffic impact during inspection	More inspection & maintenance efforts and more traffic impacts during inspection & painting	Expects less maintenance & inspection efforts and less traffic impact during inspection	More inspection & maintenance efforts and more traffic impacts during inspection & painting

Notes:

1. SEW = Structural Earth Wall system
2. Estimated costs and design and construction durations can be found in the Appendixes

11. CONCLUSIONS

The proposed location for the new bridge is just north of North Seattle Community College on the west end and between NE 100th Street and NE 103rd Street on the east end. Three alternative alignments were initially studied and two of them were chosen for more detailed evaluation. Consideration was given to potential bridge span lengths, horizontal and vertical clearance from I-5 lanes and city streets, ADA requirements for slopes and landings, impacts to traffic on I-5 during construction, street access via stairways and elevators, aesthetics, economics, environmental impacts, constructability, and durability.

Various bridge structures and its configurations have been reviewed and evaluated. For the main bridge spans over I-5, cable-stayed or steel truss structures are feasible for a long span bridge crossing. Steel truss bridge provides more traditional appearance while cable-stayed is a landmark type structure that is visually pleasing and can blend well with the surrounding environment. In addition, the cable-stayed bridge can provide a benefit for sub-structure demand due to its lighter dead weight and can reduce overall bridge span length due to its thin deck. However, higher costs requiring a specialty in cable-stayed bridge designs and construction are expected. Rendering views of these two bridge types along two recommended alignments can be seen in the Appendix.

For the approach bridge spans, more conventional type structures including precast concrete Box girder, I-girder, Bulb-T girder, and steel plate girder are viable and economic solutions. Precast concrete girders in particular can offer good durability and extreme low maintenance over their lifetime. At the bridge approaches, a flexible retaining wall system or a combination of wall and sloped fill can be considered to minimize project construction costs.

It is recommended that the typical bridge cross section have a concrete deck surface with a minimum width of either 14 feet or 12 feet depending on structure type and economics. The minimum clear height for pedestrians and bicycles using the bridge will be ten feet to any overhead structure if a roof is required. The current criteria assumed for this study is 4'-6" handrail height and 8'-0" to 10'-0" high screens on each side of the bridge.

A table that summarizes and compares various bridge alignments, structural types, and other aspects including design, constructability, aesthetic, future maintenance, traffic, and environmental impacts has been included in Section 10 of this report. The table provides construction and project cost data that should be useful for consideration of an appropriate balance among cost, function, and aesthetics for the project.



Northgate Station Access Study – Preliminary Results

The Sound Transit Board approved Motion No. M2012-42 in June 2012, which committed \$5 million towards the cost of completing the I-5 bridge project and \$5 million towards other pedestrian and bicycle improvements (and matched by the City of Seattle) to improve access to the future Northgate light rail station. The Motion also directed Sound Transit staff to conduct a station access study to help evaluate and prioritize potential ped and bike improvement projects in the Northgate area, in collaboration with the City of Seattle and King County Metro staff. Sound Transit retained Kittelson and Associates, a Portland based consultant firm, to conduct the study.

The scope of this access study was two-fold; first, conduct a connectivity analysis to assess the 15 minute walk and bikes sheds around the Northgate Station area and second, assess the access mode share of the station and identify how future improvements within the station area could benefit station access for bicyclists and pedestrians. This is a summary of the preliminary results of the access study.

The 15 minute travel sheds for pedestrians and bike riders accessing the Northgate Station are shown on the attached map. Potential ped and bike improvement projects identified by the City of Seattle and local communities are also identified on the map.

The expected mode share of riders that will access Northgate Station in 2030 and weekday boardings by mode are summarized in Table 1 below. With the construction of the I-5 pedestrian/bicycle bridge, the bike and pedestrian travel sheds expand and the number of walkers increase by 13% and the number of bicycle trips to the station increase by 4%. The increase in station ridership due to other candidate improvement projects is also summarized in Table 1. The number of new walkers and bikers who would travel to the station due to the addition of these combined projects is expected to increase by 870 boardings each weekday, a 6% increase in total new weekday station boardings.

Table 1						
Northgate Station Access Mode Share and Station Ridership Benefits (2030)						
	Park-and-Ride	Drop-off	Feeder Bus	Bicycle	Walk	TOTAL
Expected Mode Share	20%	11%	28%	4%	37%	100%
Weekday Boardings	3,000	1,650	4,200	600	5,550	15,000
Boarding Increase due to Ped/Bike Bridge				25	740	765
Boarding Increase due to Other Improvements				25	80	105
TOTAL Weekday Boardings				650	6,370	15,870
Percent Change				+8%	+15%	+6%

In addition to creating new station ridership, these candidate ped and bike improvement projects would also improve access to the station for other expected station users. Table 2 summarizes the expected

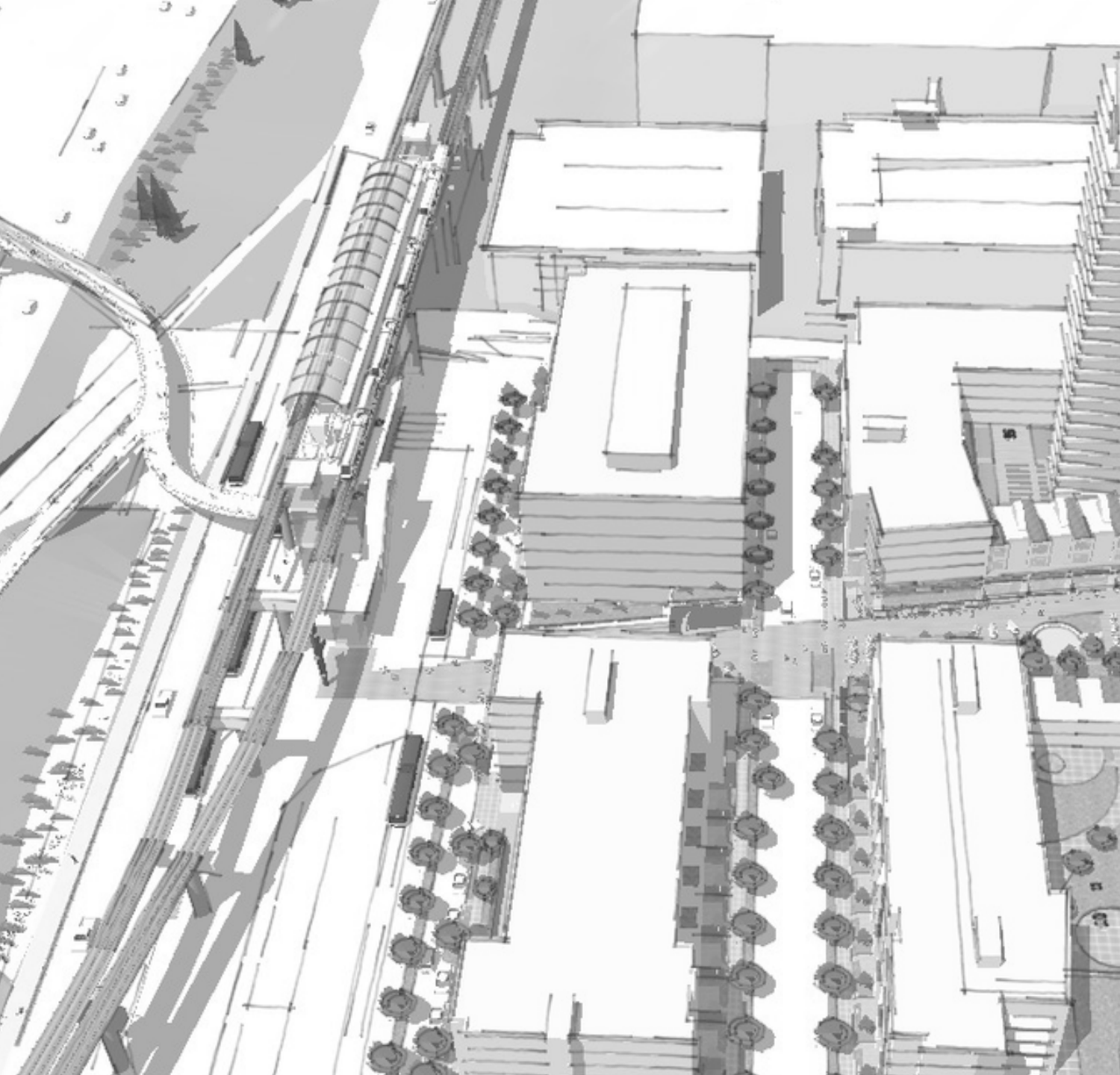


number station riders who would use and benefit from individual proposed bike improvement projects. Table 3 summarizes the number or expected station riders who would benefit from potential pedestrian improvement projects.

Table 2	2030 Northgate Station Bikers Benefited
Local Bike Improvements	
1st Ave NE Cycle Track - NE 92nd St to Northgate Way	447
Buffered bicycle lanes on 5th Ave NE between NE 80th and NE 115th St	293
Bicycle lanes on NE 92nd between Wallingford Ave and 5th Ave NE	241
I-5 Bicycle and Pedestrian Bridge	149
Protected or buffered bicycle facilities on NE 103rd St between 1st Ave NE and 5th Ave NE	82
Protected or buffered bicycle facilities on NE 100th St between 1st Ave NE and 5th Ave NE	67

Table 3	2030 Northgate Station Walkers Benefited
Local Pedestrian Improvements	
I-5 Bicycle and Pedestrian Bridge	1,169
Sidewalk upgrades on 5th Ave between NE 100th St and NE 103rd St	130
Pedestrian Enhancements - NE Northgate way between Corliss Ave N and 1st Ave NE (CTIP Project, C-12)	56
Construct sidewalks on NE 103rd St. between 5th and 8th Ave	53
Curb, gutters and sidewalks both sides of NE 92nd between 1st Ave NE and 5th Ave	46
Construct sidewalks on NE 95th St between 1st and 3rd Ave	37
Construct sidewalks on NE 98th St between 5th and 8th Ave	19
Construct sidewalks on NE 95th St between 4th and 5th Ave	14
Extend walkway along 8th Ave NE to 92nd St	9
Intersection and crossing improvements on 5th Ave and NE 94th St	8

Data Limitations: This analysis is based on light rail ridership forecasts and is limited to only estimating the number of ped and bike users traveling to or from the Northgate Station. This ridership assessment tool is not able to predict the number of non-station users who would also use and benefit from these improvements, once built.



NORTHGATE

URBAN DESIGN FRAMEWORK



City of Seattle
Department of Planning & Development

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i. EXECUTIVE SUMMARY

The future vision for Northgate is as expressed in its 1993 neighborhood plan: to “transform a thriving, but underutilized auto-oriented office/retail area into a vital, mixed-use center of concentrated development surrounded by healthy single family neighborhoods.” The neighborhood plan encompasses all facets of Northgate’s future, foreseeing:

- a denser community with many residents and diverse housing opportunities
- a network of parks and recreational amenities
- more community services
- more small local-serving businesses
- a healthy and sustainable setting emphasizing natural environmental values; and
- a transportation system that ideally serves users of all kinds — walkers, bicyclists, transit riders and motorists.

By gaining several new amenities in the last decade — library, community center, parks, streetscape improvements, drainage channel, and improved transit service frequency — Northgate has become a more livable and attractive place for residents and businesses. The City has continued to assist through a number of planning efforts that have defined design guidelines, future transportation investments, and other initiatives supporting future growth and realization of the vision.

This Urban Design Framework (UDF) defines a road map of strategies and recommendations for continued progress toward the Urban Center’s transformation. It evaluates the top priorities for future growth and recommends several urban design improvements that will be great amenities promoting livability, a better environment and a well-functioning community. All of these actions will directly support the accomplishing of Northgate’s neighborhood plan vision, especially in:

- creating a denser and vibrant mixed-use, mixed-income transit-oriented community near the Sound Transit (ST) Link and Metro Transit station;
- improving mobility and quality of facilities for pedestrians, transit riders, and bicyclists; and
- aiding the transformation from an automobile-oriented district to a better living environment throughout the Urban Center

Among the numerous benefits of a transit-oriented development approach will be:

- Increased transit system ridership and improved personal mobility
- Healthier, more walkable and livable communities supported by focused investments

- Contributes to energy conservation and climate initiatives
- Lower transportation cost burdens on households

This UDF will be used to express the preferred vision and design priorities for the future development of the Link transit station subarea. As well, further discussion and coordination with King County, Sound Transit and other agencies will inform how the vision can be realized, by influencing designs for future development and balancing transportation operational needs.

Findings

This Urban Design Framework (UDF) guides future actions that will help realize the vision identified in Northgate's 1993 neighborhood plan, calling for dramatic growth and transformation of the commercial core into a livable, walkable, dense urban center.

The UDF recommends both general and specific actions that the City will seek to implement, to achieve goals of the City's Comprehensive Plan, the neighborhood plan, and related objectives to improve Northgate as a livable and well-served Urban Center.

These include actions that support: future transit-oriented development (TOD) with high-quality public places, next to the Link transit station; enhanced transit services and operations; and investments to improve pedestrian and bicycling mobility and safety.

These can transform the Urban Center to a better living environment, enhance transit accessibility, and overcome difficulties posed by the presence of Interstate 5 as a barrier within the neighborhood, and the large "superblock" road configurations.

Planning Purpose, Process, and Guiding Principles

In the last 20 years since the Northgate Plan was adopted, much has happened – including a series of investments in public parks, facilities, streets and sidewalks, transit service, and a number of newer commercial investments and residential developments that are gradually transforming the Urban Center. Also, Link light rail is now under construction and service will begin in 2021.

This UDF provides a chance to review the neighborhood planning objectives as they relate to today’s circumstances, and better define and illustrate strategies for continuing the transformation. Topics such as how neighborhood environments support public health, livability and social equity – all referenced by the original Northgate planning – are now even more prominent in present-day city planning perspectives. Regional planning efforts and federal funding have helped motivate this current effort, to ensure that everyone is doing as much as we can to achieve high-quality neighborhoods in places that are designated growth centers and will be well-served by major transit systems.

To those ends, the City has conducted a preliminary Urban Design Study in 2011/12, and conducted expanded public outreach in 2012/13 to study options and gain feedback about how future growth can best be shaped.

Land Use Planning and Growth Principles

The most important “big themes” and priorities that have been identified for achieving Northgate’s vision, reflected in this UDF, are:

- Defining a compelling vision for the development of the Link station area district with a dense and attractive combination of residential and commercial land uses, and amenities and public spaces that are safe, active and successful.
- Accomplishing a socially diverse community with affordable housing, and amenities and services that better serve residents’ needs and make a livable place.
- Accomplishing a targeted set of pedestrian, bicycle-oriented and transit improvements that will enhance mobility, comfort and safety for all users across the Urban Center.
- Ensuring transportation mobility options and transit services are well-integrated and efficiently available to serve the neighborhood.
- Enhancing the main corridors (Northgate Way, 5th Ave NE and Meridian Ave N), and transforming Northgate’s “superblocks” throughout the Urban Center to become healthier, human-scaled and livable mixed-use districts.

Urban Design Principles

The most important urban design principles that will help improve the urban environment are:

- Providing landscaping, amenity and accessibility enhancements along key corridors to improve mobility and aesthetic quality.
- Incorporating generous public spaces, amenities and art in future development.
- Accomplishing a network of pedestrian-oriented connections across the Urban Center that will help to break up “superblocks.”
- Siting and designing buildings to reinforce the pedestrian realm.
- Including environmental sustainable design features in future development.
- Ensuring and enhancing transit service frequency and reliability.

Conceptual Framework

The UDF design recommendations are organized according to a hierarchy of three geographic scales:

1. Northgate Urban Center:

The Urban Center scale captures area-wide issues, including strategies for linkages between Northgate's subareas, housing and livability.

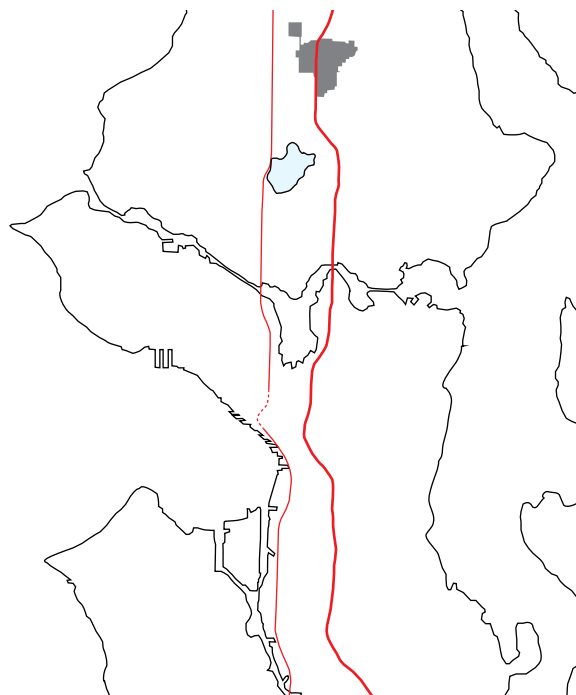
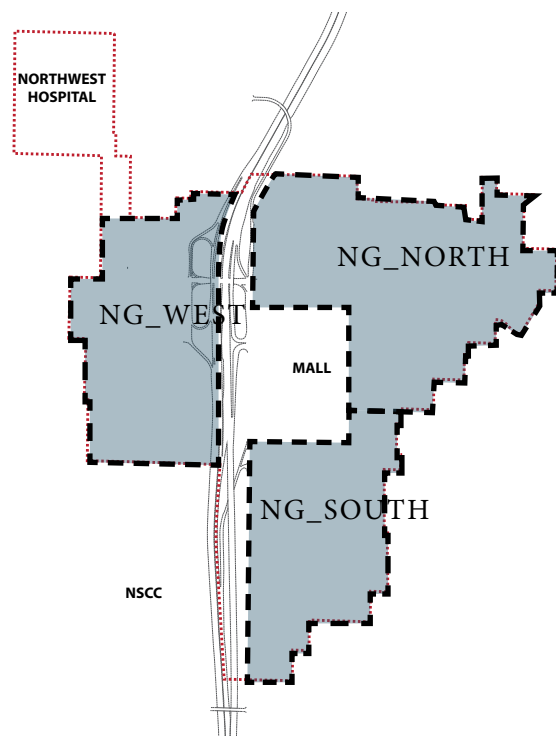


Figure 1.1 - Hierarchy of three scales of analysis

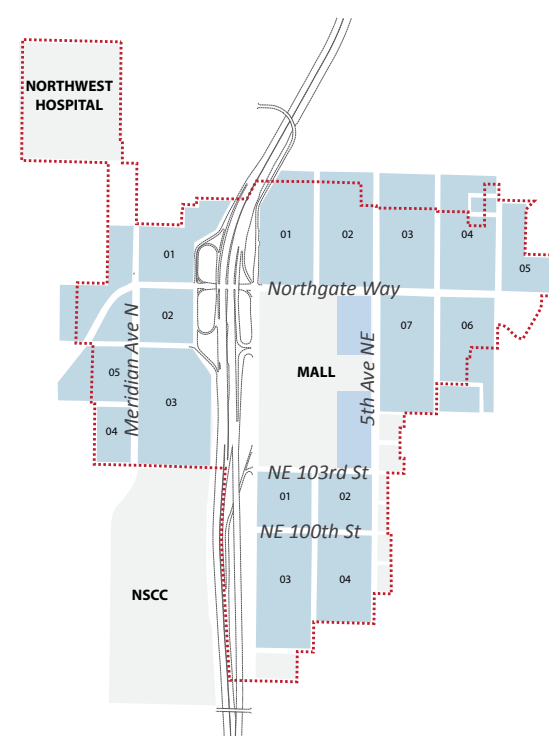
2. Northgate Subareas:

The Subarea scale explores Northgate's Urban Center in three parts, which allows a closer look at the roles and development patterns in each of these districts.



3. Northgate Superblocks:

The Superblock discussions illustrate existing issues and the future potential within several superblocks across the Urban Center. Similarly, a case study examines the future redevelopment potential within King County's Park and Ride lot south of the mall.





Festivities at the Hubbard Homestead Park

How Northgate Relates to Seattle and the Region

Located six miles north of downtown, Northgate is one of six Urban Centers designated in Seattle's Comprehensive Plan, and one of 27 regional growth centers designated in Puget Sound Regional Council's (PSRC) Vision 2040 regional growth management plan. The Urban Center includes 410 acres on both sides of Interstate 5. The Urban Center is at the conjunction of several surrounding residential neighborhoods, including Licton Springs, Haller Lake, Pinehurst, and Maple Leaf, with others such as Victory Heights, Lake City and Green Lake nearby.

Northgate is one of the City's largest retail, medical and office centers outside of downtown and home to one of the City's largest hospital complexes outside of central Seattle. This reflects its location near Interstate 5 and its history as a traditional automobile-oriented commercial shopping district that also provides a variety of medical and educational services to all of North Seattle. The adjacent North Seattle Community College is a key asset with a mission to provide 21st Century education, training and services to elevate residents' competitiveness in the job market and aid Seattle's economic vitality.

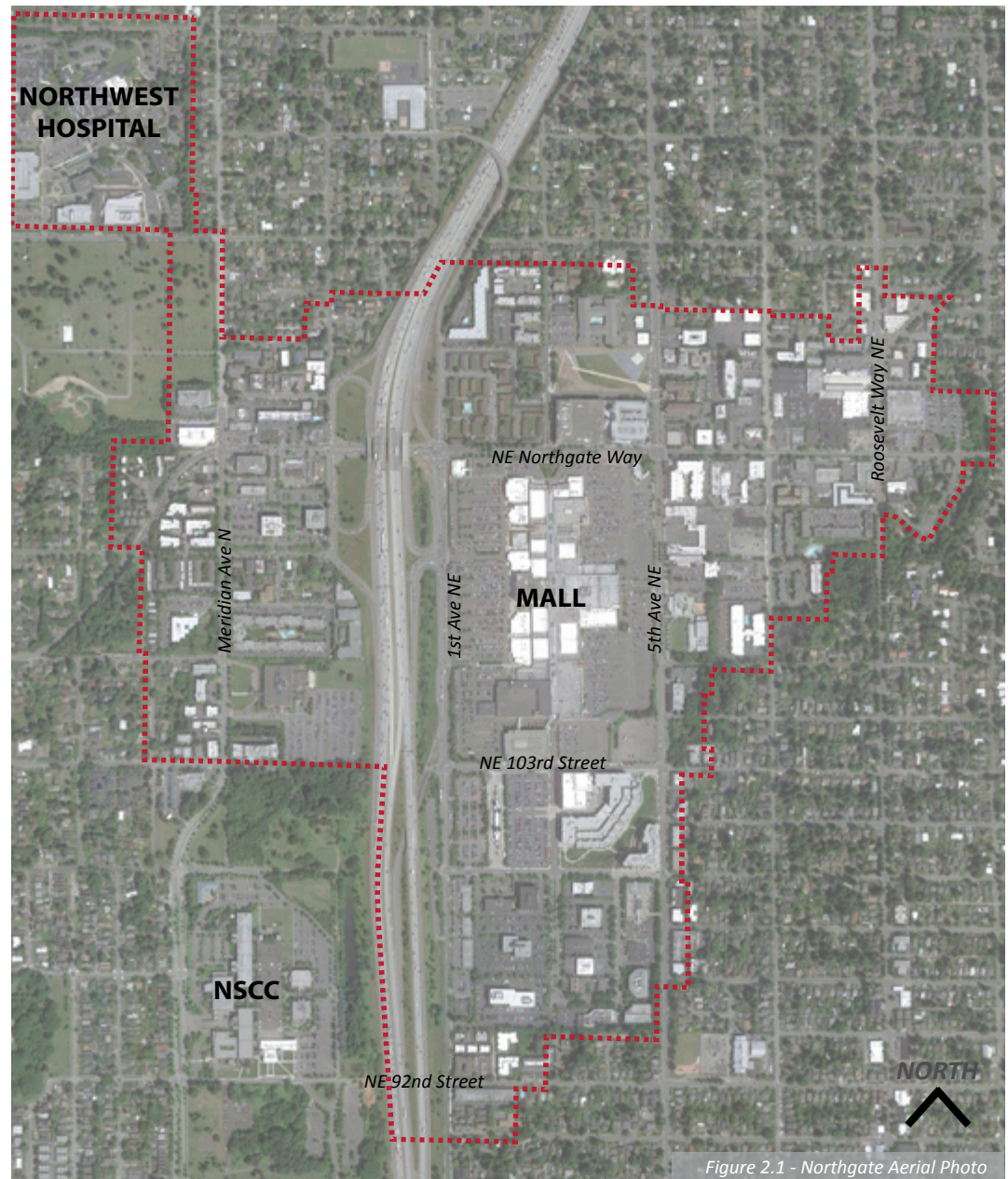


Figure 2.1 - Northgate Aerial Photo

The area includes the Northgate Transit Center, the largest in King County Metro's system, served by thirteen Metro bus routes and two Sound Transit Express bus routes, and providing 1,500 park-and-ride spaces. The new Sound Transit Link station and service, to open in 2021, will increase Northgate's significance to regional and local transit by improving transit service connectivity, speed, frequency and reliability, and is one of the best opportunities to enhance a transit-oriented community near a light rail station that fully leverages this transit investment. For this reason, it was selected as a "catalyst project" site for the PSRC's Growing Transit Communities Partnership, funded through a grant from the federal Partnership for Sustainable Communities.

Seattle's Comprehensive Plan set 20-year growth targets for the Urban Center of 2,500 new housing units and 4,220 net added jobs through 2024. Compared to the other Seattle urban centers, growth has occurred relatively slowly in Northgate: only 30% toward its housing growth target and 19% toward its employment growth target. This amounts to a net gain of 740 dwelling units and 800 jobs since 2004.

Urban Center	2004	2005	2006	2007	2008	2009	2010	2011	2012	Growth	Target	% of Target Met
Downtown	214	277	749	652	508	1,638	541	3	-37	4,331	10,000	43%
First Hill/Capitol Hill	74	67	451	127	239	484	682	(8)	1050	3,092	3,500	88%
University	5	135	18	139	62	456	(3)	319	205	1,331	2,450	54%
Northgate	-	5	22	(1)	1	699	8	3	2	739	2,500	30%
South Lake Union	162	151	-	614	97	735	89	-	-	1,686	8,000	21%
Uptown	111	8	212	94	173	320	46	207	105	1,165	1,000	117%

Table 2.1 - Northgate Urban Center Housing Growth

Urban Center	2004	2005	2006	2007	2008	2009	2010	2011	Target	% of Target Met	Total jobs Added since 2004
Downtown	143,288	142,757	143,287	145,756	150,995	141,501	136,381	139,956	29,015	-11%	(3,332)
First Hill/Capitol Hill	40,015	40,425	40,910	40,699	41,538	42,181	41,637	42,696	4,600	58%	2,681
University	32,724	34,375	34,196	34,088	33,489	32,972	32,972	33,469	6,140	12%	745
Northgate	11,022	10,605	10,394	10,439	11,065	11,123	11,430	11,827	4,220	19%	805
South Lake Union	17,863	19,017	20,340	21,645	22,880	21,427	19,644	26,756	16,000	56%	8,893
Uptown	13,740	14,355	14,256	14,558	15,180	13,862	13,911	14,801	1,150	92%	1,061

Table 2.2 - Northgate Urban Center Employment Growth

Northgate's Existing Assets and Neighborhood Features

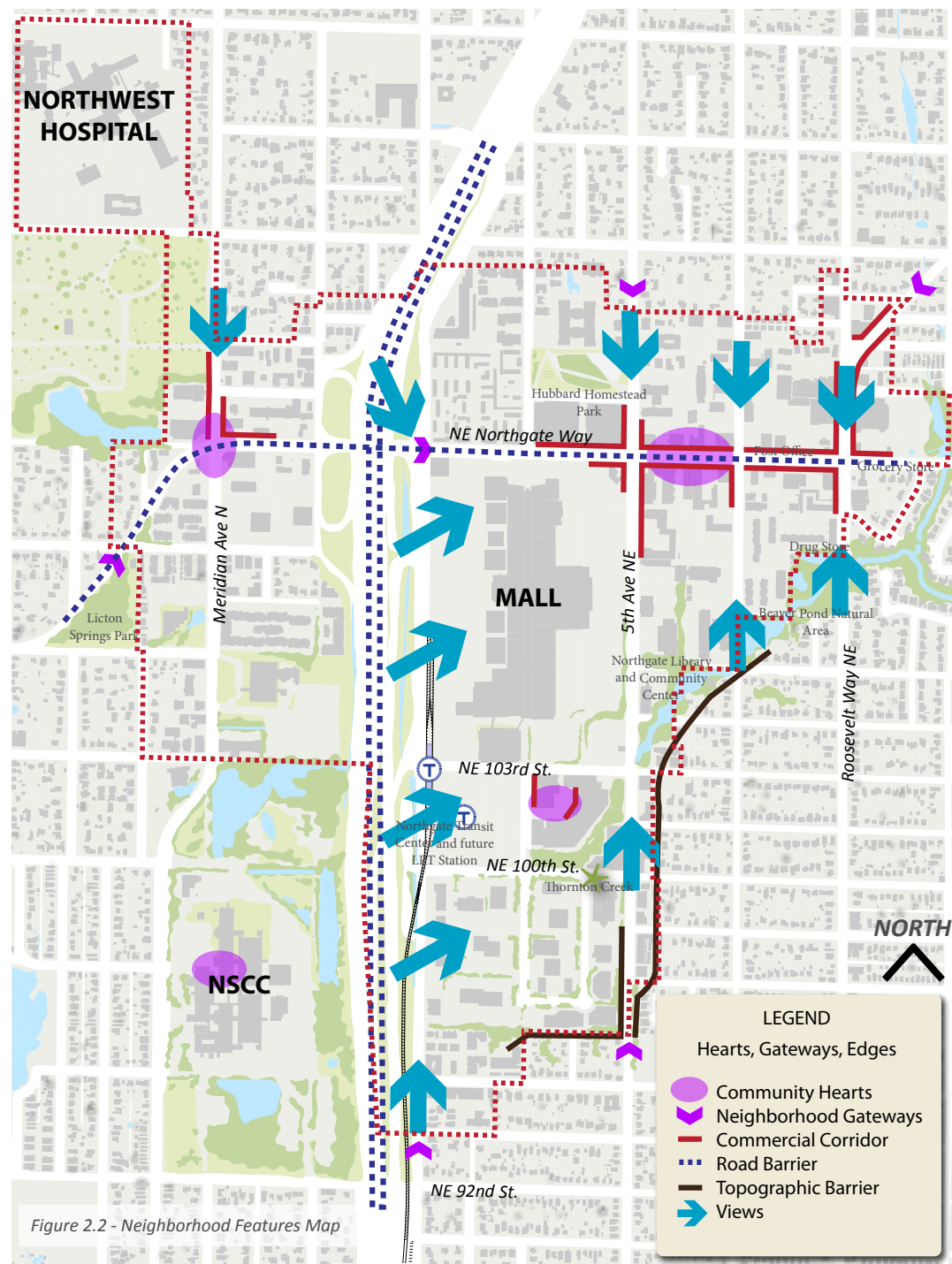
Physical Setting

The Urban Center is located in a valley bounded by the hillsides of Maple Leaf to the east and south, and Licton Springs to the west. Much of the Urban Center land slopes gently down toward the south. Thornton Creek provides natural drainage in ravines toward Lake Washington, including from areas west of I-5 via the wetland complex at the college. Areas such as the mall parking lot and the blocks between NE 100th and 103rd Streets have been filled in the past, covering peat soils in portions of the existing parking lots.

Gateways, Hearts, and Edges

“Gateways” are notable passages into and out of the neighborhood, “hearts” are the centers of community life, and “edges” are linear features that act as physical boundaries of subareas and the whole neighborhood.

Gateways: Northgate’s rolling topography and street patterns combine to define the area’s gateways on streets including Northgate Way, Pinehurst Way NE, 5th Ave NE and 1st Ave NE. The area’s slopes create vistas primarily along north-south street corridors that, combined with the experience of leaving primarily single-family residential areas and entering the commercial district, provide a sense of entry.



A similar experience occurs when street users pass under I-5 on Northgate Way, or exit Interstate 5 at 1st Ave NE and enter the densest shopping district. The existing Transit Center also provides a portal for entry and exit to Northgate, a function that will be emphasized even more greatly when light rail service begins.

Hearts: Heart locations are the centers of commercial and social activity within the neighborhood. They provide anchors for the community and help give form to the neighborhood.

The Northgate Mall, North Seattle Community College, Thornton Place and the commercial district near 5th Ave NE and Northgate Way are the most active centers. Yet most of these places are either internally focused (such as the indoor activities at the mall) or are experienced as primarily automobile-oriented places due to their function as traditional postwar commercial shopping districts. So, lesser overall sidewalk qualities tend to limit the attraction of pedestrians, although certain segments have newer sidewalks, and places such as the library/community center and Hubbard Homestead Park are linked by improved facilities on 5th Avenue NE.

Thornton Place is a newer kind of place that accommodates driving patrons, and has a movie theater complex but also a variety of residential opportunities as well as pedestrian-oriented plazas and open spaces.

Edges: Interstate 5 is the most important edge/barrier because it divides the western and eastern portions of the neighborhood with only a few streets that bridge the divide (N 92nd St., Northgate Way, NE 117th St.). The effects of this edge are significant upon overall traffic congestion and pedestrian accessibility – many Licton Springs residents, though physically close, must choose between only two routes that can be congested, to reach the heart of Northgate. On Northgate Way, the congested traffic itself and the wide street also create a sort of barrier or edge within the core.

Along the south and southeastern edges of the Northgate core, the steep topography of hills in Maple Leaf, and the Thornton Creek drainage, define edges that effectively limit the extent of the Northgate commercial core.

Views

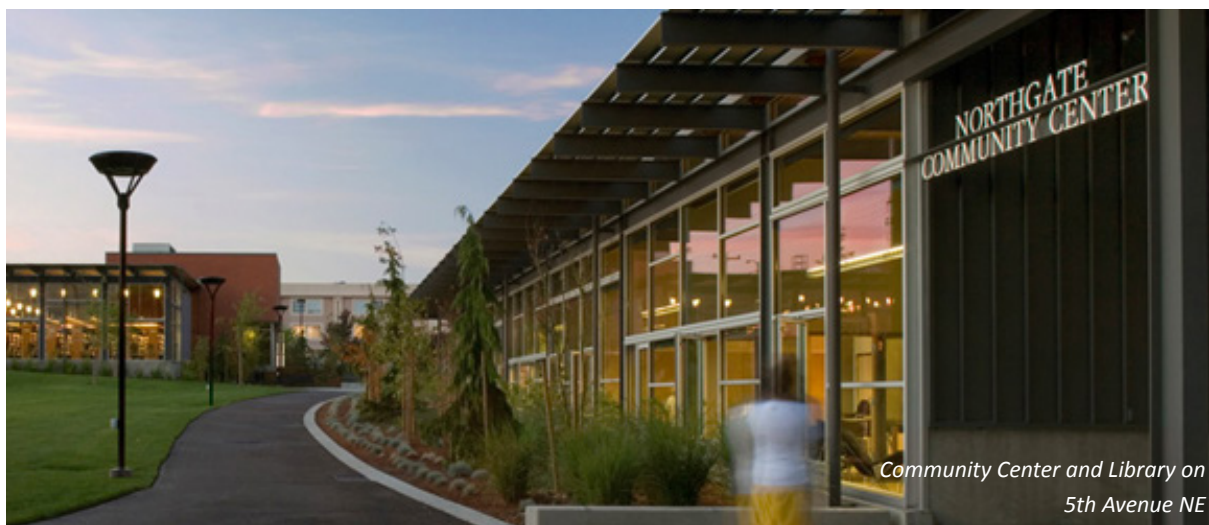
Views in Northgate consist mainly of territorial views north-south along 1st Ave NE, 5th and 8th Avenues NE and Roosevelt Way NE, influenced by the rolling topography. From Maple Leaf, views westward are also possible. On Meridian Ave N., a Downtown skyline view may be seen toward the south. Motorists also experience Northgate from Interstate 5 both northbound and southbound, seeing Thornton Place, the mall, the Transit Center, the college and multifamily buildings as they pass. A southbound view toward Mount Rainier is also possible from Interstate 5.

Parks, Recreation, Open Space

The relatively recent additions of Hubbard Homestead Park, library, community center, and Thornton Creek water quality channel have improved the range of amenities serving the Northgate core.

Active recreation features are sparse, but they include the community center, an outdoor basketball court at Hubbard Homestead Park and a Frisbee golf facility at Mineral Springs Park (west of I-5). There is also a P-Patch created by the community on NE 103rd Street, and other open space such as the Thornton Creek stream ravine with an associated beaver pond marsh that provide unique features with natural values.

The college's periphery also contains several natural tracts that include wetlands that have habitat and educational value. Licton Springs Park and Northacres Park are also located nearby.



Area Circulation and the “Superblock” Land Use Pattern

Northgate’s street circulation pattern consists mainly of a limited number of north-south arterials (Meridian Ave N., 1st and 5th Aves NE, and Roosevelt Way NE) with two east-west arterials (Northgate Way and N 92nd Street) connecting to other neighborhoods. Other east-west streets include a relatively small number of local streets, most with dead-end traffic controls aimed at reducing through traffic in neighborhoods to the north and east of the Urban Center. Given its historically commercial orientation, Northgate’s blocks are large, typically ranging from 650 to 1,300 feet in length.

This combination of blocks and limited number of streets creates a “superblock” configuration that tends to constrict mobility for all travel modes, from vehicles to bicycles to pedestrians. This pattern is illustrated to the right and compared to other Seattle neighborhoods that have many more streets for circulation and many more but smaller blocks.

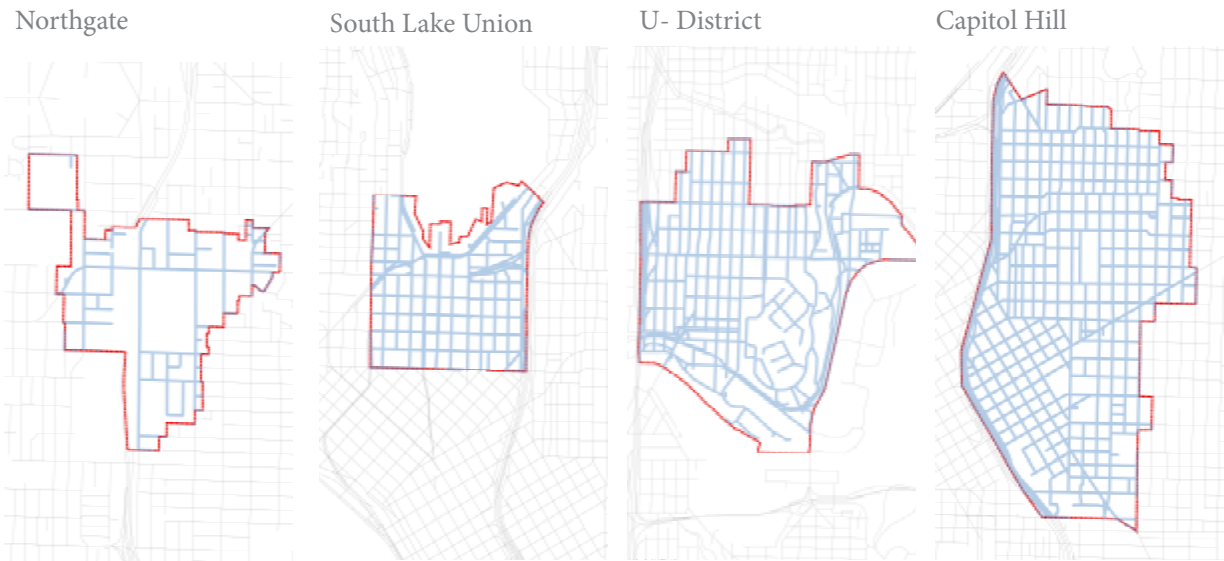


Figure 2.4 - Comparison of Seattle Urban Centers Street Density

	Acres	Block Density	Intersection Density	Typical Block Length
University District	773	12%	17%	240 x 460
Capitol Hill	913	33%	28%	330 x 420
South Lake Union	324	25%	29%	330 x 420
Northgate	410	8%	10%	1280 x 600

Table 2.3 Seattle Urban Centers Connectivity

Existing Pedestrian Facilities

Even though most streets in the Urban Center have sidewalks and some have attractive treatments, the overall quality of the pedestrian experience is affected by limitations in pedestrian facilities. These relate to the width and physical conditions of existing sidewalks, gaps in network completeness, shortfall in landscaping and street furniture, the shortage of off-street pedestrian routes, and in the presence of barriers such as Interstate 5.

Physical condition: Walkable sidewalk widths vary widely and sometimes are narrowed by utility pole placements. Typical widths range to as narrow as 3-6 feet, although most newer sidewalks are wider than 6 feet. Older sidewalks can have uneven surfaces, and intruding landscaping, cracking, and adjacency to vehicle traffic lanes can affect overall comfort and reliability.

Network completeness: Within the Urban Center, only 3rd Ave NE south of NE 100th Street lacks sidewalks entirely, which inconveniences employees in this office district. Due to a series of improvements in recent years, other streets such as 1st Ave NE and 8th Ave NE have improved or extended facilities that provide relatively complete walking opportunities across the Urban Center. However, for the adjacent Maple Leaf and Pinehurst neighborhoods to the east and north, there remain either no sidewalks on most streets or limited older isolated segments north of NE 95th Street.

Off-street Pedestrian Facilities: In the Urban Center, a shortage of defined pedestrian pathways through large lots limits overall pedestrian connectivity through the area's superblocks. The Mall property, however, does have a number of pedestrian paths on its western and southern sides. Given this shortage and a lack of mid-block connections, walkers have to pass through parking lots and otherwise feel secondary to automobile movements.

Interstate 5 Pedestrian Barrier: The I-5 right-of-way creates a significant barrier to pedestrians that hampers connectivity between Licton Springs, the college, and the main core of Northgate, including the transit center. This continues to discourage pedestrian trips. However, existing transit service helps extend the range of pedestrians and can carry them past the I-5 barrier. Three transit routes provide eight trips per weekday hour in both directions to Licton Springs via N 92nd Street, and another route travels via Northgate Way with three trips per hour in each direction. Also, the pedestrian environment along Northgate Way at I-5, including the underpass, is uncomfortable due to the combination of sidewalk quality, lighting quality, nearby vehicles, and the need to cross a number of busy streets.

The City has identified Northgate as a High Priority Area as illustrated in the City's Pedestrian Master Plan. The High Priority Areas Map identifies locations in Seattle where people need to be able to walk the most. These locations are shown as the darker orange areas on the Figure below.

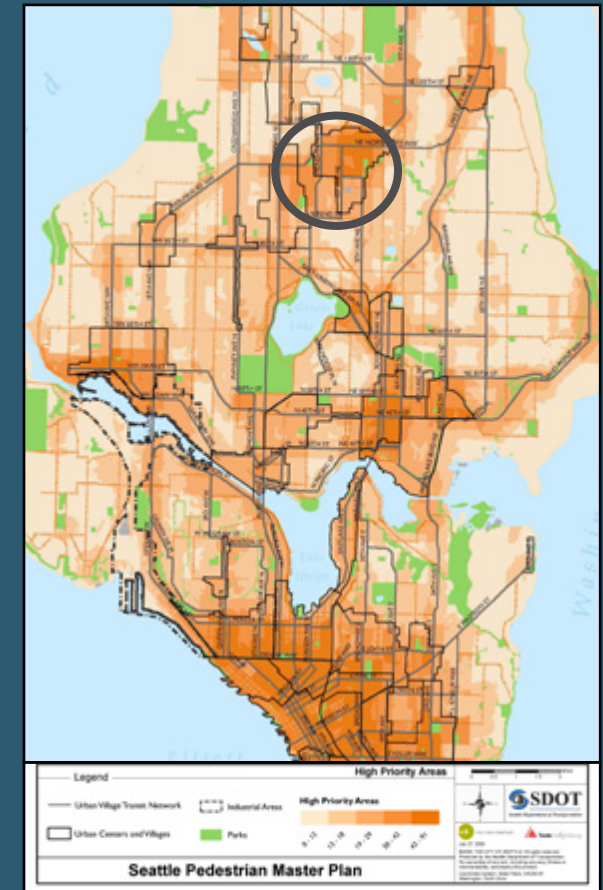


Figure 2.5 - Seattle Pedestrian Master Plan

Existing and Planned Bicycle Facilities

Bicycle connections in Northgate are compromised by the same impediments that affect pedestrian travel. Existing designated bicycle routes offer relatively little coverage for the Urban Center, consisting of “sharrows” on portions of streets including 5th Ave NE, NE 103rd Street and College Way N.

Typical bicycling routes to/from Green Lake may use N. 92nd St. as an east-west connection, and First Ave NE provides a logical routing northward toward an I-5 crossing at N 117th Street that aids connections to/from the north. First Ave NE currently lacks bicycle facilities, but a two-way ‘cycle track’ is proposed to be built on the west side of 1st Ave NE from N 92nd Street to NE 103rd St. Further to the north, a multi-use path is planned on the east side of 1st Ave NE, reached from the cycle track by crossing the street at NE 103rd St.

Transit Circulation

The Transit Center is the focal point for service in north Seattle and Shoreline, providing robust local and regional transit service options on several Metro and Sound Transit routes, serving places to the north, east and west of Northgate. This includes two-way all-day routes connecting Fremont, Ballard, Crown Hill, Licton Springs (including Northwest Hospital), Bitter Lake, Jackson Park, Lake City, Victory Heights, Maple Leaf, Roosevelt, U-District, Green Lake, Wallingford, and Shoreline. Also, one-way peak-only routes connect the Transit Center with First Hill, Overlake and Bellevue.

A frequent route connects Lake City to Downtown via the Transit Center and I-5. It uses the I-5 reversible lanes when available, providing good speed and reliability, with extra trips in the peak periods’ peak direction. Link service will replace the Northgate-to-Downtown connection in 2021. Link will also significantly improve the connection to the U-District given rail’s reliability, frequency and speed.

Some transit riders have reported a degree of accessibility challenge due to the impediments presented by Interstate 5, limited arterial street network, topography, and limitations on the quality of pedestrian and bicycle connections.

Citizen feedback suggested that bus transfer times for westbound routes from the Transit Center also add extra time to a bus trip. This confirms there are various impediments that make a difference in the choice of travel options; for example, students may choose to drive to the community college even though parking is not free on the campus.

Long-term transit funding and routing choices after light rail service begins are not set, but may increase service frequency between the light rail station and surrounding neighborhoods. This might occur largely along existing routes. However, route adjustments also could occur in the future.

Reliability in future transit service will continue to depend upon agencies making good choices in future arterial street network improvements. These choices for Northgate’s streets will need to balance traffic flow and transit accessibility purposes with access and safety needs for pedestrians and bicyclists. This balancing that acknowledges transit functions is important because fostering transit service frequency and minimized wait times are critical to attracting riders, especially those who transfer between routes.

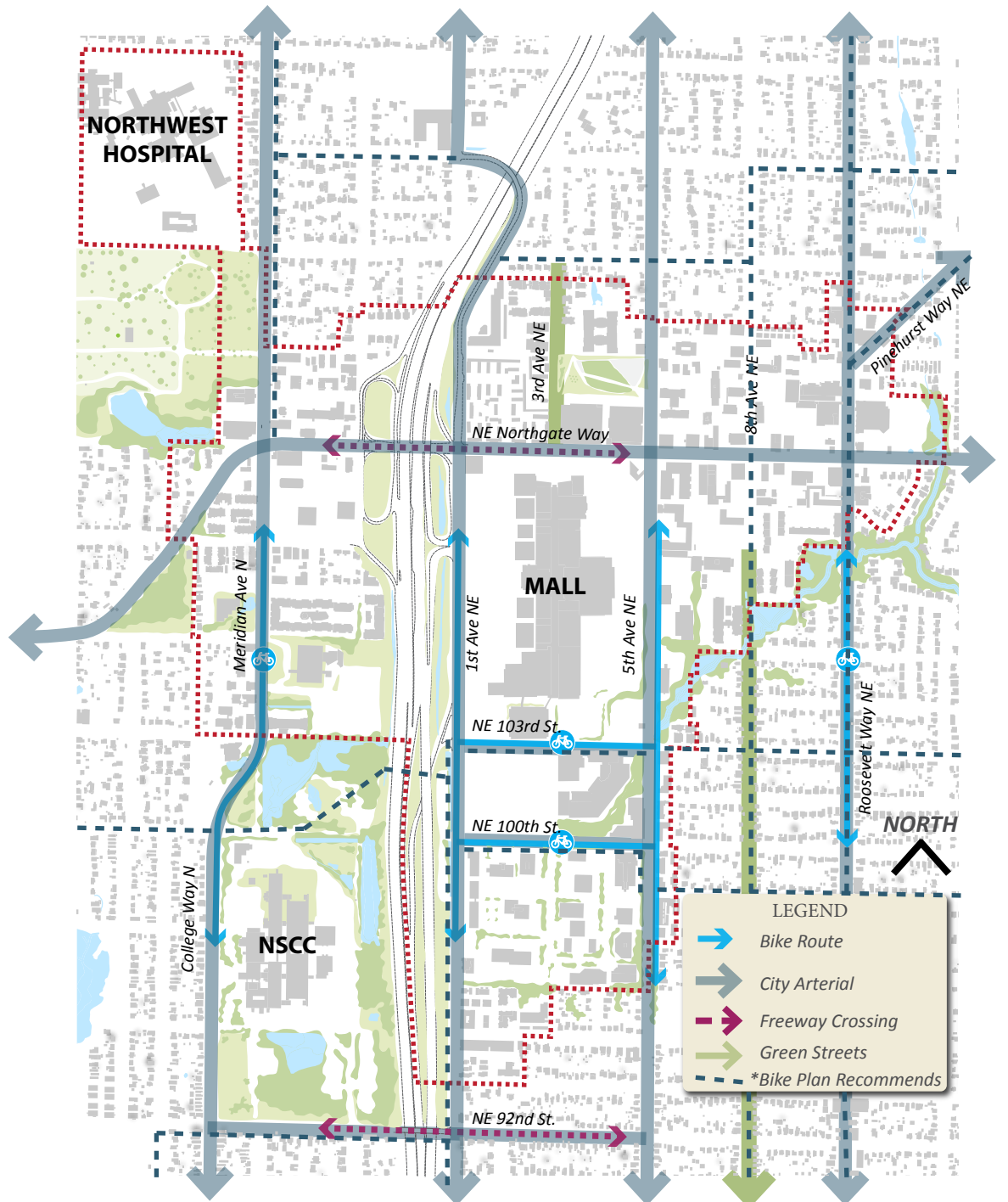


Figure 2.6 - Northgate Mobility Map

*Proposed Bicycle Master Plan recommends local connections, neighborhood greenways, and cycle tracks (1st Ave NE & Roosevelt Way), as future improvements.

The Urban Center's Development Potential

Past development has followed a couple of general trends in where investments have been made, which may inform likely future development trends:

1. Developments of private and public facilities have clustered along 5th Ave NE. The Thornton Place, Northgate North, 507 Northgate Apartments, Library/Community Center, and Hubbard Homestead Park have occurred in the last decade or so along 5th Ave NE. This may reflect a perceived viability for development immediately surrounding the central mall location that is the heart of the Urban Center.
2. Development has also clustered along Meridian Ave N. This pattern likely reflects a consolidation of medical service and office uses along this corridor, which reinforces the strength of this local center west of I-5.
3. Thornton Place was a “pioneering” development in the southern part of the Urban Center, which has been followed recently by a hotel proposal on 1st Ave NE. Thornton Place has demonstrated the viability of a multifamily residential center in this subarea, along with a small concentration of retail uses and movie theater. This will help the prospects of future development receiving financing and continuing an infill trend.

The area’s development potential also relates to the size of properties, the condition of existing buildings, and the potential offered by existing zoning. A development “propensity” analysis prepared for this UDF finds there is moderate to high potential for several properties in the Urban Center to redevelop over the long term, in each of the Center’s subareas. Potentially redevelopable properties are larger in the north and south subareas, east of I-5. The overall pattern suggests much future development potential is located along the Northgate Way corridor, and in certain large tracts south of the mall, including the “TOD site” adjacent to the light rail station.

Similar to past development trends, and based on current knowledge about probable developments on certain sites, the likely trend in future infill development will be to grow first in areas surrounding the Link station and mall property, and subsequent redevelopment to be more likely further east and west along Northgate Way and further south in the south subarea of the Urban Center. Other properties, slightly removed from Northgate Way itself, could also see infill development that would continue trends initiated by developments such as the 507 Northgate Way apartment complex. Places such as the mall property’s eastern edges (northeast and southeast corners) could also be attractive for long-term infill development, although the mall ownership indicates its main priority is focusing on the mall operations.

In summary, there is potential to continue trends of infill redevelopment that will continue the gradual transition in the Urban Center’s land use from a traditional automobile-oriented shopping district to a denser mixed-use center. The future light rail service beginning in 2021 appears to be a significant factor that could increase the long-term prospects for such infill to occur. As the nearest area to the light rail station, the south subarea would most directly experience the locational benefits of light rail service, which should aid long-term future development prospects which would help transform that subarea.

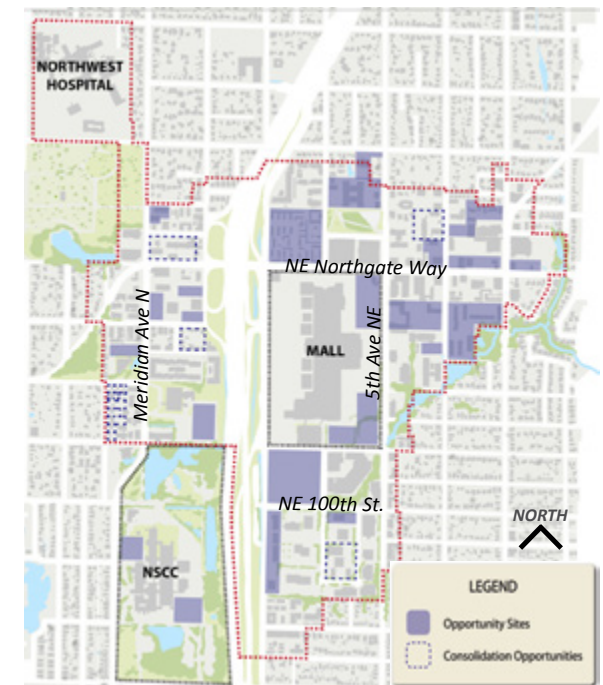


Figure 2.7 - Development Propensity

Conclusions of the Land Use/Design Analysis for Existing Conditions

Although designated as a single Urban Center, the Northgate area actually comprises three separate subareas. Each subarea has clusters of single-use automobile-oriented office, residential, retail and academic (NSCC) buildings (shown on the adjacent diagram) that are relatively independent from one another. Also, the scarcity of options to walk pleasantly within each subarea and between subareas contributes to the sense of three separated districts.

The following Urban Design recommendations are targeted to enhance the character of the three subareas through encouraging land uses that will be supportive of the neighborhood plan vision, and mobility improvements that will help reintegrate the subareas into a cohesive Northgate Urban Center.

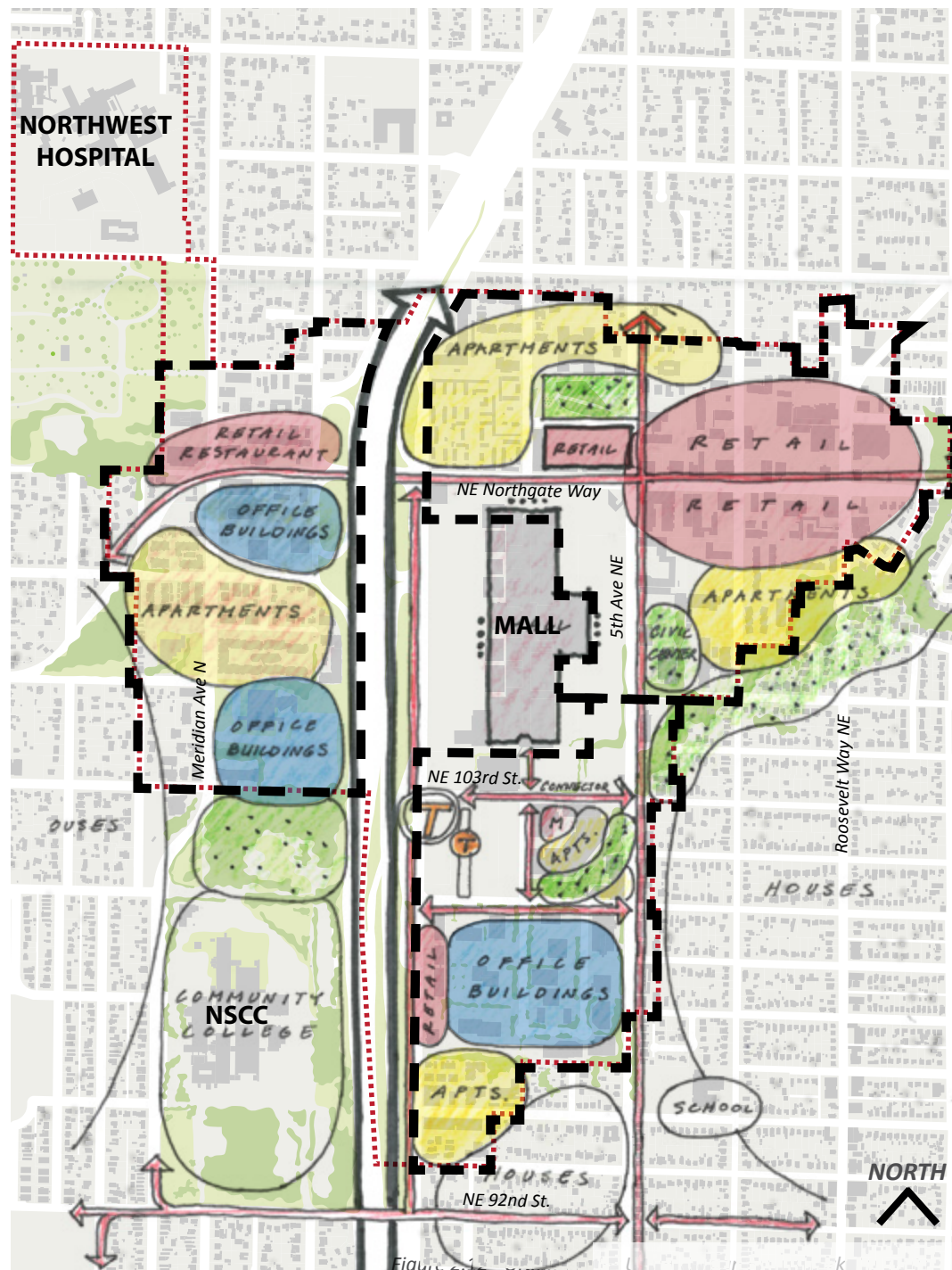


Figure 2.8 - Neighborhood Land-use Analysis Map

URBAN CENTER: Recommendations for healthy, livable, equitable neighborhood development

City staff sought input on priorities for improving Northgate's future in nearly 20 meetings that covered a broad spectrum of neighborhood residents and stakeholders, most of whom had not participated in past planning discussions. Groups included students, seniors, parents and children living in apartment housing, households newly arrived in Seattle, Christian and Muslim faith-based communities, and cultural communities including Eritrean, Somali and American Indian/Alaska Native. Community councils were also updated, and input from business representatives, developers, and health care providers was gathered.

The product of these discussions is a better understanding that livable and healthy communities rely on neighborhood characteristics that relate to all of the following:

- Maintaining public safety for all
- Good community services and facilities
- Opportunities for improving personal health
- Quality physical environment
- Excellent transportation
- Affordable housing

The relationship of these topics to urban design and Northgate's neighborhood development is summarized as follows. This provides advisory guidance about how future growth and City efforts can effectively pursue improved public health, livability and a neighborhood that equitably serves its residents.

Public Safety

1. Ensure public safety is maintained at the Link station, transit center, I-5 pedestrian/bicycle bridge, public spaces in the TOD site, and parks throughout the Urban Center, through good lighting, sufficient law enforcement presence, enforcing civil behavior in public spaces, and providing features such as emergency call boxes.
2. Pursue design and siting of public spaces and buildings that will provide "eyes on the street" and encourage peoples' presence at most times of day, thereby discouraging uncivil behavior. Encourage environmental design techniques that will assist in crime prevention.
3. Ensure that sidewalks, crosswalks, traffic signals, and bicycle facilities are designed and operated to ensure safe conditions.

Community Services and Facilities

1. Encourage provision of more recreational facilities to support active recreation and activities such as picnicking at existing parks.
2. Encourage provision of more community facilities, such as community meeting rooms, for free or low cost, to ensure everyone can afford and make use of public facilities.
3. Encourage provision of artist studios and other arts/cultural facilities in future Urban Center development, including within the station area. Provision of space to support creative activities, cultural opportunities, and social services activities would add vitality to the mix of uses in growth areas, and would help support community needs. Places such as museums or cultural education centers could also become attractions for tourists and scholars, and would express elements of this area's identity.

Improving Personal Health

1. Encourage future development that provides greater access to fresh food.
2. Encourage future development and public spaces and facilities that support physical activity and greater social connections, through more walkable features and socially engaging places.
3. Encourage development of places that support new economic activity and entrepreneurship, including small businesses, in an equitable manner.

Quality Physical Environment

1. Ensure sidewalks are clean, maintained and passable.
2. Encourage development that avoids excessive exposure of residents to air and noise pollution that threatens healthy living.
3. Encourage inclusion of green and sustainable development features that will enhance the quality of public spaces and environmental protective performance.
4. Encourage development of buildings, facilities and public spaces that are attractive, support healthy social activity, arts/cultural activities, and provide a great sense of place.
5. Encourage inclusion of physical design themes in future development that will reflect elements of this area's identity and character, such as: native American cultural heritage, 19th and 20th Century cultural heritage, natural history and vegetation.

Excellent Transportation

1. Ensure easy transit connections, frequent and reliable bus service, good transit infrastructure, good parking accessibility, and sufficient park-and-ride capacity are available at the light rail station.
2. Ensure traffic operations are sufficiently managed, to maintain and improve mobility across the Urban Center.
3. Provide a diverse range of improvements that will improve safety and quality of facilities for walking and bicycling, including an emphasis on filling gaps and improving substandard conditions in locations serving the neighborhoods within and near the Urban Center.

Affordable Housing

1. The City (supported by citizens' preferences) encourages setting definite performance levels in provision of affordable housing that will equitably support the presence of a diverse population in vicinities near light rail stations and frequent transit service. Set performance levels likely to meet Urban Center goals of: 13% of new dwelling units serving households at 0-30% of area median income; 12% serving households between 30-50% of area median income; and 18% serving households between 50-80% of area median income.
2. Encourage provision of services and amenities that will complement the ability of households of all income levels to choose to live in the Northgate Urban Center.

Online Survey Results: Summer 2013

After the Draft UDF was published, an online survey yielded more than 200 responses. This included opportunities for written input.

The results:

--- The highest expressed priority is to achieve safe, enhanced pedestrian and bicycling conditions between the station area and surrounding neighborhoods.

--- Ensuring affordable housing presence, sufficient amounts of commuter parking, and a well-designed station area core that is safe, comfortable and an engaging 'people place' are also among the highest priorities.

--- There is also significant interest in supporting local-based small businesses, a grocery store, and achieving an attractively greened landscape using sustainable green strategies.

--- The UDF's recommendations for an attractive public realm, including park/plaza, public movement corridors, and street park on 3rd Ave NE received majority support.

Opinion was more divided on whether tall buildings should be encouraged, with a slight majority in favor. But most agreed with the recommended strategies such as tower width controls and preservation of solar access on key public spaces.

URBAN CENTER: Land Use Recommendations

Recommendations for the neighborhood are designed to inform and guide the ongoing redevelopment of the urban center.

Subareas

The recommendations support improvements that will help each subarea fulfill its role in the Urban Center:

1. Northgate North subarea as a dense retail corridor augmented with more residential uses and improved pedestrian characteristics.
2. Northgate West as an office and commercial activity center surrounded by multifamily residential uses and complemented by North Seattle Community College.
3. Northgate South as a significant opportunity area to establish a transit-oriented development district with a vibrant center adjacent to the Northgate Link station. Working together with Thornton Place and potential infill development south of 100th Street, this area will be enhanced as an exciting, people-oriented place and a key transit hub.

Break up the Superblocks

The large-block development and street pattern needs to be broken into more human-scale blocks that will foster an improved walkability. The combination of new buildings and public spaces, including streets and sidewalks will actually redefine the character of the Northgate subareas into more active, walkable and livable places.

Promote Infill Development in Parking Lots to Expand and Create Vital Cores in Each Subarea

Each subarea will be enhanced as infill development is accomplished in key locations, particularly the northeast and southeast corners of the Northgate Mall parking lot. Parking lots on the east side of the Mall contribute greatly to the automobile oriented scale of the Urban Center. To the degree that infill development can occur in areas near 5th/Northgate Way and near the corner of 5th/NE 103rd Street (as well as other parts of the east parking lots), this would create new blocks that form a better-realized core for both the north and south subareas of the Urban Center.

“Turning the corner” with development at 5th/103rd Street would also begin to accomplish a closer physical linkage between the north and south subareas that will also encourage more walking within the neighborhood.

In the South subarea, introduction of denser development with new residential opportunities in parking lots or underdeveloped properties will be important to enhancing livability in the station area.

Realize a Network of Pedestrian Routes and Linked Public Open Spaces

Along with the benefit of breaking up the superblocks, the introduction of more pedestrian routes and small streets within the superblocks will enhance overall mobility.

But just as important will be the benefits provided by a series of public plazas and parks that will be realized within each superblock. This network of amenities and movement corridors will greatly improve the perceived quality and livability of each part of the Urban Center by defining a network that is pleasant and complementary to the larger street system.

URBAN CENTER: Mobility Recommendations

Northgate Loop, Bridges, East-West Connections and Transit

This UDF proposes four primary themes for improving accessibility throughout the Urban Center:

1. The “Loop” concept to improve the continuity of access routes for pedestrians by connecting all of the subareas. Key streets in this concept are Northgate Way, Meridian Ave N., 5th Avenue NE, and NE 103rd Street. Improvements there would provide a continuity and visibility that is lacking today in sidewalk routes.
2. The “Bridges” concept that recognizes there are a handful of key places along a main loop with shortcomings that need improvement in order to support the best movements through the Urban Center. These would allow distinctive design improvements to improve linkages among the subareas, to encourage more walking, bicycling and transit use.
3. Improved quality of east-west pedestrian connections between Roosevelt Way NE and 3rd Ave NE to enhance accessibility to the Link station.
4. Maintain and improve transit service connectivity throughout the Urban Center with short headways and good transit speed and reliability.

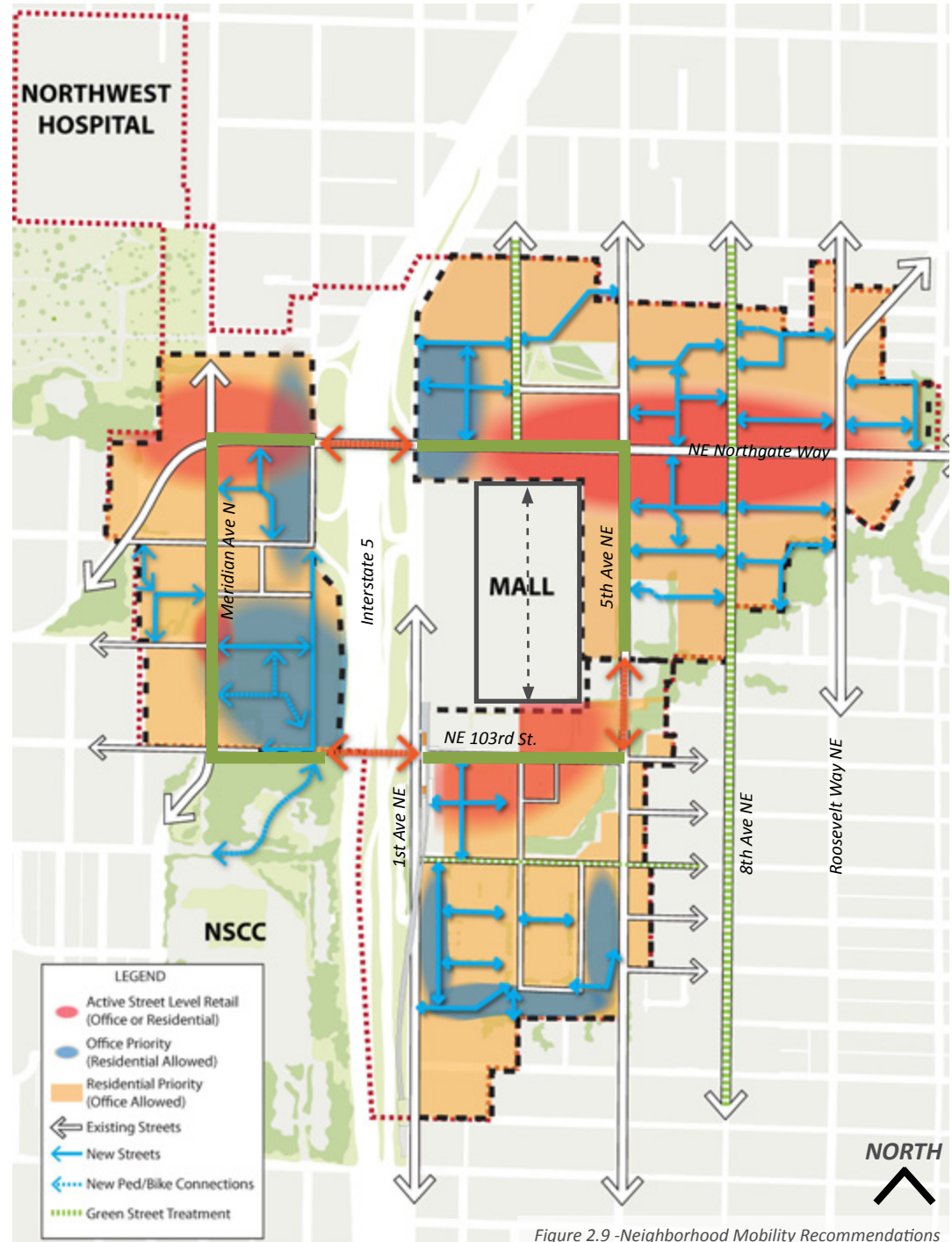


Figure 2.9 -Neighborhood Mobility Recommendations

The Northgate Loop concept

The four streets of the Northgate Loop should be improved to establish a conspicuous and identifiable route that will assist and prioritize pedestrians, bicycles and transit. Wherever possible, these improvements should share consistent design elements to provide visual indications of continuity and improve wayfinding. The following traditional urban “elements of continuity” are recommended:

- Sidewalk improvements with related reallocations of space devoted to other street functions, within the 5th Ave NE and Meridian Ave N rights-of-way
- Pedestrian lighting
- Sidewalk paving features
- Moving utility poles where they are sidewalk impediments
- Benches and trash receptacles
- Information and “wayfinding” signage
- Consistent improvements to transit stop elements
- Crosswalk design and safety features (e.g. lighting)
- Public art



Wayfinding elements



Street Furniture

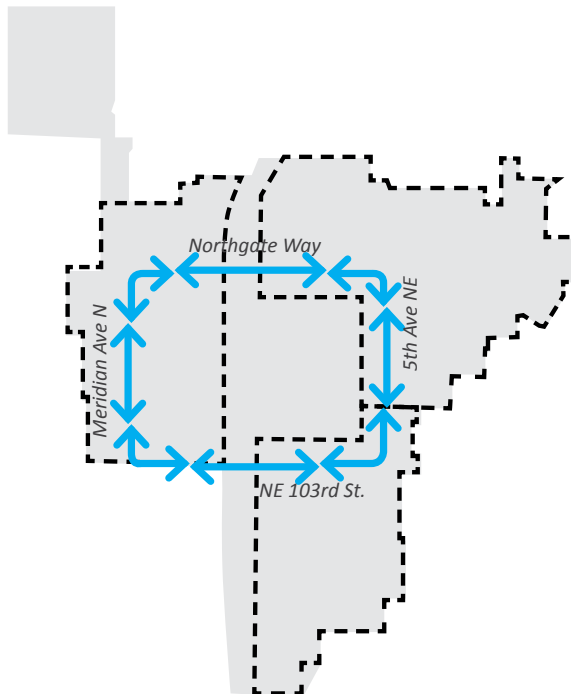
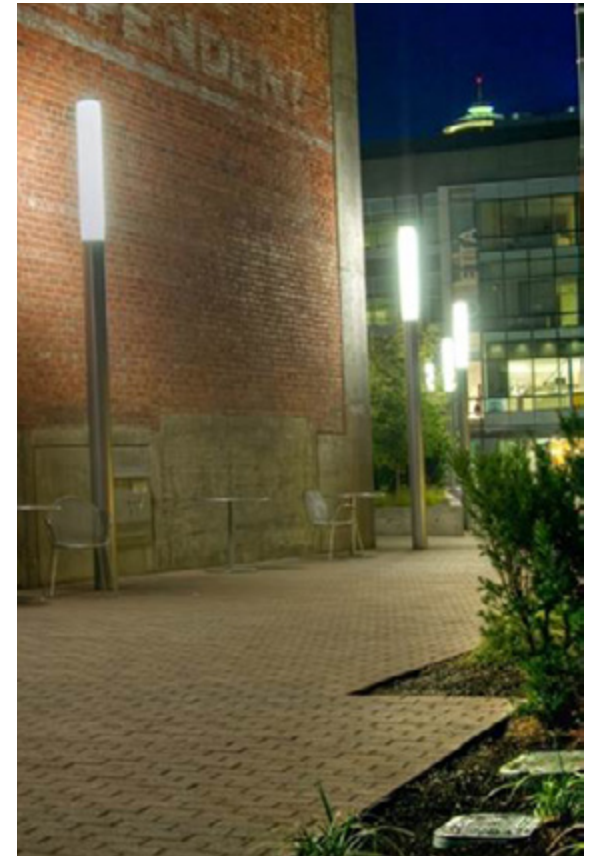


Figure 2.10 - Northgate Loop Diagram



Public space with pedestrian lighting integrated



LED lighting pavers integrated in a pathway



Weather Protection



Crosswalk design



Sidewalk Paving



Wayfinding Elements

The Northgate “Bridges”: Elements of Distinction

Three specific locations in the Urban Center present obstacles to easy pedestrian travel. Since these locations occur between each of the three subareas they present a unique opportunity to create improved linkages (which could be thought of as “bridges”) between each area. The three locations are:

1. 5th Ave NE between NE 103rd and NE 105th Streets (connecting the North and South Subareas)
2. The Northgate Way freeway underpass (connecting the North and West Subareas)
3. The proposed pedestrian and bicycle bridge across I-5 near NE 103rd St (connecting the South and West Subareas)

Fifth Avenue “Bridge”

Although 5th Ave NE is the primary public sidewalk connection between the North and South subareas, it is not an inviting pedestrian environment.

It presents a long walk (over 1,000 feet) on a narrow sidewalk immediately next to cars, trucks and buses. There is also an adjacent heavy foliage bank on the west side, without storefronts or other activity. The east side is constrained by narrow sidewalks, adjacent travel lanes, and utility poles in the middle of the pedestrian pathway. There is little or no pedestrian lighting, and no benches.

The two blocks between NE 103rd and 105th Streets (and NE 100th - 103rd Streets on the east side of 5th Ave NE) are important to improving the area’s overall pedestrian comfort and accessibility.

The following improvements are recommended, in the spirit of completing the previously identified 5th Avenue NE streetscape improvements:

- Narrow the travel lanes to reduce traffic speeds (while still accommodating truck and bus movements)
- Provide sidewalk buffers such as planting strips
- Add pedestrian-scale lighting
- Reduce obstructions in sidewalks
- Require wider sidewalks with future redevelopment and initiate discussion with adjacent property owners to increase access
- Install crosswalks at NE 104th and 105th Streets
- Mark the entire section between NE 105th to 103rd Streets with a special lighting/art project
- Improve landscaping and landscape maintenance on adjacent properties

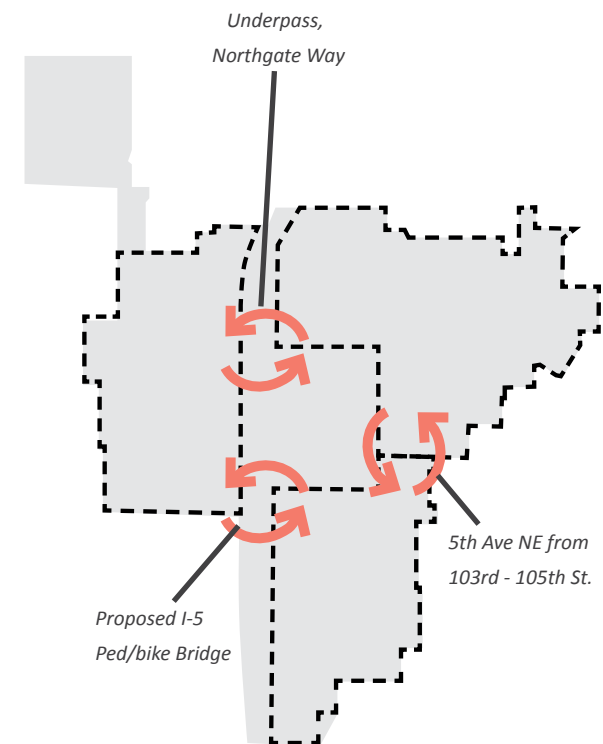


Figure 2.11 - Northgate Bridges Diagram

Northgate Way Freeway Underpass

The Northgate Way underpass is, and may continue to be, the only connection under I-5 between the north and west subareas of the Urban Center. It is currently difficult to comfortably travel by walking or cycling and transit flow is also degraded by traffic congestion. The City's 2004 Northgate Open Space and Pedestrian Connections Report recommended numerous improvements to the underpass including:

- Eliminate unused center lane and widen sidewalks
- Grade-separated sidewalks (3-4' above roadway) with decorative railing
- Reconfigure lane/intersection geometry for better pedestrian safety, appropriate to an urban center setting, including at the eastbound right turn lane from Northgate Way to 1st Ave NE to eliminate double pedestrian crossing
- Aesthetic treatments such as pedestrian lighting, special paving, gateway landscape treatment, ornamental slope improvements under bridge, decorated columns

All of the above recommendations are still relevant today and continue to be recommended by this UDF. Missing from the 2004 recommendations however, was a bicycle connection. This was presumably due to the limited width of the right-of-way. One option that the City should consider is to utilize the space behind the bridge columns.

The City's 2006 Northgate Coordinated Transportation Investment Plan (CTIP) recommended locating the sidewalks behind the bridge columns to allow for a new left turn lane under the bridge for westbound Northgate

Way to turn southbound onto Corliss Ave N. This UDF recommends that the City not consider adding more vehicular capacity but rather use the space behind the bridge columns (or other in-street space if desirable) for bicycle lanes. The benefits of improving non-motorized connectivity throughout the Urban Center and to the Transit Center should be carefully understood, considered and evaluated before making further vehicular only improvements. A safe, convenient bicycle connection through the Northgate Way underpass would become a particularly important component of the bicycle network after the planned cycle track on 1st Ave NE is completed.

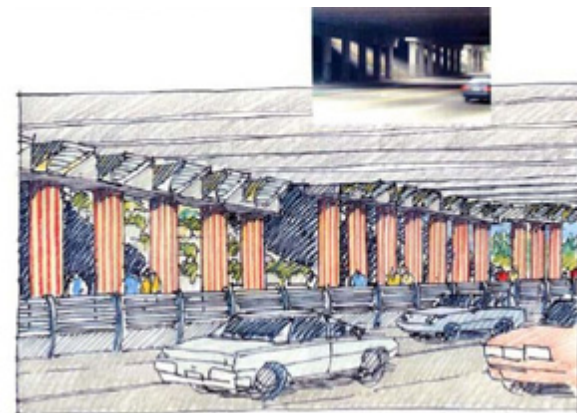


Figure 2.12 - Pedestrian Improvements concept for I-5 Underpass
Source: Northgate Open Space & Pedestrian Connections Plan

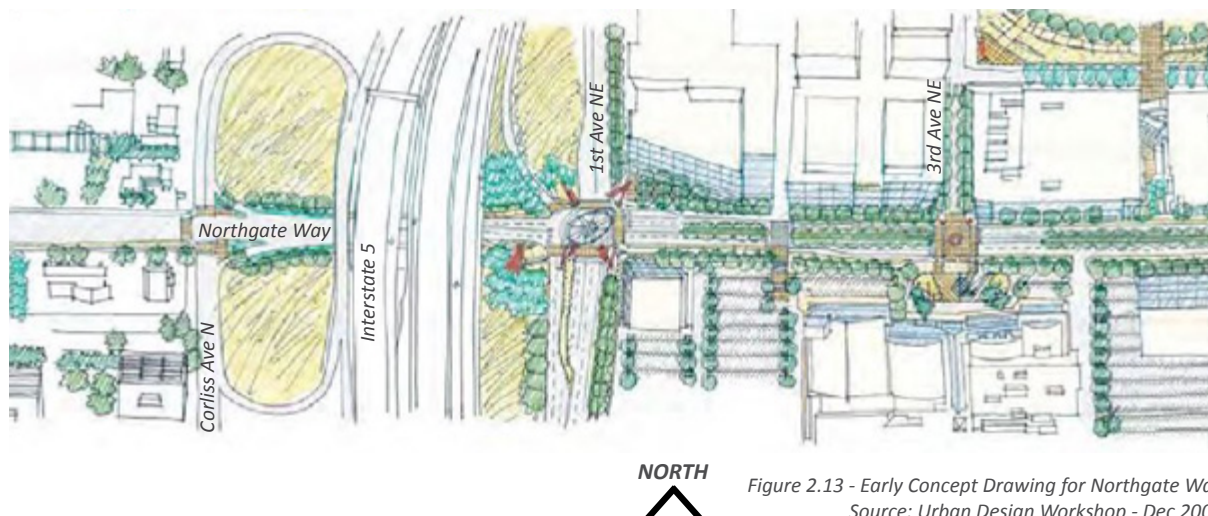


Figure 2.13 - Early Concept Drawing for Northgate Way
Source: Urban Design Workshop - Dec 2006

Northgate Pedestrian/Bicycle Bridge

A bridge across I-5 is the single most important non-motorized connectivity infrastructure investment for the Urban Center. The need for a bridge has been identified in multiple previous planning efforts, including the 2006 Northgate CTIP, which stated the following:

“The Northgate Stakeholders Group expressed its strong support for a pedestrian and bicycle overpass crossing the freeway from North Seattle Community College to the Northgate Transit Center and future Sound Transit Northgate Link Light Rail Station. The crossing would make it easier for College faculty and students to use bus transit and the future light rail, reducing single-occupant vehicle trips. It would connect neighborhoods west of I-5 to the commercial area and neighborhoods east of I-5, particularly the new Northgate Civic Center and South Lot developments envisioned for Northgate. The project could cost \$7–10 million and might come about through collaboration between the City of Seattle, King County, WSDOT, Sound Transit, North Seattle Community College, private property owners, neighborhoods, and others.”

In 2012, King County DOT completed the Northgate Pedestrian Bridge Feasibility Study Report, which identified opportunities, issues and estimated a range of costs for a bridge. The Report found

that a bridge would reduce the walking distance from the transit center to NSCC from 1.2 miles to approximately 0.25 miles. The Report cites a previous study indicating that a bridge would result in a 30% 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. In 2013, the City of Seattle issued a request for qualifications to complete an analysis of potential pedestrian/bicycle bridge types and alignments.

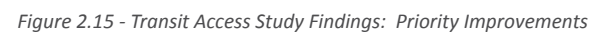
Similar results were reached by 2013’s Sound Transit’s Transit Access Study, which has led to a list of recommended improvements to be pursued by the City and Sound Transit.

To fully leverage the potential connectivity that the bridge could provide, this UDF recommends that the bridge entrances on both sides of the freeway be carefully configured to allow for convenient access to the widest range of destinations possible, not just the light rail station and NSCC. For example, on the east side of the freeway, a potential second entrance to the bridge from the planned cycle track on 1st Ave NE could improve connectivity to the south of the Urban Center and the neighborhoods beyond.

On the west side of the freeway, the bridge should provide convenient access to both NSCC and current and future development north of NE 103rd Street.



Figure 2.14 - Potential Northgate Interstate 5 Crossing (currently under study) Source: SDOT



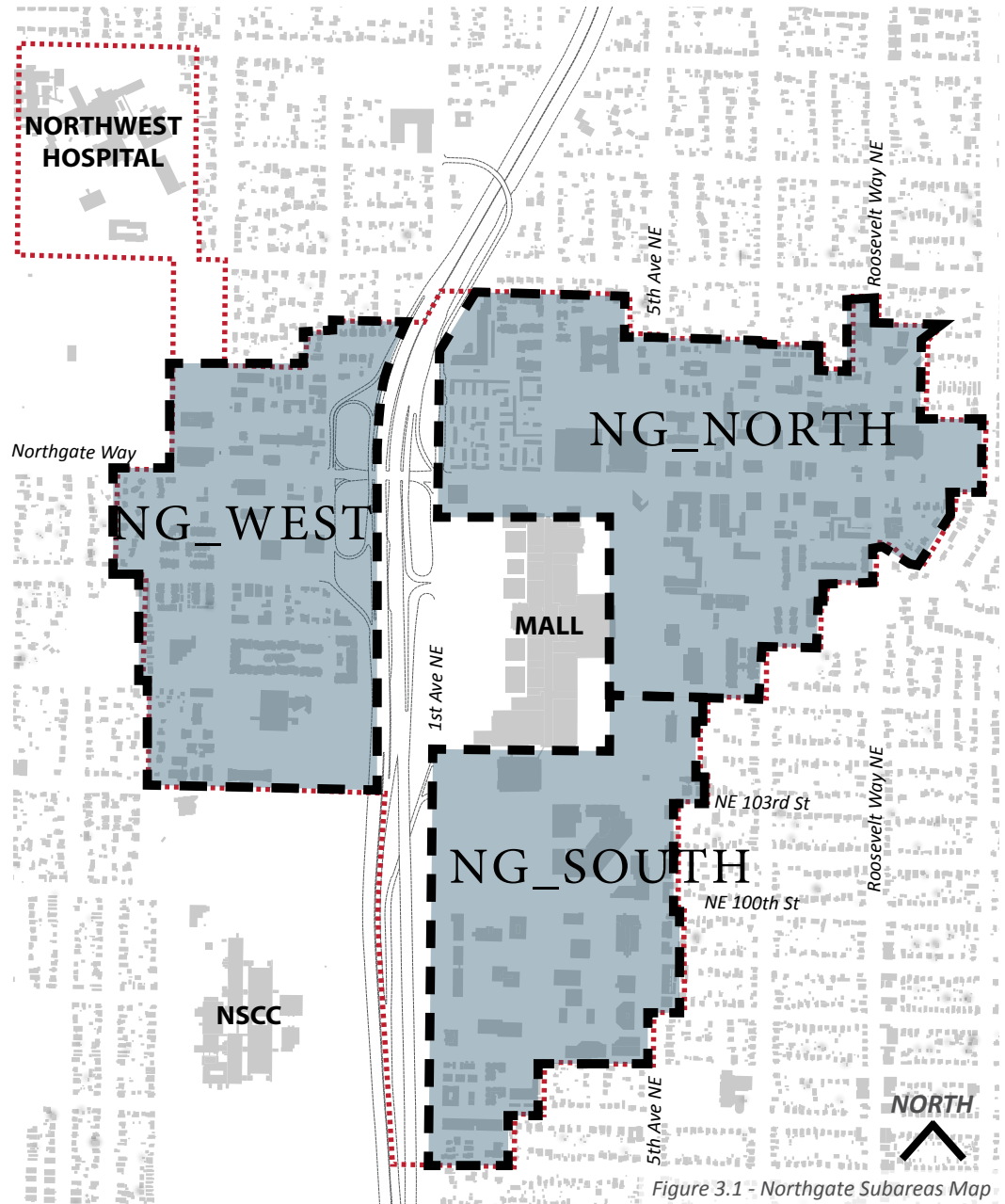


Figure 3.1 - Northgate Subareas Map

3 Northgate Subareas

The Northgate Urban Center essentially functions as three adjacent and separate subareas: North, South and West. Each subarea contains unique and regionally important functions, but none contain all the elements of a complete Urban Center environment.

For the purposes of this UDF, the Urban Center is divided into the following three Subareas, as illustrated in Figure 2.2:

- Northgate North (NGN): north and east of I-5 and the Northgate mall structure, generally between NE 105th and NE 114th Streets, with the eastern edge established by Thornton Creek. This also encompasses the Northgate mall parking lot that borders on 5th Ave NE
- Northgate South (NGS): south and east of I-5 and the Northgate Mall, between NE 95th and NE 105th Streets and extending east of 5th Ave NE
- Northgate West (NGW): west of I-5 from NE 100th to NE 113th Streets, and extending west to approximately Wallingford Ave N

Northwest Hospital and North Seattle Community College (NSCC) are each large and distinct parts of the community that are functionally and geographically separated from the heart of the Urban Center. Northwest Hospital is beyond easy pedestrian access. Accessibility to NSCC and any functional connection to the greater Urban Center is hindered by the barrier of the Interstate 5 corridor.

The Northgate mall structure and the west side of its property near I-5 are central to the Urban Center, providing retail sales attractions, indoor recreation space, and direct north-south walking connections. The Mall has a large structure surrounded by extensive parking lots. Given the Mall's interest in maintaining line-of-sight between the Mall and I-5, as well as its parking needs, these parts of the property are unlikely to change substantially over time. Thus, the Mall structure and its west side parking lots are excluded from this UDF's priority recommendations.

However, parking lots east of the mall structure are included in the North and South subareas because future infill development there would add much to core concentrations of uses in both of these subareas. Especially in the northeast and southeast corner portions, there is clear potential for future development that would activate the subareas.

As well, other UDF recommendations address the edges of the mall property's adjacent public streets.

Format of this Chapter

Subarea recommendations are provided in a consistent format. An overall analysis of both the land use and mobility issues is provided first. This is followed by several specific urban design principles meant to guide future urban design improvements primarily related to streets and mobility. Lastly, specific development and midblock connectivity recommendations are summarized for each super-block within the subarea.

North Subarea (NGN)

Urban Design Analysis

The North Subarea near NE Northgate Way and 5th Ave NE is the most commonly identified heart of Northgate. It is approximately the same size as central Ballard or Capitol Hill. The Mall and the Northgate North retail complex are the central features of the Subarea, containing regional retail destinations and much parking.

The eastern part of the Subarea is characterized by primarily auto-related retail uses, including retail that serves community residents such as a grocery store, a drug store, and small restaurants.

The new Hubbard Homestead Park provides an exceptional new community open space for the Subarea. Residents point out that the park needs improvements to be a better active recreational space. For example, some nearby residents prefer more trees to be planted for shaded resting places, and there is also a lack of a “circuit” walking path. The Northgate Library and Community Center on 5th Ave NE serves as a local civic center and activity hub.



Pedestrian Amenities

The pedestrian environment in the North Subarea is mixed in quality. Some 5th Ave NE and Northgate Way sections have modern improvement levels, and other portions are at least six feet wide with basic amenities but mixed evenness. Also, some side streets have received recent sidewalk and curb improvements. However, a portion of 5th Ave NE south of the community center has notable impediments of utility poles in the center of sidewalks between NE 103rd and 105th Streets. Within the main part of this Subarea the only pedestrian connection to the east across I-5 is the Northgate Way underpass. The nearest alternate I-5 crossing to the south is at N 92nd St, almost a mile south of Northgate Way.

Mobility and Access

Most of the North Subarea is composed of superblocks, with lengths ranging from 650 to 1,300 feet. The I-5 freeway ramps at the western edge of the Subarea provide the primary auto connections to the rest of the City and beyond, and high traffic volumes create frequent congestion at the Northgate Way/1st Ave NE intersection. Three arterials (1st and 5th Avenues NE and Roosevelt Way NE) provide good connectivity to neighborhoods to the north, and two of those (5th Ave NE and Roosevelt Way NE) also provide connectivity to the south. Northgate Way continues east, connecting to Lake City, Kenmore, Bothell and beyond.

Transit access in the North Subarea is adequate but somewhat less frequent than is typical of Seattle's other Urban Centers. The Northgate Transit Center is over a one-half mile walk from the core of this Subarea along routes of limited pedestrian quality. The subarea is currently served by five two-way all-day bus routes providing 12 to 14 trips per hour per direction and connections with Lake City, Jackson Park, Maple Leaf, and the University District.

Development Opportunities

Of the three Subareas, the North has the greatest opportunities for redevelopment, including:

- North side of Northgate Way between 1st Ave NE and 3rd Ave NE
- North of Hubbard Homestead Park
- East of 5th Ave NE and south of Northgate Way

There are also areas with high development propensity in the northeast portion of the Mall's property.

North Subarea Principle #1

Provide Generous and Extensive Pedestrian Amenities

The CTIP identified several sidewalk and pedestrian oriented improvements to the street network. These were generally modest in scope and more extensive improvements are required to support the level of pedestrian activity required in an Urban Center. The priority locations for the following improvements are along NE Northgate Way and on 5th Ave NE. Other north-south arterials should also be evaluated for similar needs.

General improvements include:

- Provide a 5-foot minimum width landscaped buffer for sidewalks where immediately adjacent vehicular travel lanes. Where this would result in too narrow sidewalks, a raised buffer should be considered.
- 8-foot sidewalk widths adjacent any arterial or retail uses
- Pedestrian lighting, benches, trash receptacles and other amenities
- Weather-protective canopies at building edges



Weather Protection Devices



Sidewalk Design



Temporary street furnishings



Landscape Buffer



Street Furnishings



Example of a commercial oriented mid-block connection

North Subarea Principle #2

Establish new mid-block complete streets and pedestrian connections

Because Northgate has substantially fewer public streets than other Urban Centers in Seattle, a combination of new “complete” street connections, along with public and semi-public (limited public hours) pedestrian and bicycle connections are suggested to improve overall access.

Mid-block crossings may be associated with redeveloping sites. Mid-block connections may be designed as particularly attractive urban design interventions to increase pedestrian activity, as well as multiply the number of activity nodes located at corners and intersections.

North Subarea Principle #3

Create a central bus transit “signature” station with complementary enhanced bus stops

A central and primary bus stop station is proposed near the corner of 5th Ave NE and NE Northgate Way.

Station design goals include:

- Offer a unique ‘Northgate North’ design concept coordinated with the Metro standard as needed, and abundant lighting.
- This central station may be complemented by ‘mini’ versions of smaller but distinctive bus stops.



Examples of signature bus stations

North Subarea Principle #4

Define and activate the edges of the mall parking lots

An important characteristic of a pedestrian friendly urban environment is the definition of edges between public and private space. Where retail storefronts or residential frontages are not possible, landscape “fences” can also provide this definition. Since over one third of all the block faces along NE Northgate Way and 5th Ave NE are immediately adjacent surface mall parking, there is an opportunity to better define the pedestrian spaces. Although the ultimate goal is to realize storefront retail and ground related residential frontages, such development may not occur on the mall perimeter for many years. Consequently, it is important to more clearly define the edges. Edges can be defined by landscape fences. Another opportunity to define the edge would be to establish incubator businesses in temporary, but high quality smaller buildings.

The mall should also strive in future improvements to provide designated pedestrian pathways from the sidewalk through the parking lot into the mall. Ideally the entrances to these pathways would be coordinated and aligned with the current street grid pattern to reinforce orientation.



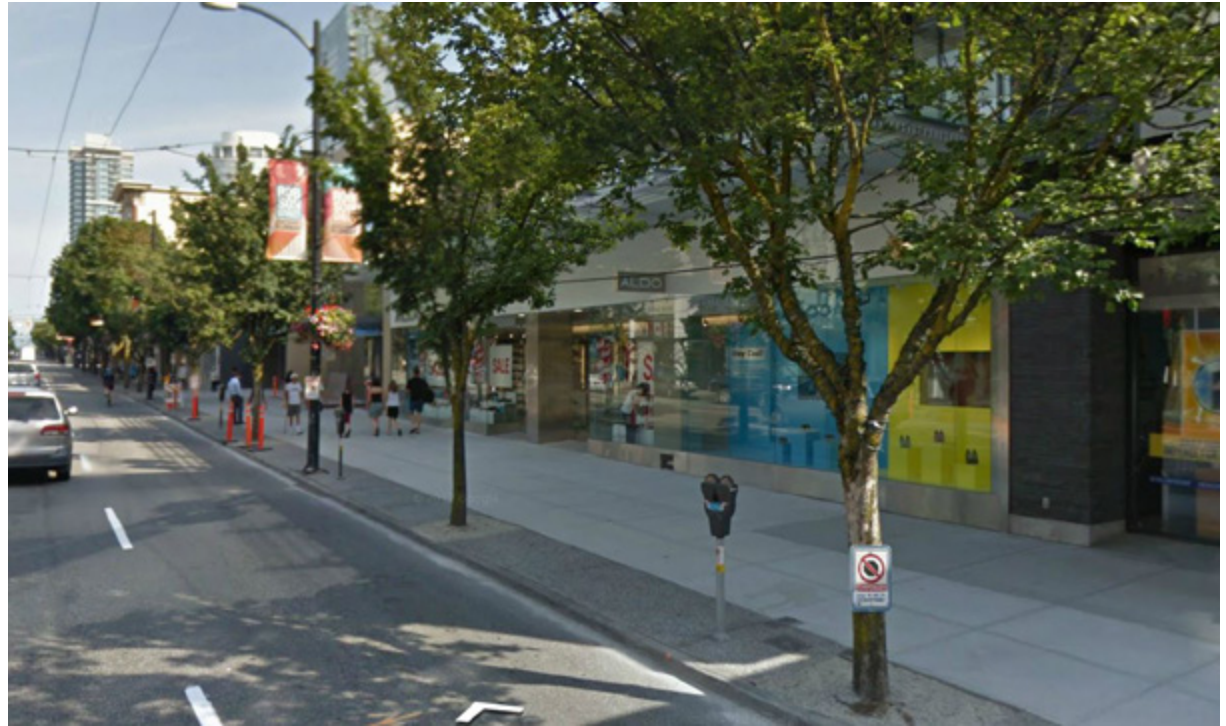
Examples of surface parking treated with landscape features

North Subarea Principle #5

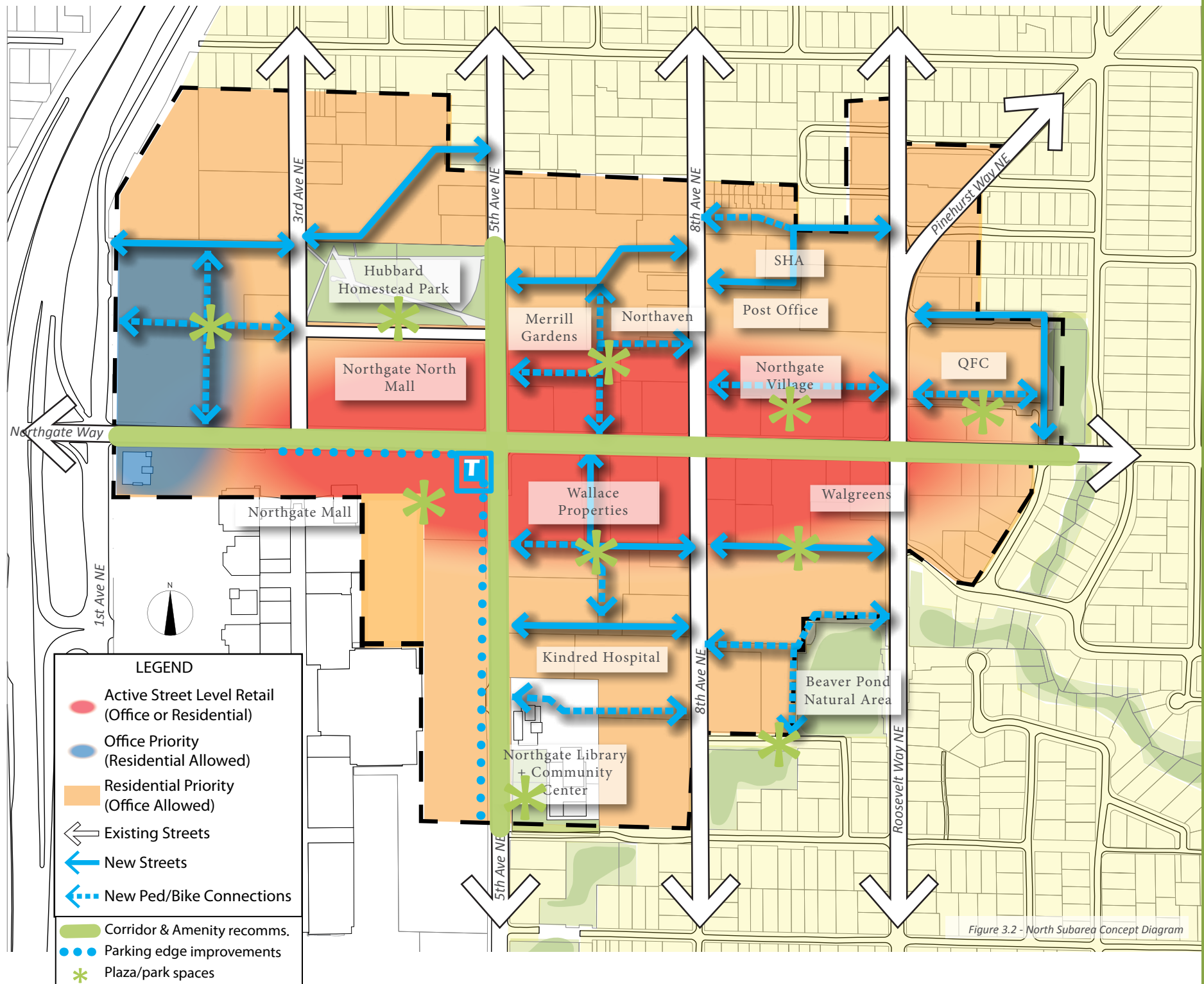
Design Northgate Way as a major regional pedestrian-oriented retail street

Currently, pedestrian activity is internally focused within the mall and the NGN shopping complex. In order to support pedestrian activity throughout the neighborhood's streets, Northgate Way should be envisioned and improved as an attractive pedestrian retail street that has attractive design elements contributing toward its qualities as a key retail street and part of the loop that links all parts of the Urban Center. At a minimum, design standards should reflect the following:

- Provide a low landscape buffer between the curb lane traffic and pedestrian areas
- Update development standards to encourage ground level retail with frequent storefront entries from 1st Ave NE to Roosevelt Way NE.
- Update development standards to ensure new developments include translucent or transparent weather-protective canopies for a minimum of 80% of the street frontage.



Cambie Street in Vancouver BC is a major high-density arterial similar in scale to Northgate Way. It provides generous pedestrian amenities and retail fronting uses.



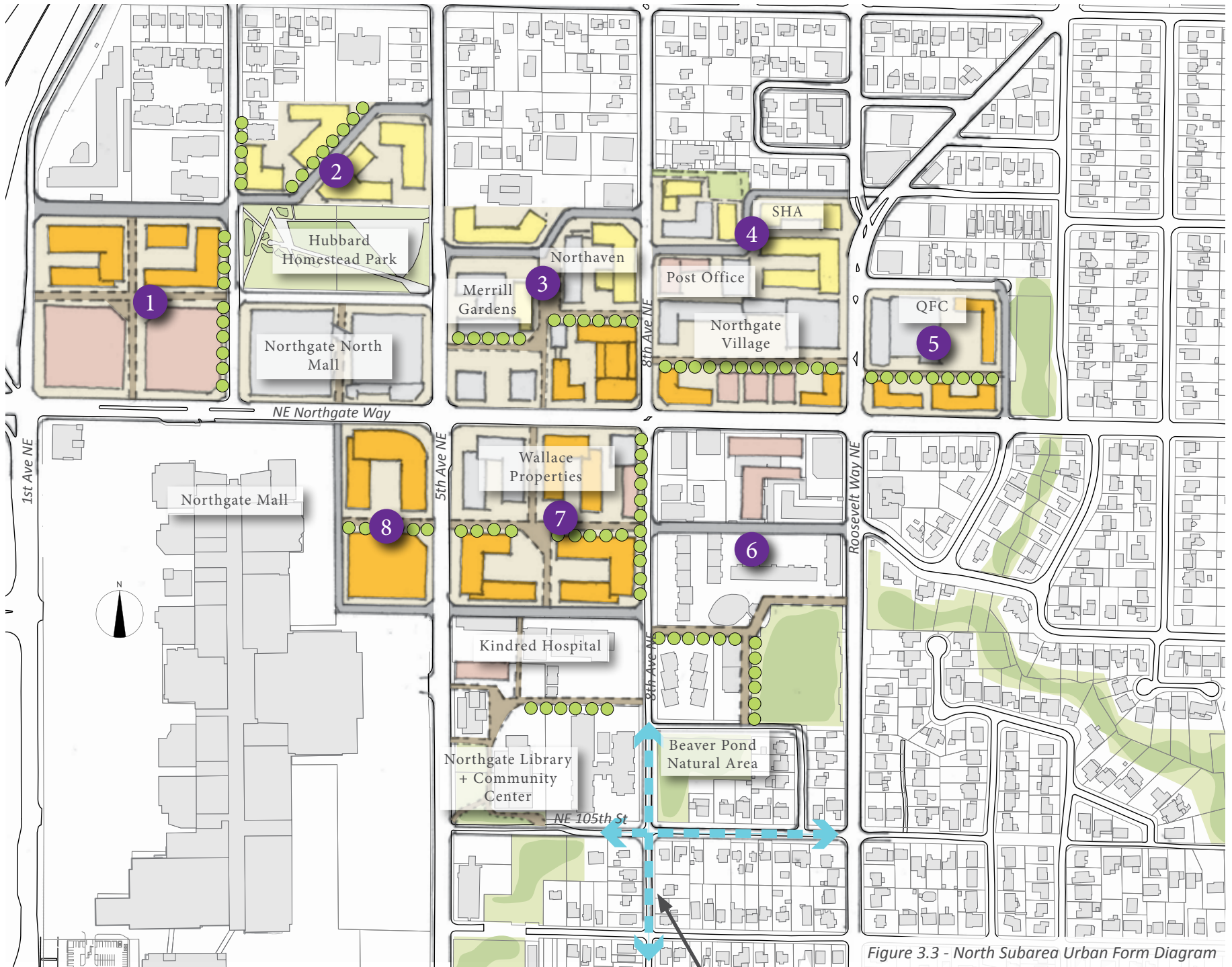


Figure 3.3 - North Subarea Urban Form Diagram

Blue-dashed lines show where possible future pedestrian improvements may occur.

NORTHGATE NORTH SUPERBLOCK RECOMMENDATIONS

1. Superblock NGN # 1.

Potential use: A multi-block site with freeway access, for a mix of regional retail, office and residential uses. Residential uses could be integrated with other uses throughout multiple blocks or focused in certain blocks.

Connection & amenity opportunities:

Local street connecting 1st Ave NE and 3rd Ave NE; and other local pedestrian ways, local plazas, and streets within the property.

2. Superblock NGN #2.

Potential use: Infill residential development adding to existing multifamily buildings; potentially facing Hubbard Homestead Park.

Connection & amenity opportunities:

A potential new local street connection between 3rd and 5th Avenues NE.

3. Superblock NGN #3.

Potential use: Expansion of the Northaven Senior Living complex, and an enlarged commercial/services hub also serving seniors at adjacent Merrill Gardens.

Connection & amenity opportunities:

Could incorporate urban plaza and other recreation spaces and amenities, along with local connector street routed carefully through the block.

4. Superblock NGN #4.

Potential use: Long-term infill or

redevelopment of an automobile-oriented shopping center with mixed uses; potential to explore mixed-income housing concepts for Seattle Housing Authority properties.

Connection & amenity opportunities:

East-west street and adjoining park/plaza space one block north of Northgate Way between 8th Ave NE and Roosevelt Way NE; potential to evaluate other connecting street concepts two blocks north of Northgate Way.

5. Superblock NGN #5.

Potential use: Infill mixed use, mid-scale development on parcels fronting NE Northgate Way, next to QFC.

Connection & amenity opportunities: A north-south street at the east edge of the site, connecting to NE 112th Street.

6. Superblock NGN #6

Potential use: Long-term potential for infill multifamily development with retail or mixed uses fronting Northgate Way.

Connection & amenity opportunities:

Explore new pedestrian connections between 8th Ave NE and Roosevelt Way NE, perhaps feasible at the southern edge of the main multifamily properties.

7. Superblock NGN #7

Potential use: Following 507 Northgate Way multifamily (two phases) with additional mixed use residential buildings in the properties just south, bordering on

5th Ave NE and 8th Ave NE.

Connection & amenity opportunities:

East-west connecting pedestrian ways and/or local street between 5th and 8th Ave NE, with adjoining plaza/park space. Would connect to north-south connection being built.

8. Superblock NGN #8.

Potential use: Infill commercial, retail and/or mixed use development, adding new blocks to the NGN core.

Connection & amenity opportunities: An improved private or public street at the perimeter, with street-facing commercial uses on at least the arterial block faces.

West Subarea (NGW)

Urban Design Analysis

The West Subarea covers approximately 83 acres and encompasses six superblocks. Isolated from the rest of the Urban Center by I-5, the Subarea has generally lower development intensity and activity levels compared to the east side of I-5. There are numerous multifamily developments, offices, and commercial buildings, and surface parking lots mostly clustered around Northgate Way and Meridian Ave N, but there is no established “Main Street” or community “heart” location. There are a few auto-oriented restaurants on Northgate Way, but no grocery or drug stores within the Subarea. North Seattle Community College (NSCC) is located immediately to the south and outside of the official Northgate Urban Center boundary, but is an important complementary major use near the West Subarea. A Seattle Police station, which will relocate in the future, is located on N 103rd St just south of the Urban Center boundary.



Pedestrian Amenities

The pedestrian environment in the Subarea is generally limited in quality, and lacks sidewalk coverage in many residential blocks except along main arterials. Within the Subarea the only connections to the east across I-5 are the Northgate Way underpass and at N 92nd St, almost a mile south of Northgate Way.

Mobility and Access

Transit service in the Subarea benefits from the presence of the NSCC campus, which is served by five Metro bus routes. Aurora Avenue with Metro Rapid Ride service is about a 0.4-mile walk from the west edge of the Subarea. Community commenters have expressed favor for a high capacity transit connection from NSCC to UW (which will be satisfied by light rail service beginning in 2021).

The I-5 exit at Northgate Way provides good regional vehicular access to the Subarea, but I-5 also limits travel to the east, the only connection being Northgate Way, which is often congested. The bulk of the Subarea's vehicular connectivity is provided to the north and south by Meridian Ave N, and to the east and west by Northgate Way. Most of the local streets are spaced at the superblock scale, reducing connectivity. Noise from I-5 affects the eastern portion of the Subarea.

A striped bike lane on Meridian Ave N and College Way leads into the NSCC campus. Bicycle connection quality via the Northgate Way underpass is poor.

Development Opportunities

Other than a handful of townhouses there has been little recent residential development in the West Subarea. Recent commercial development includes the Northgate Polyclinic (2007) and the Verity Credit Union. Planned development includes a new building at the Public Health property on Meridian Ave N. Given the presence of Northwest Hospital and other facilities, there is potential for further medical office expansion in the area around Northgate Way.

- The West subarea presents several opportunities for redevelopment. There are three sites with high development propensity and two sites where consolidation would produce an opportunity site. When the police precinct operations relocate, the police precinct station may be a candidate site as well.

There are also two significant sites with high development propensity located south of the Urban Center on the North Seattle Community College campus. Potential expansion within the NSCC campus could create development opportunities for new campus buildings, student housing, and services to support the College community, which are currently lacking in the Subarea.

West Subarea Principle #1

Improve pedestrian connection along N 100th St. to Aurora Ave N

Create generous pedestrian and cycling improvements on N 100th St to provide a better connection with Aurora Ave N.

If the I-5 crossing bridge is built, this connection would provide a direct link from the commercial areas on Aurora Ave N all the way to the light rail station. (If the pedestrian bridge alignment ends up closer to N 103rd Street, that street should also be considered for improvements.)

Develop a street concept plan for N 100th Street with a focus on maintaining its residential character. Consider incorporating it as a Greenway.



Examples of a typical residential sidewalk with pedestrian amenities to enhance the character

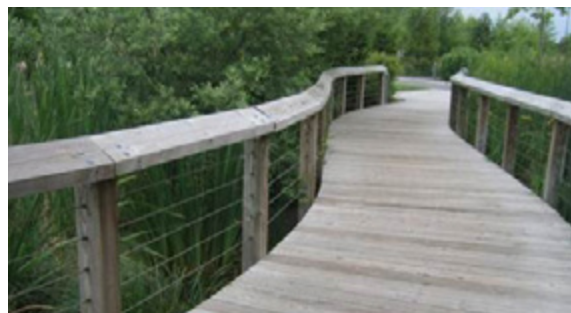


West Subarea Principle #2

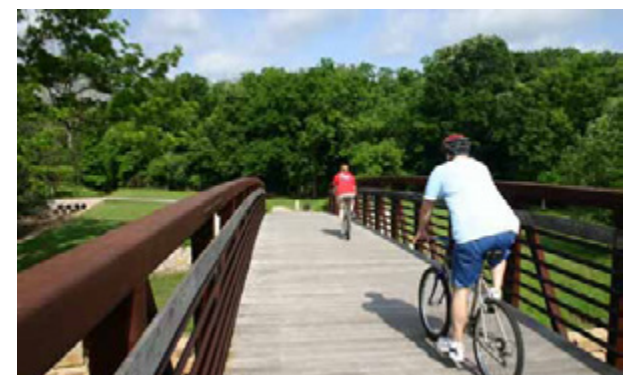
Develop N 103rd St to connect to the future I-5 pedestrian bridge

The potential benefit of a pedestrian bridge over I-5 will be better leveraged with good connections not only to NSCC, but also to the neighborhoods to the west.

NE 103rd St is a possible landing alignment of the bridge, and currently it is not fully developed east of Meridian Ave N. A complete street connection between Meridian Ave N and the bridge would create a seamless connection to the west. Special care would have to be taken in relation to wetland areas. This connection should be designed to minimize its impact on the natural areas while providing a high quality design integrated with the natural landscape.



Examples of bike and pedestrian routes along a natural setting. Treatment desired for the natural areas north of the NSCC





West Subarea Principle #3

Upgrade Meridian Ave N

Meridian Ave N is a key corridor connecting the NGW subarea from the NW Hospital and Northgate Way in the north to NSCC in the south.

Meridian is a generous (90'+) ROW, with a wide vehicular roadway (66') but narrow sidewalks (6') and landscape zones (6'). Since the traffic volumes are relatively low (4,000 average daily vehicles), the street could be considered for reconfiguration to help support increased pedestrian use.

A street design concept plan should be developed to identify the most appropriate and practical 'complete street' balance of uses to serve all travel modes.

West Subarea Principle #4

Establish a new community gathering space along Meridian

The West Subarea lacks a public open space location that serves as a community focal point. Ideally the public open space would be located centrally so as to best serve both NSCC and the residents of the numerous multifamily developments. The intersection of Meridian Ave N and N 105th St would be an appropriate location -- relating to or within the Public Health property, which may be feasible with future development there.

Example of a high density street to illustrate the character desired for Meridian Ave N

West Subarea Principle #5

Pedestrian connections through superblocks

The largest superblocks in the West Subarea are located between Meridian Ave N, Corliss Ave N, Northgate Way, and N 103rd St. If and when any of these blocks redevelop, the City should explore options for new mid-block connections, including both semi-private and public, as well as vehicular and non-motorized connections.

The City should continue to promote through-block connections in superblocks when properties are redeveloped. This is already embodied in the neighborhood's design guidelines.



Examples of pedestrian connections at mid-blocks

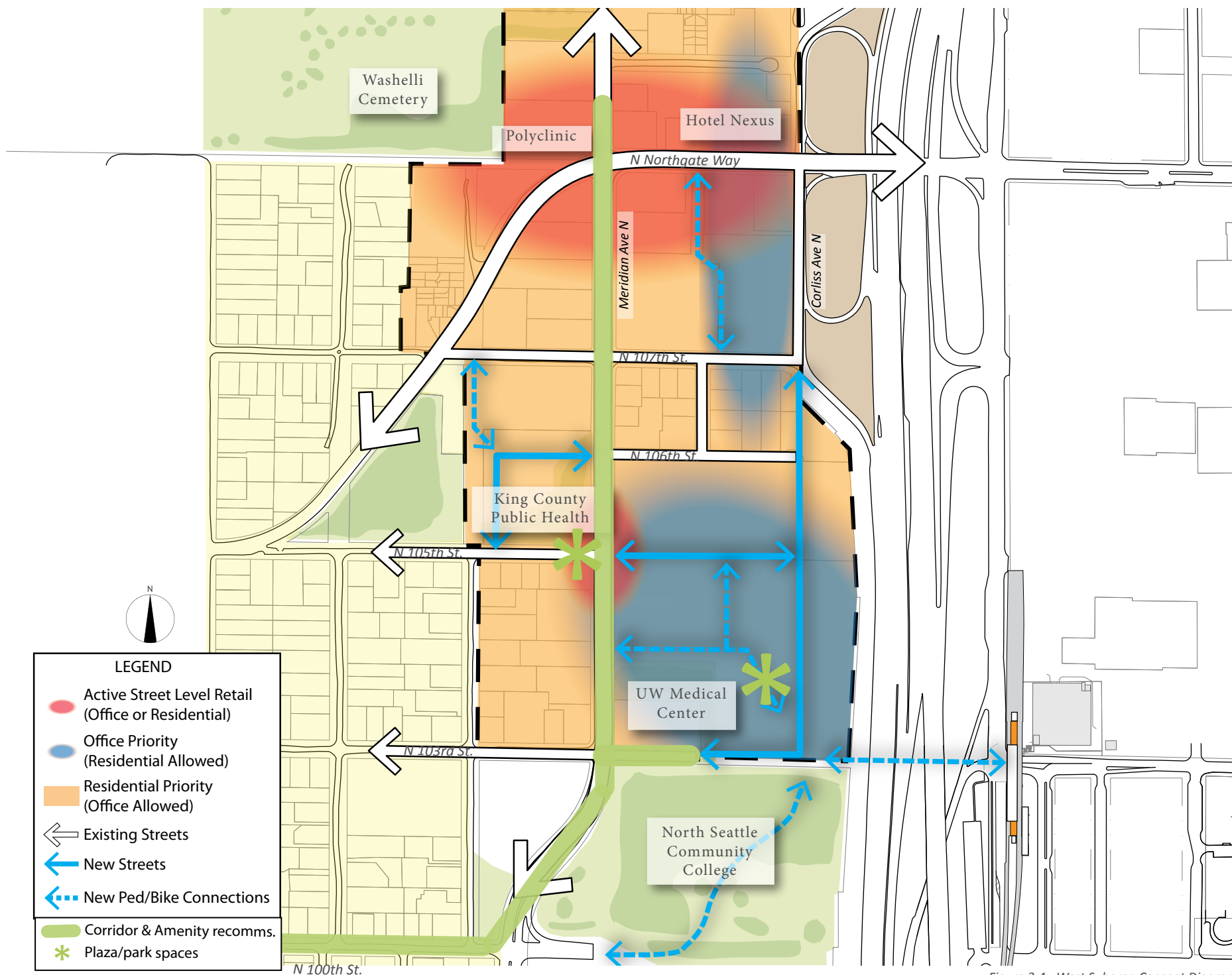


Figure 3.4 - West Subarea Concept Diagram



Figure 3.5 - West Subarea Urban Form Diagram

NORTHGATE WEST SUPERBLOCK RECOMMENDATIONS

1. Superblock NGW #1.

Potential use: Long-term infill or redevelopment with commercial or mixed uses.

Connection & amenity opportunities:

Encourage pedestrian oriented features and streetfront retail uses.

2. Superblock NGW #2.

Potential use: Long-term infill commercial or residential development; possible enhanced campus qualities.

Connection & amenity opportunities:

Encourage north-south pedestrian way or street enhancement with adjoining plaza/public square space.

3. Superblock NGW #3.

Potential use: Conversion of low-density residential uses to higher-density residential uses.

Connection & amenity opportunities:

Encourage or require a public extension of Corliss Ave N to connect N 107th Street with N 106th Street.

4. Superblock NGW #4.

Potential use: Encourage master planning to add medical/commercial buildings near I-5 and other infill of mixed uses, to make use of this area closely linked to the light rail station if the I-5 pedestrian/bicycle bridge crossing is built.

Connection & amenity opportunities:

Encourage new east-west pedestrian linkages to/from the I-5 pedestrian/bicycle bridge with adjoining plazas and civic open space feature(s). Also, encourage or require an extension of Corliss Ave N between N 106th Street and N 103rd Street.

5. Superblock NGW #5.

Potential use: Rebuild the public health building, and consider addition of other mixed-uses at the site.

Connection & amenity opportunities: Retain a green open space area as a public amenity, and/or other public spaces incorporated in future development phases. Consider providing as much affordable housing in mixed-use development as is practical and feasible.

“P” Parking Resources.

Potential strategy: Consider a district wide public parking resource strategy, which could be parking at garage facilities as mapped.

South Subarea (NGS)

Urban Design Analysis

The South Subarea encompasses approximately six superblocks, as shown in the adjacent photo. The two most identifiable elements of the South Subarea are the Northgate Transit Center and the Thornton Place mixed-use and cinema complex. This area is and will continue to serve as a transit hub, where buses and rail service will come together. This combination means that maintaining traffic circulation to support effective bus operations will continue to be an important factor in this area's future.

The Subarea also contains multiple office buildings, strip retail facing I-5 along 1st Ave NE, and large areas of surface parking. The Northgate Library and Community Center are located at the northeast edge of the Subarea, about a 0.4-mile walk from the Transit Center. There are no grocery, drug or hardware stores, and only a few restaurants (within the Thornton Place internal circulation space). The Thornton Creek channel at Thornton Place provides an interesting and attractive open space amenity, with a greened drainage corridor and pedestrian amenities between 5th Ave NE and the Northgate Transit Center. The Olympic View Elementary school is a 15 minute walk (0.6 mile) from the Transit Center, just outside the southeast edge of the Subarea.



Pedestrian Amenities

Pedestrian connections within the South Subarea are available in most places, but are limited by gaps in sidewalk continuity and varying physical condition. The extent of surface parking lots compromises walking comfort in much of the commercial area south of the Mall. There is no sidewalk on 3rd Ave NE south of NE 100th Street. Connections to the south are restricted by a grade change aligned with NE 96th St, where a stairway connects up to 4th Ave NE. Between NE 100th St and NE 95th St a steep slope on the west side of 5th Ave NE is a barrier to pedestrian travel. Pedestrian comfort along parts of 5th Ave NE is compromised by higher speeds of traffic near narrow sidewalks, limited visibility and frequent turning vehicles. Most blocks have no sidewalks past one-third of a block east of 5th Ave NE. Higher quality sidewalks are included as part of the Transit Center and Thornton Place.

As noted in the Urban Center mobility recommendations, there are shortfalls in pedestrian connections to/from Maple Leaf to the east of this Subarea. Recommended improvements between Roosevelt Way NE and 3rd Ave NE would improve mobility to/from the South Subarea.

Mobility and Access

The service focused at the Metro Transit Center, including 13 Metro and two Sound Transit routes, provides excellent transit access for the Subarea, and Link light rail will further improve it in 2021. Although the Subarea is immediately adjacent I-5, access to and from the freeway is relatively challenging. There is a reversible ramp at NE 103rd St. connecting with the I-5 express lanes and a northbound general purpose ramp at NE 107th St., but access to the I-5 southbound general purpose lanes requires traveling up to Northgate Way and crossing below the freeway through frequently congested intersections.

Community vehicular connections to/from the South Subarea are reasonably accessible to and from the north and south (via 1st and 5th Avenues NE) but relatively limited to/from the west (N 92nd St. via 1st Ave NE), and east (certain local streets only, with steep grades and several traffic calming revisions in Maple Leaf -- primarily the prohibition of certain travel directions by automobiles).

Development Opportunities

The South Subarea is dominated by large surface parking lots, including the commuter parking next to the Northgate Transit Center, the Mall perimeter lots, and multiple lots surrounding office buildings in the southern portion of the Subarea. Four vacant mall block 'edges' exist along NE 103rd St. and 5th Ave NE. The corner of NE 103rd St. and 5th Ave NE is a potential future development site.

The properties east of 1st Ave NE south of NE 100th St. are a group of large and consolidated parcels with ample surface parking lots surrounding office buildings and strip retail. These are potential redevelopment opportunities due to property size and the aging conditions of the existing improvements.

The King County Metro transit center and surface park and ride lots have been identified as a catalyst project site, and with the arrival of the Link station and redevelopment of the bus transit island, prime property will be available for redevelopment. This site is presented in Chapter 4 of this UDF as a case study for the character and type of development and adjacent public amenities desired in the urban center.



South Subarea Principle #1

Create two great neighborhood-scale public open spaces

The South subarea lacks a civic/community gathering space. In order to encourage private investment, establish two distinct and complementary public spaces to support the growth of an urban residential neighborhood.

- A “Town Square” public open space is recommended to be located between 3rd Ave NE and the new Northgate Transit Center. A preferred location for the park is adjacent to or visible from 3rd Ave NE. It should also be close to, but not immediately adjacent to the future light rail station. See the recommendations for the Metro TOD property in Chapter 4.
- A small “Village Green” that includes spaces designed for both young and older surrounding residents. This space should be located south of NE 100th St, and could be integrated/coordinated with adjacent mixed-use residential development.

South Subarea Principle #2

Establish Third Avenue NE as a central linear park street

Third Avenue NE is located between Thornton Place and the King County Metro Transit Center. The City should consider actions to create a central neighborhood promenade street that provides orientation as an organizing feature for the subarea. The design of this street should include:

- Generous 15-20-foot linear park space on the west side of the street, plus complementary 8-foot sidewalks. Where feasible, expand the public realm into the curb parking zone for special street furnishings, art and other pedestrian features such as water features.
- Incorporation of complementary aesthetic street features demonstrating sustainable landscaping qualities appropriate for an urban “main street.”
- Encourage adjacent building frontages as ground-related residential.
- Encourage a landscaped buffer ‘fence’ where the linear park street will be adjacent to surface parking lots.
- Encourage retail storefronts north of NE 102nd Street (e.g., the recommended E-W pedestrian connection), and allow such uses anywhere along the street.
- Update development standards to include blank wall restrictions.



Example of a linear park located at a street median



South Subarea Principle #3

Convert surface parking lots into infill development

Encourage the infill redevelopment of surface parking lots, with a focus on the following priority locations:

- The Metro Transit Center TOD Site
- The Mall edge along NE 103rd Street and 5th Ave NE
- Several locations south of NE 100th Street
 - West of 3rd Ave NE – office use is most likely
 - Between 3rd and 4th Ave NE – multifamily use is desirable, but may need incentives
 - East side of 1st Ave NE – commercial use is most likely

South Subarea Principle #4

Buffer freeway noise with office/commercial buildings

Large buildings with uses that are not overly sensitive to noise can help block freeway noise from penetrating the Urban Center and reducing comfort for area users.

- Between NE 97th and 100th Streets, office and hotel uses are the most likely development opportunities that would be tall enough to create a good buffer in the western portion of the TOD site – encourage this type of development.
- Other structures, such as the future light rail station structure, and Sound Transit parking garage north of NE 103rd Street will also provide a degree of freeway noise buffering.



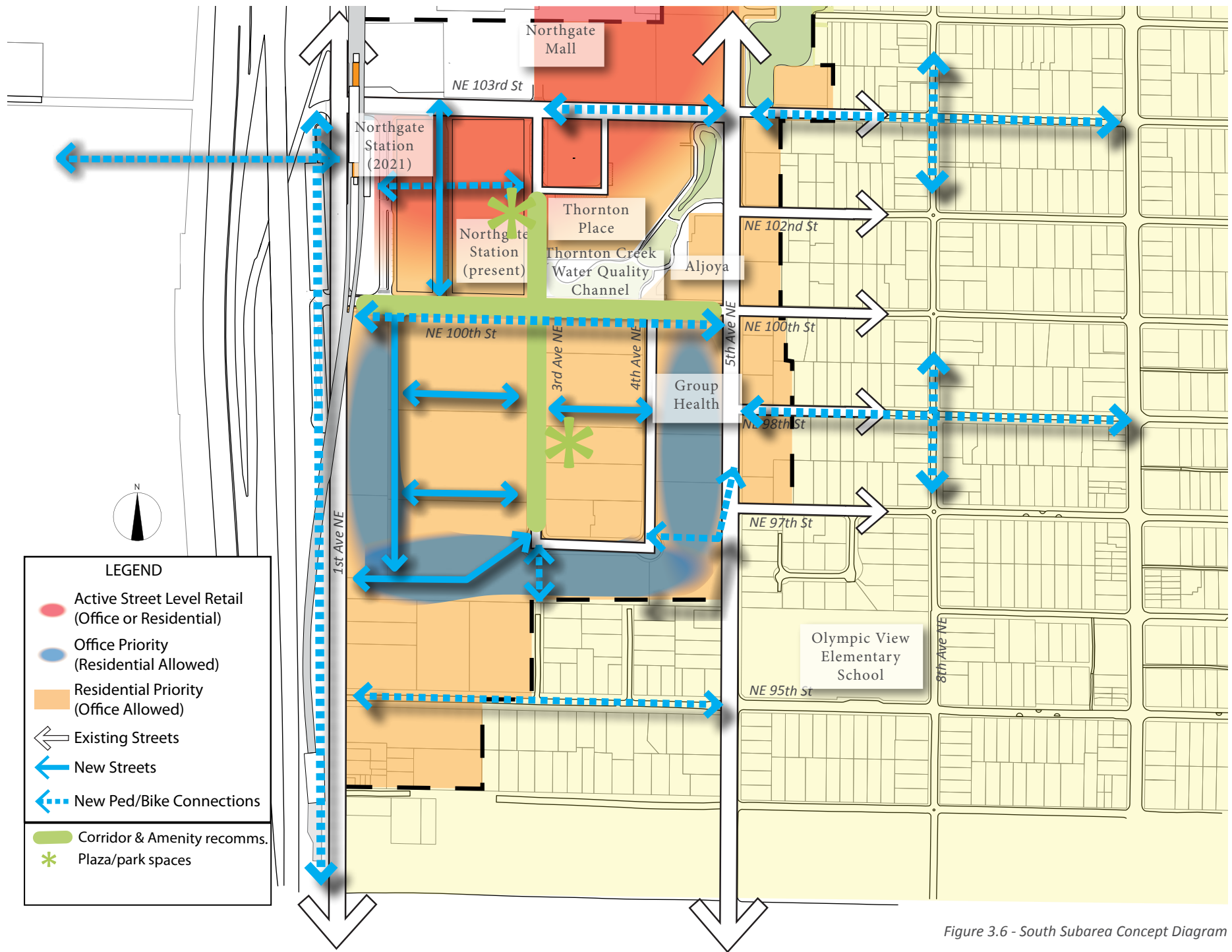


Figure 3.6 - South Subarea Concept Diagram



Figure 3.7 - South Subarea Urban Form Diagram

NORTHGATE SOUTH SUPERBLOCK RECOMMENDATIONS

1. Superblock NGS #1.

Potential use: A parking garage adjacent to the north end of the light rail station will accommodate parking that replaces stalls to be lost during rail construction.

Connection opportunities: Based on analyses in 2013, a garage connection to/from 1st Ave NE was included in planning, as well as vehicle access to/from NE 103rd St.

2. Superblock NGS #2.

Potential use: A major opportunity to establish a dense mixed-use core for this South subarea with a significant presence of residential and commercial uses in a future transit-oriented development (TOD). See Chapter 4 of this UDF for more information about recommended guidance for future TOD development. The west edge of this block will serve as a key transit hub for rail and feeder bus routes linking to several North Seattle neighborhoods.

Connections & Amenity Opportunities: Numerous opportunities to provide complementary streets, pedestrian ways, town square/open space, and encouraged indoor amenities. See Chapter 4 of this UDF for more information.

3. Superblocks NGS #3 and NGS#4.

Potential use: As the nearest properties to the rail station, south of NE 100th Street, these existing retail and office use blocks have potential for denser redevelopment or infill development that could include denser office buildings, perhaps most likely near I-5. Additional residential development could be added opportunistically in some properties that have large underused surface parking lots.

Connection & amenity opportunities: Green street improvements on NE 100th St. and 3rd Ave NE will require setbacks or acquisitions on certain edges of these properties. Also, design concepts should include public plaza spaces, and additional north-south and east-west pedestrian ways and/or local streets (between 1st and 3rd Avenues NE) to redefine more walkable block patterns in these parcels as they are infilled or redeveloped.

4. Superblock NGS #5.

Potential use: This superblock between 3rd and 4th Avenues NE could be redeveloped with high-density residential or mixed uses. If property consolidation is possible, these parcels could provide sites large enough to establish a meaningful new residential presence.

Connection & amenity opportunities: A public park space amenity is encouraged near 3rd Ave NE to provide breathing space and amenities for future residents. A recommended new street between 3rd and 4th Ave NE would also provide for better vehicle and pedestrian circulation.

5. Superblock NGS #6.

Potential use: The broad southeast vicinity of the Northgate Mall property (including at the intersection of NE 103rd St and 5th Ave NE) could accommodate a diverse mix of infill development over the long term that may include retail, office and residential uses. This would help round out the South Subarea and bring a denser urban character closer toward the library and community center. Redevelopment should be encouraged to include a large-scale mixed-use building or complex with enough space to include large retail and commercial development. This may also need a parking garage to provide sufficient parking for overall needs, but this should be designed using “right-size parking” principles.

Connection & amenity opportunities: Plazas and pedestrian ways in future development will enhance north-south walking connections, and outdoor amenities will add a more livable and human-scaled setting.

NORTHGATE SOUTH STREETScape CONCEPT PLAN

NE 100th St.: A Great Green Street

The existing and new proposed streets in the Northgate South Subarea will share some commonalities but also have varying distinct functions. Some streets need to accommodate broad uses including regional through access, transit, trucks, autos, bicycles and pedestrians. Other streets should be limited to local access only, with only minor and occasional use by lighter service trucks and buses. This street design concept plan outlines and illustrates recommended designations for two key streets in the South Subarea:

- NE 100th St.
- 3rd Ave NE

NE 100th St. will serve as one of the subarea's principal Green Streets with "complete street" elements including landscaping and possible drainage features, pedestrian and bicycle infrastructure while continuing to function as one of the neighborhood's transit streets (including continuing bus layover functions). In contrast to NE 103rd St., which is fed by the I-5 offramps and busier in terms of automobile traffic, NE 100th St. will provide an east-west connection that is focused on mixed modes of transportation.

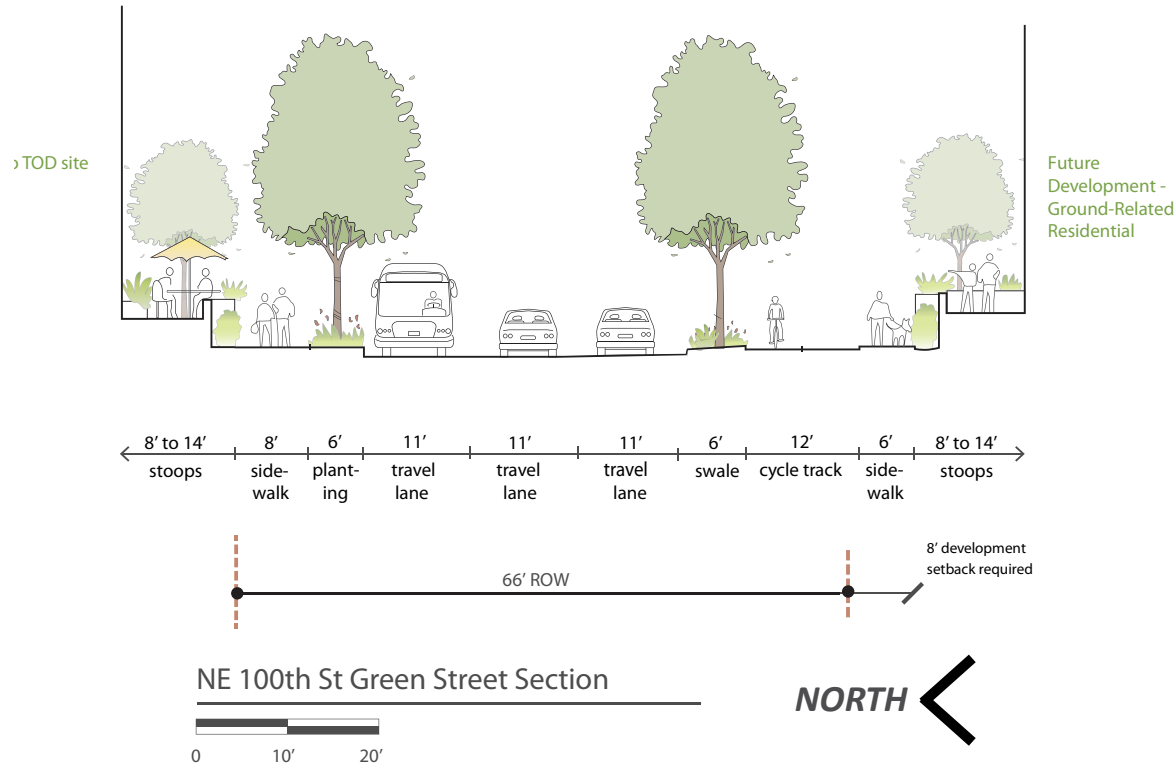
A new cycle track on the south side of the street will be a local bicycling connection between 1st and 5th Avenues NE, with prioritized pedestrian/ bicycle paving over general street paving at 3rd and 4th Avenues NE.

The NE 100th St. roadway section will be rechannelized to three automobile travel lanes: two general purpose travel lanes and one curbside lane (north side) for bus layover. A retained sidewalk on the north side of the street will accommodate the majority of pedestrian trips to and from the light rail station. A greened landscaping edge is also recommended on the north side of this sidewalk.

On the south side of NE 100th St., the pedestrian zone will consist of a six-foot wide sidewalk, buffered from the automobile lanes by a six-foot wide landscaped swale and 12-foot wide, two-way cycle track. There will be no curb parking on the south side of this street.

Bus layover will continue to be accommodated on NE 100th St. as well as a portion of WSDOT right-of-way between 1st Ave NE and I-5. This layover will help maintain the area's function as a large transit hub, improving service reliability while maintaining operational cost efficiencies. If built, a bicycle lane on the south side of NE 100th St. would displace one layover space just west of 5th Ave NE.

Section A - NE 100th St west of 3rd Ave NE



A greened residential sidewalk edge



A 'cycle track' with in-street green buffer

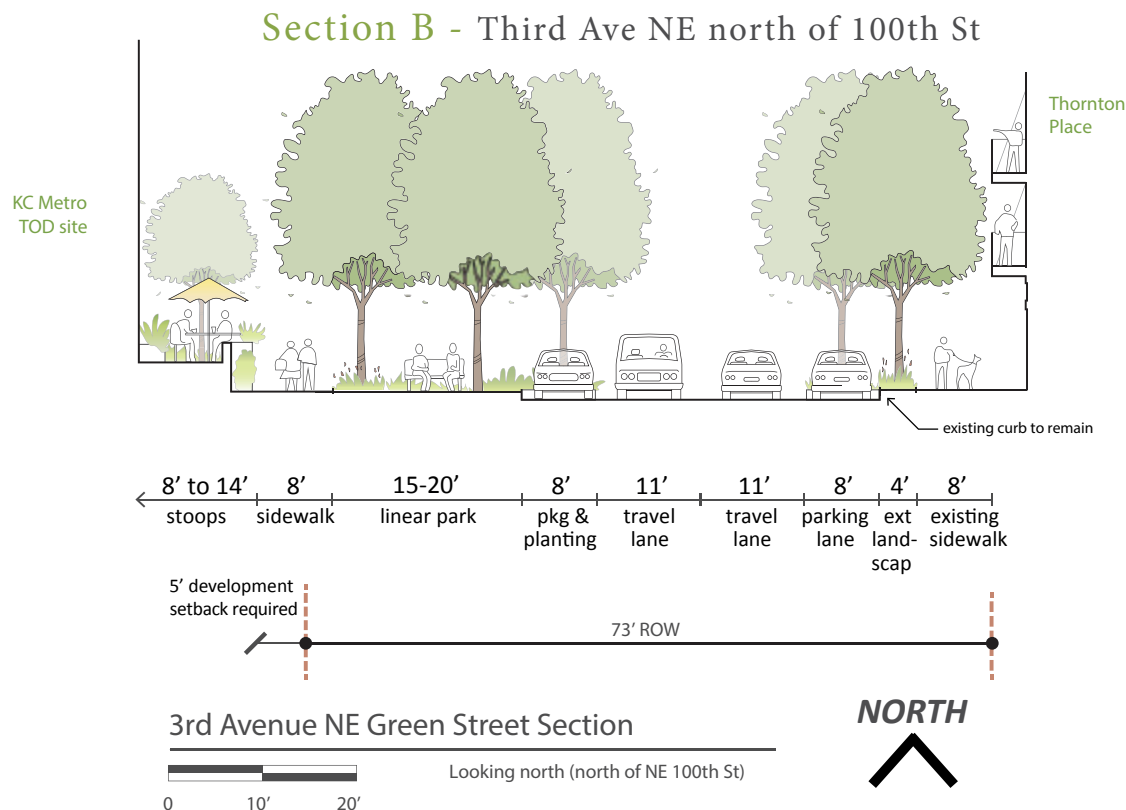
Third Ave NE: A Linear Park Street

Third Ave NE will be both a central “Main Street” and a linear park street, providing an important pedestrian connection and greened space to link the neighborhood subareas north and south of NE 100th St.

Generous sidewalks and green street features will reinforce and unify the neighborhood street character of 3rd Ave NE while providing a buffer to adjacent surface parking areas. In order to help complete the neighborhood pedestrian network, sidewalks will be added to the 3rd Ave NE right-of-way south of NE 100th Street, where they currently do not exist.

Configured in the form of a linear park 15-20 feet wide plus an additional 8 feet given to sidewalks, this corridor will create a strong pedestrian pathway that serves and connects the Northgate South subarea.

North of NE 100th St., this design (if 15 feet in width) could be accomplished within the right-of-way without overlapping private property, if a left-turn lane through the middle of this block is eliminated south of Thornton Place’s entry to 3rd Ave NE. A right-turn pocket on 3rd Ave NE, and adding a traffic signal at NE 100th St./3rd Ave NE will help maintain vehicle traffic movement efficiencies.



Third Ave NE south of NE 100th Street

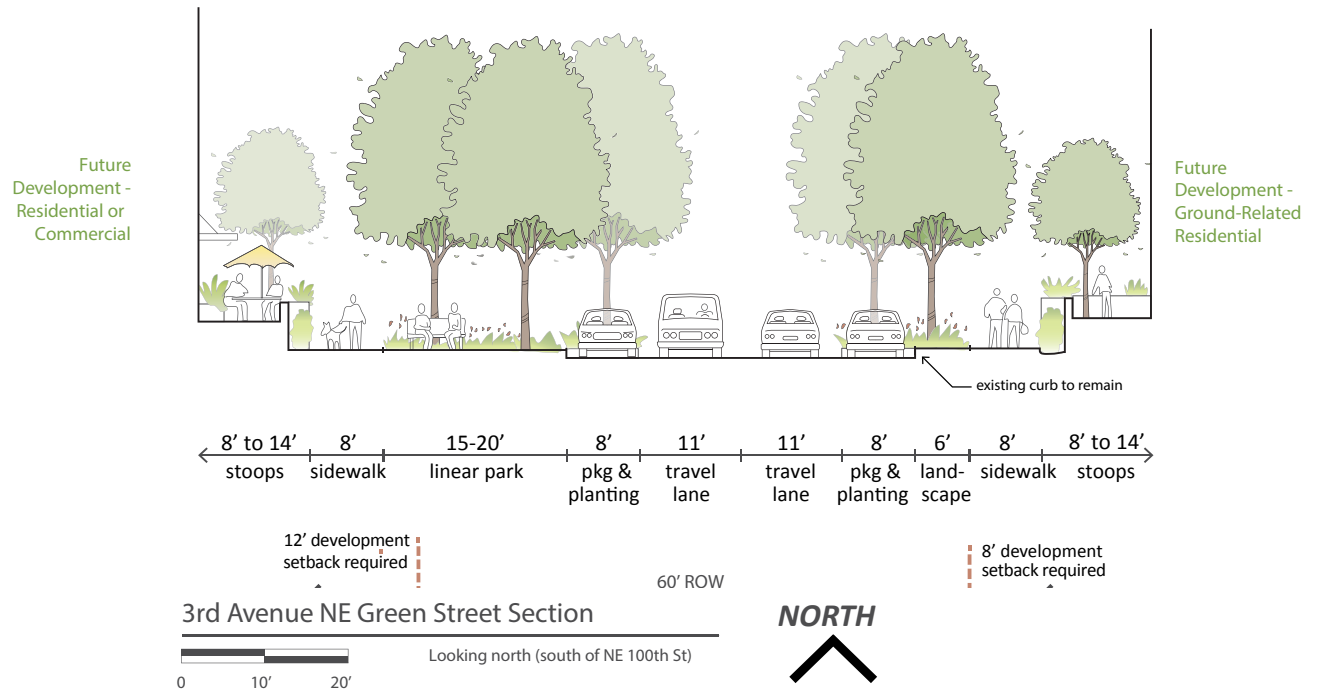
The 3rd Ave NE right of way south of NE 100th St. may be reconfigured to eliminate the existing vegetated median in exchange for usable public green space directly adjacent to the sidewalk. Alternatively, eliminating parking on one side of the street would enable a linear park corridor while also keeping the existing vegetated median.

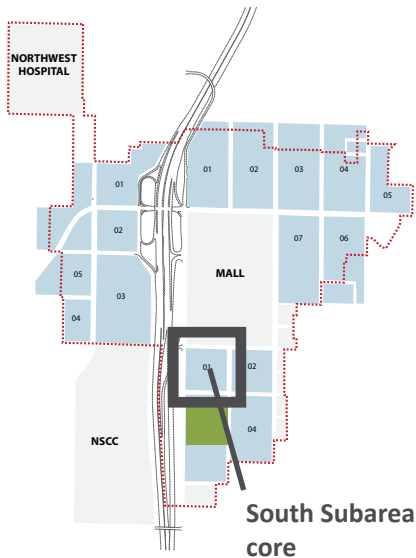
South of NE 100th St., this street section would overlap with private properties by approximately 8-9 feet on both sides of the street. This overlap, either retained in private property or in future acquired right-of-way, would be used to enhance the public realm in anticipation of adjacent redevelopment with street-related uses.



A linear park street with commercial uses at its edge

Section C - Third Ave NE south of 100th St





Context

A transit-oriented development (TOD) is encouraged to occur between 1st and 3rd Avenues NE at the core of the South Subarea next to the future Link station (shown above). The South Subarea currently consists of a few superblocks with: the Thornton Place mixed use complex; Aljoya senior housing; several low-to-moderate scaled medical-dental office and clinic buildings; a few larger multi-tenant office buildings; limited presence of retail uses; and a dominating presence of surface-parking lots reflecting a suburban approach for commercial office development.

FIVE ASSETS: There are five assets of the South Subarea that will help support TOD goals:

1. Activity generated by transit riders

Transit riders will use local services and patronize restaurants, and some will choose to live in this subarea. The future TOD will facilitate pedestrians passing through the heart of the site on their way to and from the east.

2. The Northgate Mall as an adjacent draw for customers and activity

Northgate Mall is a major regional shopping destination with over one million square feet of retail, attracting thousands of shoppers and hundreds of employees to the area every day. The South Subarea and the King County property can be expected to attract future customers from the mall, due to proximity, transit ridership, good pedestrian connections, opportunities for complementary retail uses, and the provision of other welcoming place-making urban design amenities.

3. The nearby office district's potential to support future infill development and as a source of local service customers and town square users.

The subarea south of NE 100th Street has substantial medical and office employment and other nearby residential base. It also has a substantial potential to support future infill development that may occur in response to transit station proximity. The area lacks sufficient public gathering spaces, and so the King County property would offer a place for local services and a central community 'town square' gathering place for these users.

4. Thornton Place as an established resident base with complementary retail & public places.

Thornton Place's residential base of 530 apartments, movie and retail businesses, nearly 1,000 parking stalls, and green space provide an existing resident and visitor population. This helps lower risks for future development, and provides an opportunity to strengthen overall activity levels for the whole subarea. Ensuring there are direct pedestrian connections between the Link station and Thornton Place's amenities will naturally improve local circulation and beneficial levels of activity in public places.

5. North Seattle Community College as a potential draw with improved accessibility.

The 7,000+ college population of students and staff bring activity through the day to the campus west of I-5. With more convenient pedestrian/bicycle connections to the station area via a pedestrian/bicycle bridge across I-5, there is great potential to increase overall economic activity in the South Subarea, and increase the convenience and frequency of mass transit ridership for school commuting. This will also help "reunify" the Northgate Urban Center's two parts on either side of I-5, which will also benefit local residents west of I-5.



Northgate Mall



Northgate Washington Dental Service



Thornton Place



North Seattle Community College

Overall Development Goals

The City's goal for development of the King County property and the South Subarea is to ensure that a future development will result in a publicly accessible urban community that fully realizes its potential as a transit-oriented community. This goal synthesizes the objectives of regional and city planning policies as well as the preferences and priorities expressed in many community comments.

The King County property provides a significant opportunity to build upon the precedent established by Thornton Place to create an attractive and safe environment that is accessible and inviting to the surrounding community. King County's large publicly owned site provides a unique opportunity to realize a broad range of community development, environmental sustainability, livability, public health and social equity objectives.

Developing the King County Site

The King County Metro Northgate site has been North Seattle's primary bus transit center and commuter park and ride lot for decades. The construction of the Link station by 2021 provides an opportunity to redevelop this site with higher-density land uses that will be transit-supportive and important to the creation of a more walkable, vibrant and environmentally sustainable activity center in this part of the Urban Center. This will build upon the population base at the adjacent Thornton Place.

Benefits of TOD: Transit-oriented development promotes cleaner ways to travel than driving alone. By redeveloping the Northgate parking lot into a transit village, we will preserve precious farmland and open space elsewhere in the county, and will reduce air pollution. Households who live in this transit village will be more income-diverse than households in other multifamily housing communities, and will own fewer cars, and drive less often. They will generate fewer greenhouse gas emissions than other residents of the region.

This UDF explores ways to realize its full development potential while also adhering to strategies promoting public health, an excellent natural and built environment, and community economic growth.

At the same time, this UDF encourages a broader transformation of the South Subarea to be a mixed-use district that will also take advantage of proximity to mass transit service.

What qualities do we want to see in the TOD site development?

--A combination of public places and amenities that become an active "heart" of Northgate, attracting daily activity as a popular gathering place

--A walkable environment

--A safe place that is well-lit, secure, populated and supports healthy activities

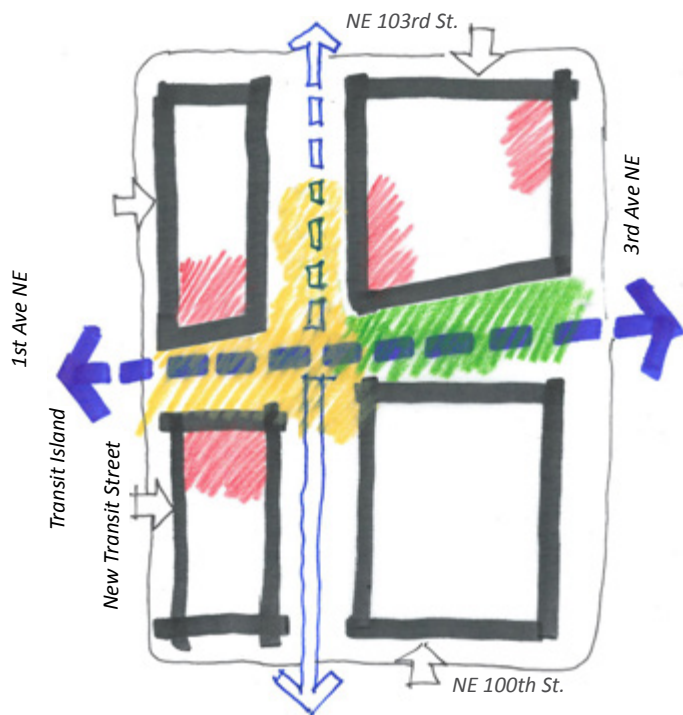
--Efficient development to maximize its potential as a transit-oriented activity center while still being a pleasant, livable setting

--Ground-level uses in key locations on the site that create an engaging and activated atmosphere

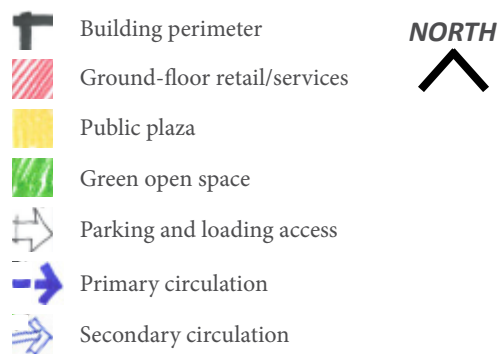
--Uses that support, integrate and blend well with the transit functions on the site and in the vicinity

--Uses that support an equitable mixed-income community with community amenities and economic opportunities that support the Northgate neighborhood

PREFERRED SITE DEVELOPMENT CONCEPT



URBAN FORM CONCEPT DIAGRAM



The preferred site development concept emphasizes pedestrian connections, greened public spaces, activated streetfronts through the center of the site, and extensive presence of residential uses to accomplish a transit-oriented community.

Key features include:

- A primary pedestrian-oriented east-west corridor through the center of the property, linking the transit station with Thornton Place;
- Generous public greened town square and plaza open spaces located along the east-west corridor;
- Block sizes and future mix of uses that are flexible for development in phases
- North-south access for vehicles and pedestrians
- Ground-floor commercial uses and a variety of housing types, including affordable housing
- Transit island designed to ease transit connections between bus and rail, and fit within the area's street network

Development Guidelines

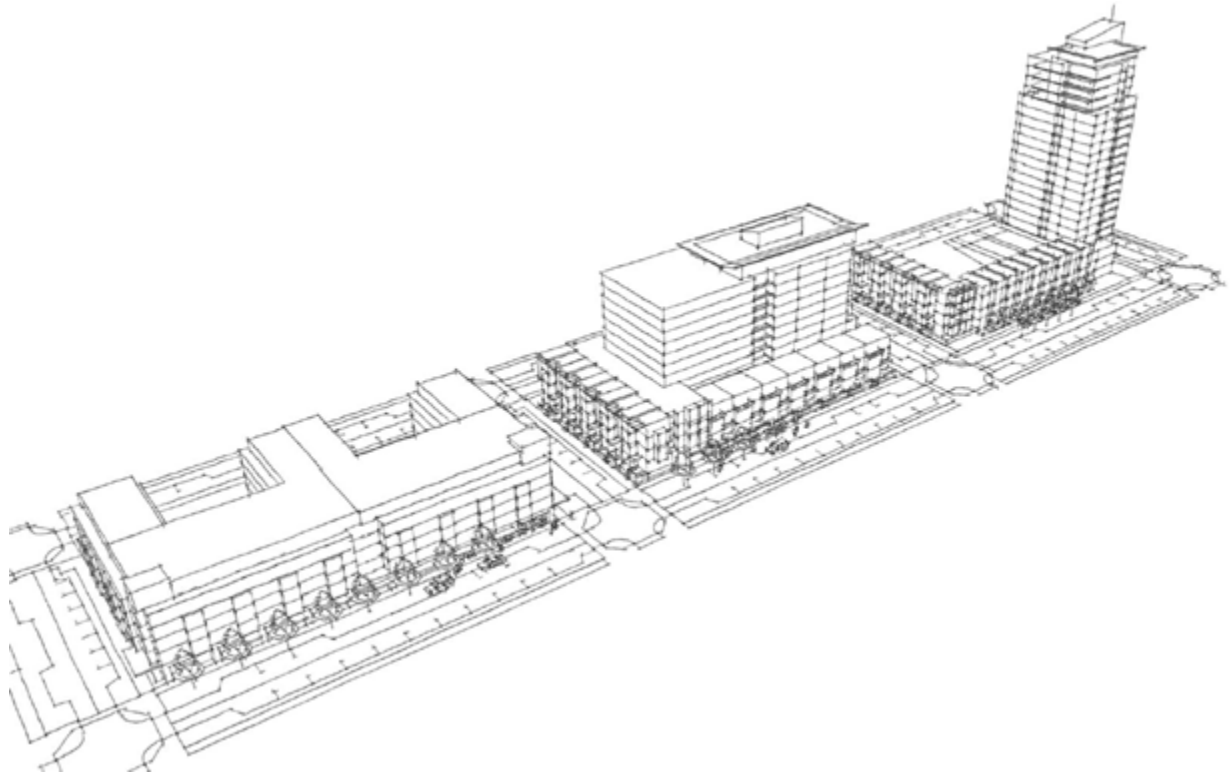
The following guidelines articulate the most important and desirable characteristics of future development at the Northgate Metro TOD site.

The guidelines will influence future buildings, streets and amenities in ways to meet the goals discussed in this UDF.

There is an intentional flexibility in how these recommendations can affect future development. There are many possibilities for the development of this TOD, and the City does not wish to prevent creative and efficient arrangements that will result in a great transit-oriented community.

The guidelines are organized into four main categories:

1. Defining Blocks and Major Pathways Within the Site
2. Parks and Public Amenities
3. Land Uses and Building Design
4. Other Supporting Features and Qualities



The illustration above shows three buildings with roughly the same capacity (in floor area) distributed with different heights and massing. This suggests the benefits that taller tower forms can bring in allowing other portions to be lower-scaled.

DEFINING BLOCKS AND MAJOR PATHWAYS WITHIN THE SITE

The recommended TOD concept is to divide the site into four rectangular blocks that will serve as future building development blocks. This would occur through:

- A central east-west corridor for predominantly pedestrian and bicycle movements between Thornton Place to the east and the transit station to the west; and
- A north-south street or pedestrian corridor that would provide access to parking and complementary public spaces; and

- Other complementary indoor or outdoor pedestrian connections within the development blocks, to increase overall pedestrian circulation and achieve an urban form with a finer grain.

East-West Corridor

The east-west corridor is recommended to include an open space that will be a multipurpose 'town square' public gathering space.

The corridor should provide an approximate line-of-sight between the transit station and Thornton Place's entry on 3rd Ave NE.

Recommended features of the corridor:

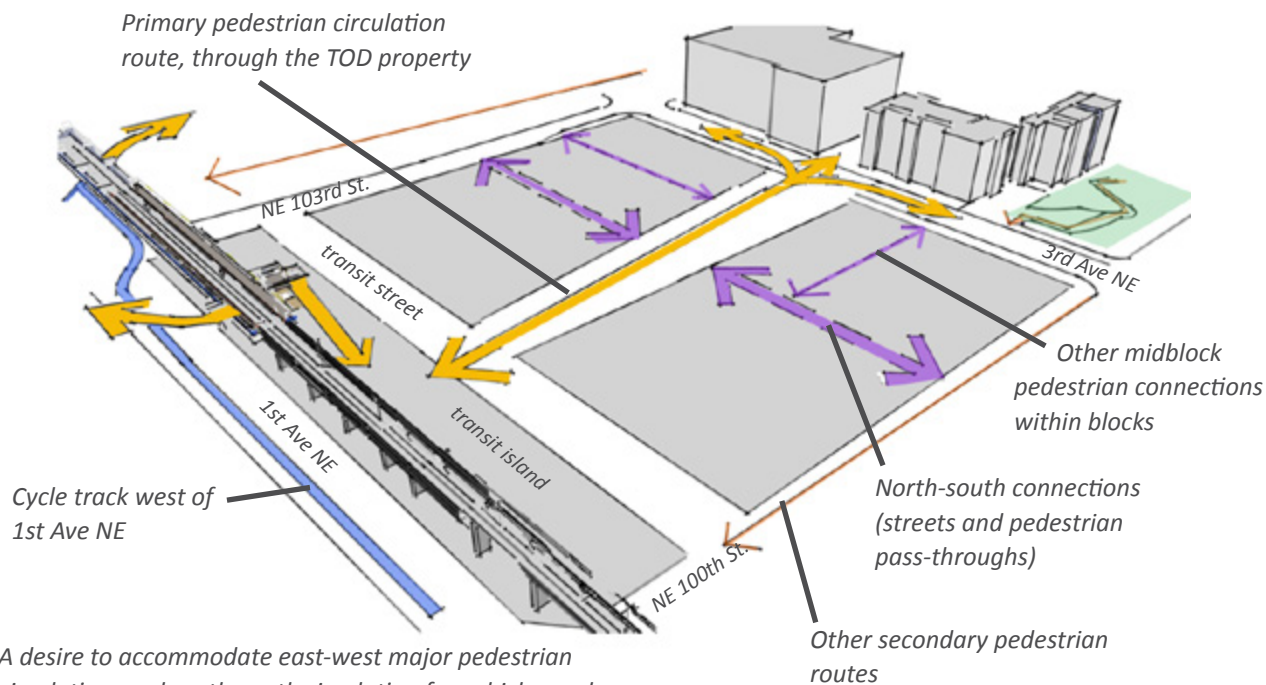
An average corridor width of approximately 40 feet, allowing for considerable flexibility in width in different parts of the corridor -- to accommodate the town square and other plazas.

Prioritizing pedestrian movement over vehicles. The corridor may contain a one-way automobile access street if designed as a pedestrian prioritized and curbsless environment with special paving, and the ability to restrict vehicular access during special events.

High quality pedestrian amenities and lighting along with engaging street-level uses and other design features that will create an attractive and safe environment.

Appropriate paving material and other street design features promoting safety and aesthetic quality at the major crossing of the transit street (east edge of the transit island).

Weather protection features such as canopies on adjacent buildings for at least 50% of the east-west corridor.



A desire to accommodate east-west major pedestrian circulation, and north-south circulation for vehicles and pedestrians within the TOD site. Other circulation routes also recommended within each smaller block.

DEFINING BLOCKS AND MAJOR PATHWAYS WITHIN THE SITE (Continued)

Blocks

There is no recommended fixed block size, but blockface lengths of at least 120 feet will provide for sufficient spacing of streets and intersections and will provide building sites that are well sized for individual building and parking construction.

North-South Corridor

The north-south corridor may consist of a two-way automobile street with accompanying sidewalks and parking lanes across the entire site, or may consist of a primarily pedestrian-oriented corridor along part or all of its length. On-street parking may be provided in this corridor. This corridor is expected to accommodate vehicle access to underground parking for at least some of the future building sites.

PARKS AND PUBLIC AMENITIES

Parks, public amenities and open space features should complement and connect to the network of open spaces around the site. This includes designs that acknowledge and relate to the Thornton Drainage Channel corridor just east of 3rd Ave NE at Thornton Place. Open space amenities also should:

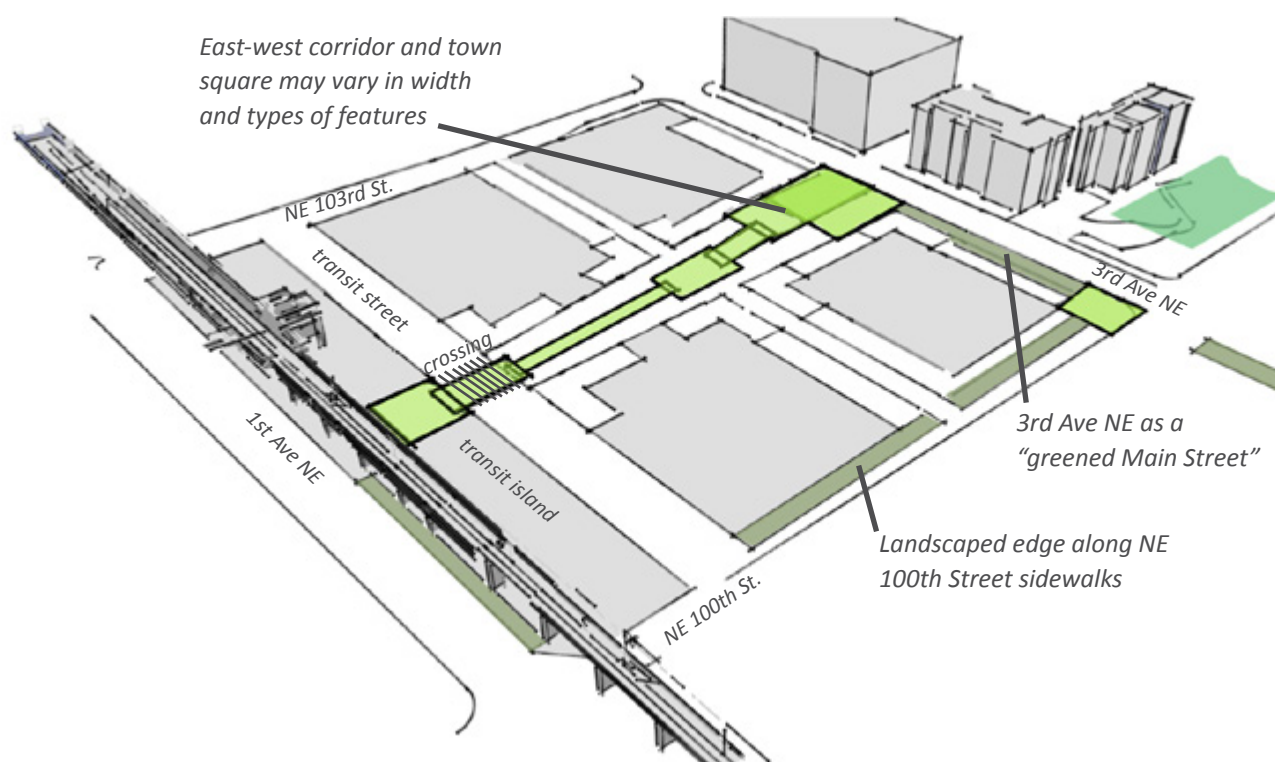
- Emphasize 3rd Ave NE as a greened “Main Street” helping unify the Northgate South sub-area;
- Reconfigure NE 100th St. with more green design features

- Locate a community town square park/plaza feature in proximity to 3rd Ave NE to be a comfortable, activated and successful “people place.”
- Include a plaza or other treatment at the junction of the transit-street pedestrian crossing and the beginning of the east-west connection.

Recommended Features

Community Park/Plaza Space(s) and Open Space

- A community park or plaza approximately 10,000 square feet in size as part of the east-west corridor that will function as a town square and open space amenity for local residents and visitors.
 - The development should provide for a minimum of 15% of the site’s area in outdoor open spaces. This amount could be phased in over time as the site develops.
- The park/plaza should be:
- Located on or near the east-west corridor.
 - A suitable community gathering place, with a combination of both hardscape and durable landscaped areas to soften and enhance the spaces.
 - Designed to integrate public artworks, as well as green features such as raingardens or similar features, and sculptural water features.
 - Configured to provide a sense of an “outdoor room” in an urban setting.



Locate and link open spaces along the major east-west circulation route, including a large community ‘town square’ oriented closer to 3rd Ave NE. Also, a linear street park recommended for part of 3rd Ave NE and greening of the NE 100th St. corridor.

PARKS AND PUBLIC AMENITIES (Continued)

- Located to complement and enhance viability of ground-level non-residential uses; for example, designed with edges and amenity features that will encourage restaurants with outdoor dining spaces.
- Designed to accommodate a single-level small building and/or multiple kiosks for cafes or similar activating uses to stimulate activity within the corridor and help define edges of the public space.
- Configured to gain most advantage from solar exposure, particularly in afternoon hours.
- Fully accessible to the general public for all daytime and evening hours, to provide gathering place(s) that are designed to accommodate multiple functions and uses, such as farmers markets, book fairs, and daytime concerts.

Sidewalks

- Provide sidewalks and streetscape improvements at the site perimeter as shown in the street section drawings included in this UDF.

Other Community Amenities

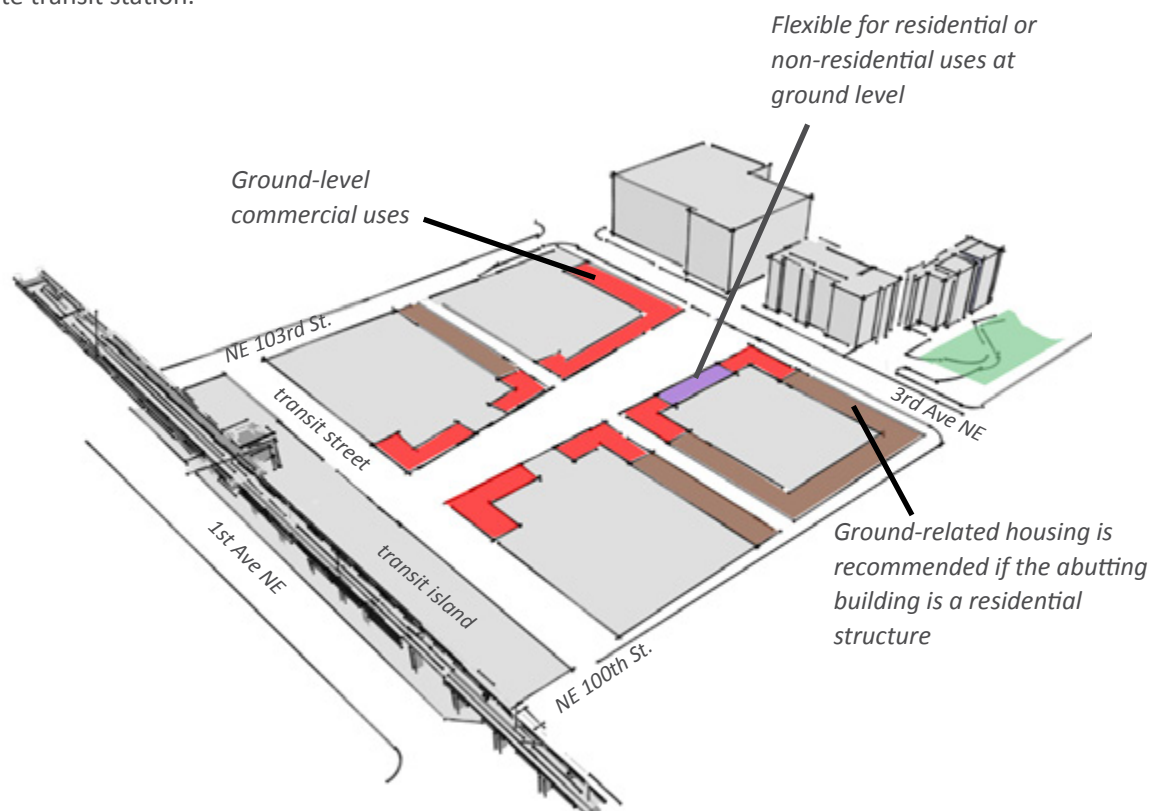
- Encourage provision of indoor community amenity features, including community meeting rooms, space for recreational activities, accessory spaces such as shopping atriums, and artist/cultural facilities as tenants.

LAND USES AND BUILDING DESIGN

The intent is to encourage efficient use of land on this TOD site while providing public amenities and serving community needs with affordable housing, services and community facilities. These recommendations provide guidance to shape the future development and ensure that the arrangement, sizing and combinations of uses will lead to an active and vibrant urban community at the Northgate transit station.

Possible Development Agreement

- To allow flexibility in application of development standards and to achieve high-quality design in the transit-oriented community, a development agreement is encouraged.



A desire to concentrate ground floor commercial uses (in red) along the east-west circulation corridor. Also, a desire to include ground-related housing with stoops (in brown) on north-south corridors where residential buildings are present.

Recommended Features

- The TOD site should host a combination of uses that are built in response to market forces. Expected uses will primarily be residential, retail, and office development.

Site Density

- This UDF recommends that future development use as much of the available development capacity as possible, to most efficiently use this key transit center core property. The density limit is 6 FAR (total floor area can equal 6 times the site's total land area). City zoning allows this density limit to be exceeded if it will enable more residential housing to occur.
- A recommended minimum density of 2 FAR per building site or defined "block" on the TOD site.

Height Limits

- Structures that exceed the current 125-foot height limit could provide a distinct identity for this station area and allow for sufficient development potential to make this a successful TOD.
- Strategies such as site coverage limits could help taller buildings make positive contributions to the function and design of the area.

Transfer of Development Density

- To provide flexibility for the most efficient development outcomes, allow the transfer of development capacity among individual properties across the TOD site.

LAND USES AND BUILDING DESIGN (Continued)

Ground-Floor Commercial Uses

- Ground-floor retail uses are encouraged along at least one side of the east-west pedestrian corridor, and along the edges of the recommended town square open space. Ground-level retail uses are also encouraged along the west side of 3rd Ave NE, at a minimum to include locations north of the east-west pedestrian corridor. (See the illustration on page 69).
- Convenience retail uses are encouraged to occur adjacent to or on the transit island's main pedestrian plaza, to provide visible and convenient goods and services for transit users.

Amount of Retail Uses

- For the whole TOD site, provision of an approximate minimum of 40,000 square feet of ground-level retail uses is recommended, to ensure availability of services and activation of the main east-west corridor.
- The development is encouraged to provide a medium sized grocery store or urban market and a drug store as resident-supportive uses and convenience uses to commuters.

Residential Development

- Residential uses will be permitted throughout the TOD site, although ambient noise levels may discourage location of residential uses facing the light rail facilities and Interstate 5.
- To establish an engaging residential presence along streets, encourage ground-level, ground-

related housing with stoops on block faces of predominantly residential buildings that border on the north-south streets, including 3rd Ave NE south of the east-west pedestrian corridor.

Affordable Housing

- The TOD site development will be required to include affordable housing targeted to provide new affordable dwelling units serving a range of household incomes.
- The TOD site development will contribute toward achieving the Growing Transit Communities TOD Compact goals for affordable housing production, which are:
 - 13% of dwelling units serving households from 0-30% area median income
 - 12% of dwelling units serving households between 30-50% area median income
 - 18% of dwelling units serving households between 50-80% area median income

The development agreement will specify levels of affordability.

Tower Size Limits

- Define a maximum size limit of 10,000-12,000 square feet per floor for residential tower floors.

Locations of Towers

- Portions of the TOD site north of the east-west pedestrian corridor are preferred as locations for the tallest building towers, in order to avoid shad-

ing the primary public spaces.

Upper-Level Building Setbacks

- Define upper-level building setbacks for towers in the range of 5-15 feet above a building's base, to allow more light into sidewalk and pedestrian corridors.

Limits on Uses

To encourage efficient use of the site:

- Prohibit surface parking on building sites or restrict it to accessory short-term spaces.
- Limit individual ground-level retail/commercial spaces located on the TOD site to approximately 25,000 square feet.
- Prohibit presence of drive-in businesses.

OTHER SUPPORTING FEATURES AND QUALITIES

Recommended Features

Green Performance Levels

- Meet a high level of environmental performance for buildings, to a minimum of LEED Gold or Built Green 4-Star standards.
- Meet City Green Factor for landscaping at a minimum performance level of 0.3. This will afford flexibility in the selection of strategies for accomplishing greened conditions in future development.
- Encourage inclusion of raingardens and distinctive landscaping and water features.

Transit “Busway” Street

- Accommodate a vegetated median within the transit street that discourages jaywalking.
- Ensure a well-marked crossing at the east-west pedestrian corridor.
- Ensure sufficient safety for pedestrians and bicyclists for the busway crossing locations at the north and south ends of the transit island.
- Require that the northbound lane is available for general purpose traffic, and that two southbound lanes are reserved only for transit use. Require curbside parking spaces next to the northbound lane (east side of transit street).
- Accommodate street design flexibility and relief from code standards, if it will help avoid bus service operational conflicts.

Parking

- Encourage parking provision that will be “right-sized,” meaning that future development will avoid parking in excess of its needs. The recommended performance guideline is to achieve site-wide parking rates that are less than one parking space per dwelling unit and one space per 1,000 square feet of nonresidential floor area. However, for the non-residential uses’ parking guideline consider flexibility for retail-uses’ parking to exceed a rate of one space per 1,000 square feet.
- Recommended parking should be located underground and not on the surface of any building site.
- Accommodate on-street parking for the site’s internal streets.
- Accommodate above-ground structured parking for up to 30 feet above grade, if intervening uses or full screening of parking areas from view is accomplished.

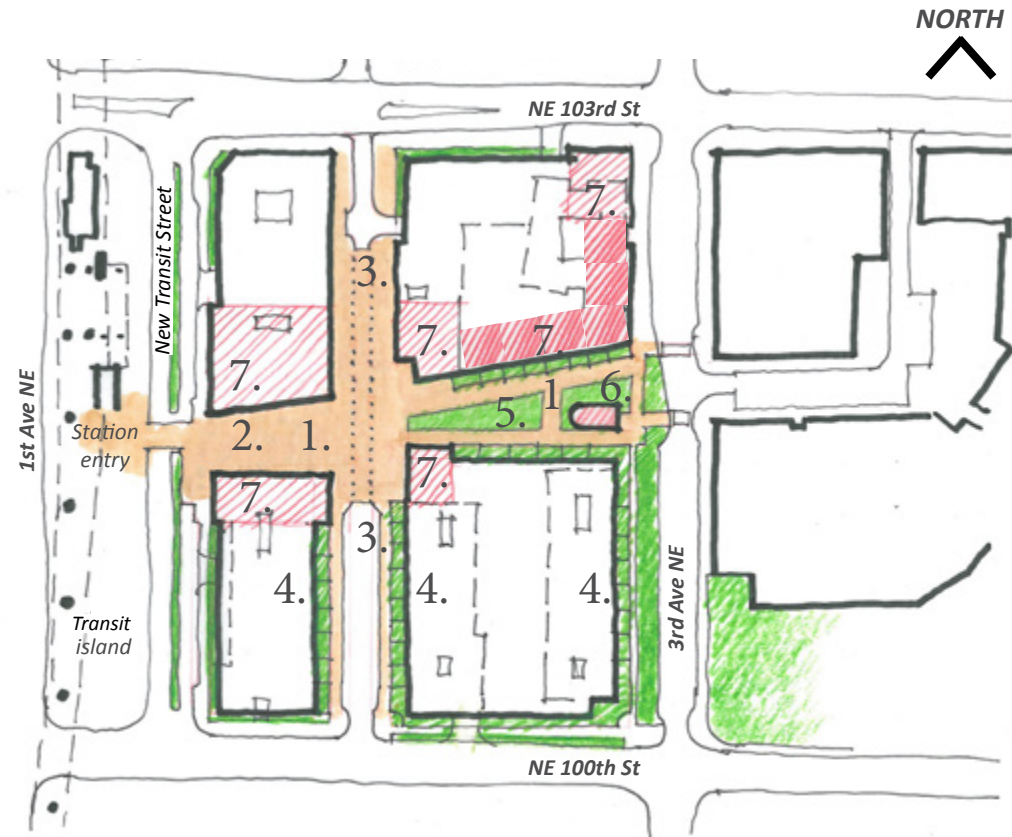
Vehicle Access

- Recommend parking accesses be located on the internal north-south street when possible.
- Accommodate parking accesses from 3rd Ave NE, NE 100th St., and the transit street; parking accesses may also occur from NE 103rd St. as long as the City concurs that safety and operational efficiencies can be maintained.
- Allow parking accesses at other locations if necessary to meet other City design goals.

Development Concept Using the UDF Guidance

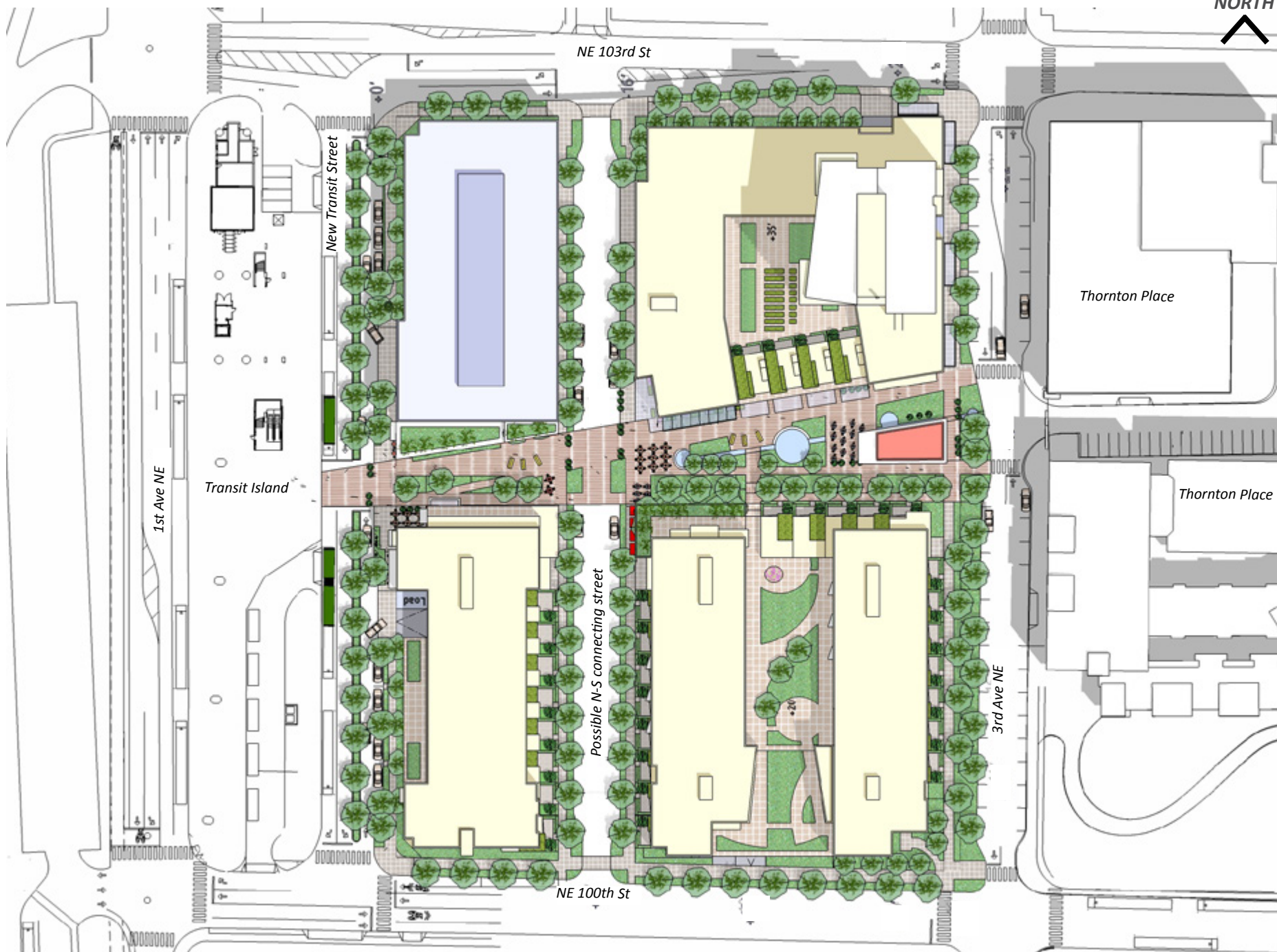
The following illustrations show one conceptual site plan that would be consistent with the City's proposed guidelines. However, this is not meant to show the only acceptable development outcome. Also see Appendix 1 for other alternative siting possibilities.

Development on the site should fit well within the recommended off-site improvements to the South subarea. These include the proposed street parks and related streetscape improvements on 3rd Ave NE and NE 100th Street. As well, the TOD would help area pedestrian circulation by providing attractive pathways for transit users, to and from Maple Leaf.

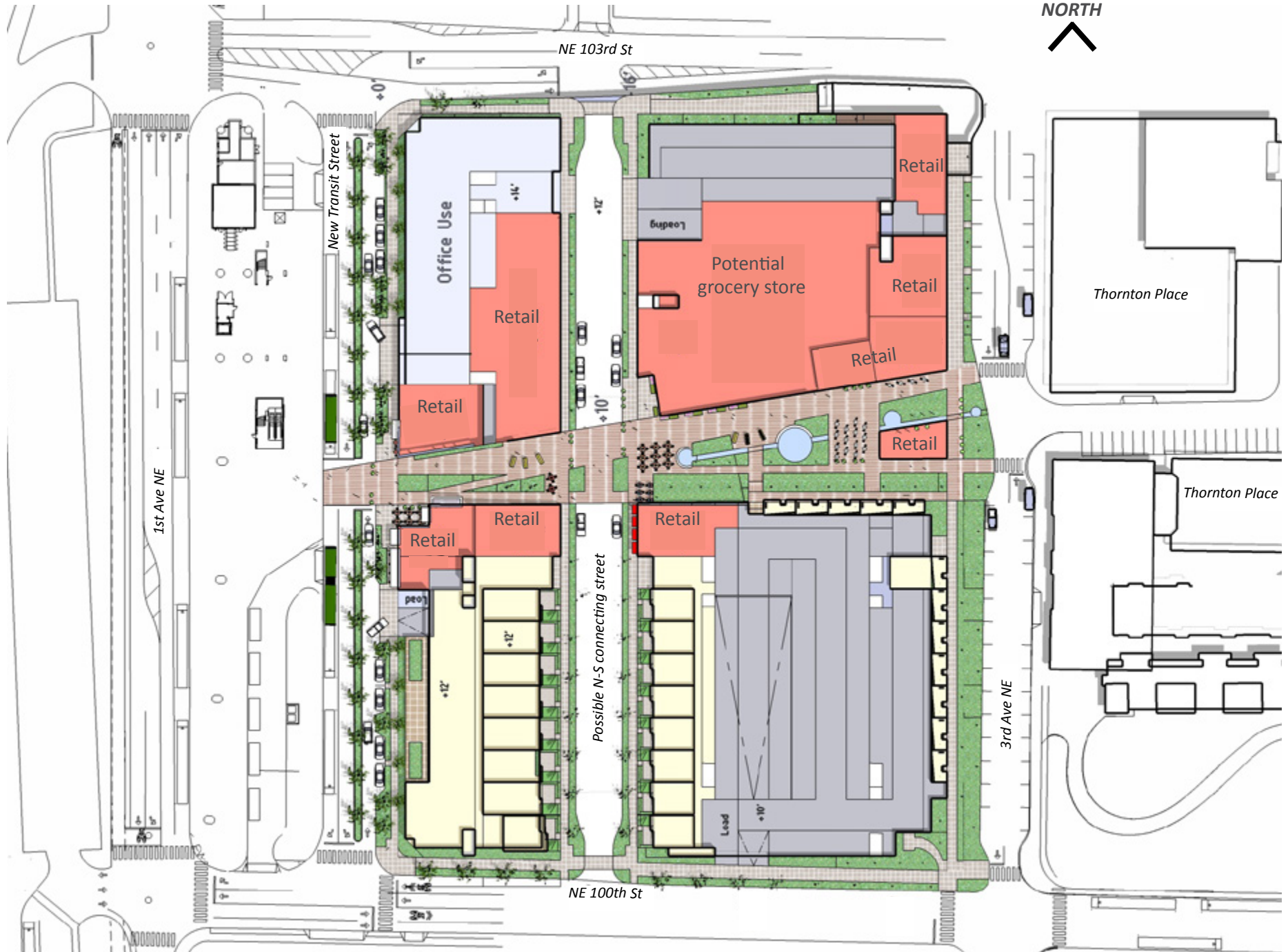


CONCEPTUAL SITE PLAN

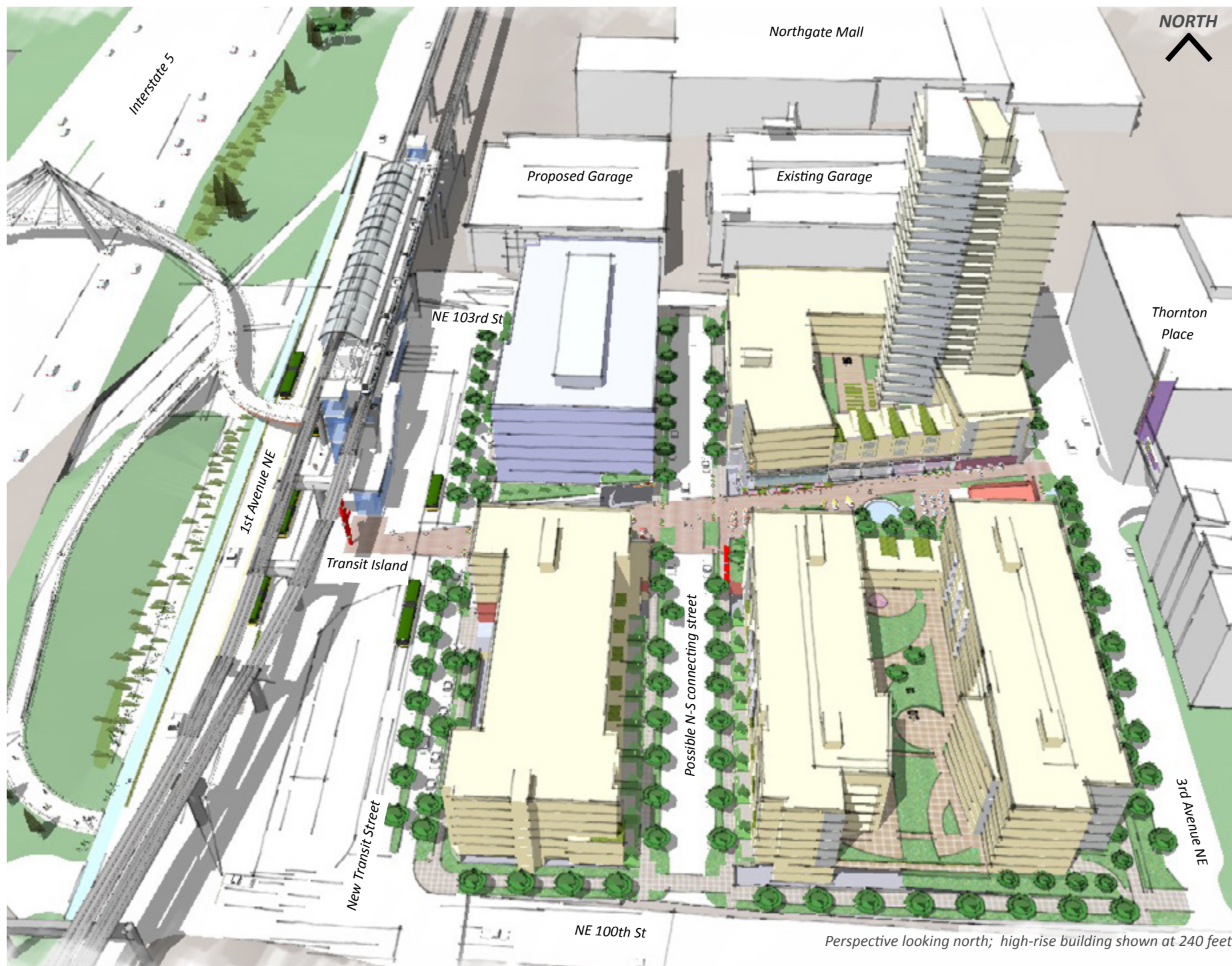
1. Town Square plaza
2. Primary pedestrian access from station to 3rd Ave NE
3. Access and service routes through site, becoming a textured *woonerf* at the town square
4. Townhomes or work lofts with ground-related entrances and landscaped stoops
5. Common green space for recreation, playgrounds, and/or rain gardens
6. One-story kiosk retail
7. Encouraged ground-floor commercial retail uses

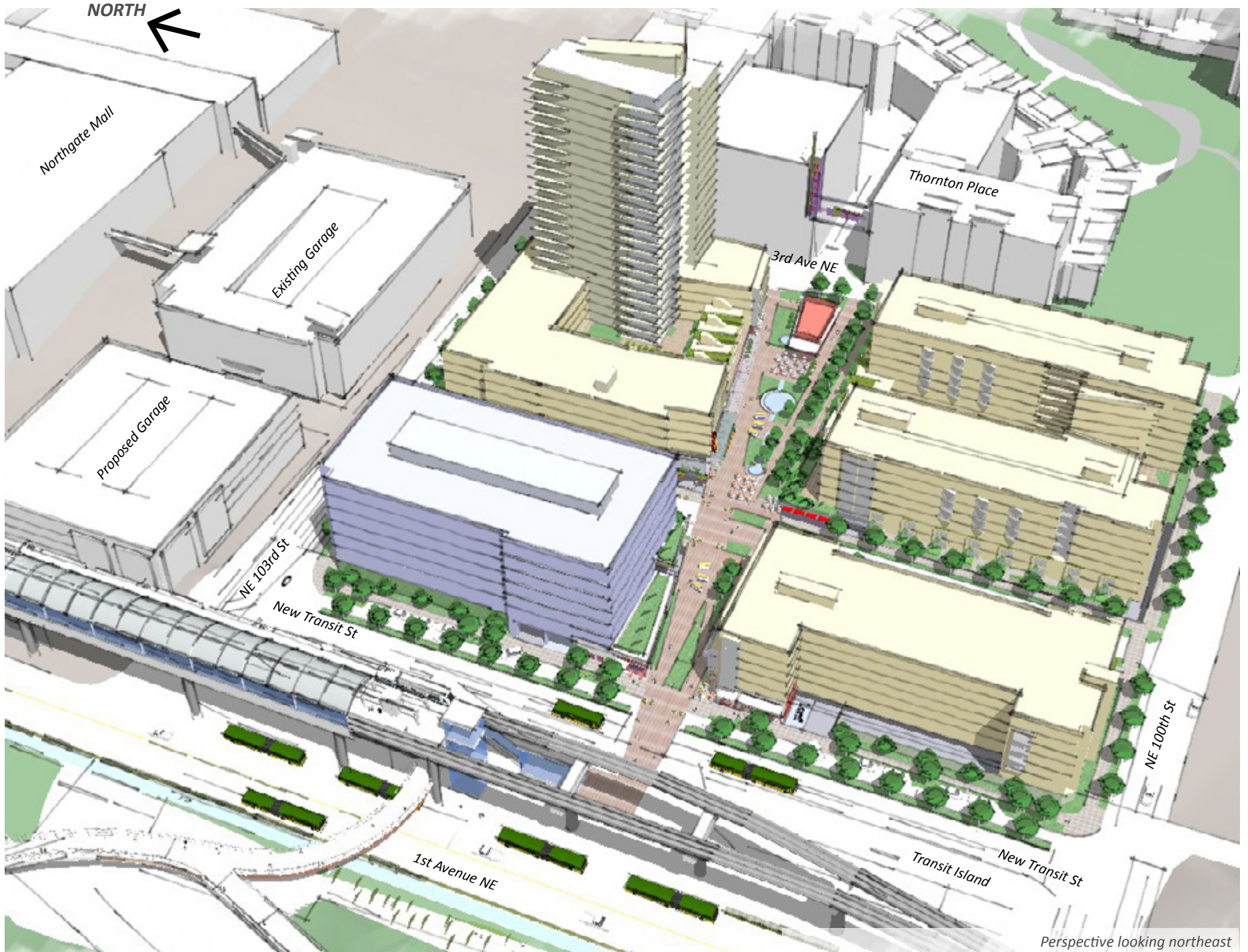


Illustrative Site Plan



Ground Level Plan to illustrate desired uses and active edges





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5 IMPLEMENTATION

Transforming the Northgate Urban Center into a more livable and walkable community will require actions by multiple departments of the City of Seattle in collaboration with partner public agencies such as Washington Department of Transportation, King County and Sound Transit. More detailed evaluation and recommendations will be required to resolve issues comprehensively. However, several general implementation steps are recommended below. These actions are designed to leverage current investments and general market development patterns. The City Departments of Planning and Development (DPD) and Transportation (SDOT) are suggested to lead the relevant actions listed below related to each subarea.

Northgate North Subarea

DPD should lead efforts related to development opportunities. Actions should include meetings with property owners to present and discuss City goals and objectives of the UDF. Both individual and group meetings should be considered to elicit the most useful information. Based upon meetings, develop strategies and tools to better catalyze and coordinate future development opportunities consistent with UDF goals.

SDOT should lead efforts to further evaluate recommendations for improving streets and mobility connections. Actions should include:

- Develop street concept plans for 5th Ave NE, and NE Northgate Way.
- As needed, assist appropriate community organizations to sponsor Neighborhood Street Fund grant applications for street improvements on 5th Ave NE.
- Coordinate with King County Metro to determine how to further evaluate and realize recommended improvements to the transit facilities.
- As part of ongoing transportation planning, develop strategies (including multi-agency collaborative strategies) to realize the recommended new street and pedestrian/bike connections.
- Facilitate community application for Neighborhood Matching Funds for Hubbard Homestead Park improvements and connections to nearby senior housing.

Also consider future funding such as the new Parks Levy, Future Bridging the Gap transportation improvements levy, and other collaborative funding strategies for all street improvements.

Northgate South Subarea

DPD should address development opportunities on both the King County Metro TOD site as well as other development opportunities in the Northgate South Subarea.

The TOD site may be the first catalyst for redevelopment and for street improvements.

For the Metro TOD site, DPD should refine and incorporate the proposed development guidelines into a development agreement with King County that allows it to solicit for development services. DPD and SDOT should coordinate commitment of capital funding for infrastructure and right-of-way improvements with a possible Request for Proposals and as part of the future development agreement for the site.

For all other development areas, DPD should meet with property owners to present and discuss City intentions and objectives of the UDF. Both individual and group meetings should be considered to elicit the most useful information. Based upon meetings, develop strategies and tools to better catalyze and coordinate future development opportunities consistent with UDF goals.

The design and funding for the new cross I-5 bridge at NE 103rd St. is a significant second catalyst for change. SDOT should:

- Continue coordination of the proposed pedestrian and bicycle bridge evaluation across I-5, connecting the Transit Center and surrounding Northgate South subarea to NSCC, the Northgate West subarea and the overall North Seattle bicycle infrastructure network.
- Develop street concept plans for the green street and cycle track for NE 100th St. and 3rd Ave NE in coordination with SPU.

- The new bridge can catalyze funding for new pedestrian and bike connections to the bridge along NE 100th St. and from NE Northgate Way. SDOT should include these pedestrian and bike connections in their project descriptions as they pursue potential funding sources.
- Assist the appropriate community organizations to sponsor Neighborhood Matching Fund grant applications for street improvements.

Northgate West Subarea

DPD should:

- Continue to monitor opportunities that could arise with future development to include a new active public space.
- Meet with property owners to present and discuss City intentions and objectives of the UDF. Both individual and group meetings should be considered to elicit the most useful information. Based upon meetings, develop strategies and tools to better catalyze and coordinate future development opportunities consistent with UDF goals.

SDOT should:

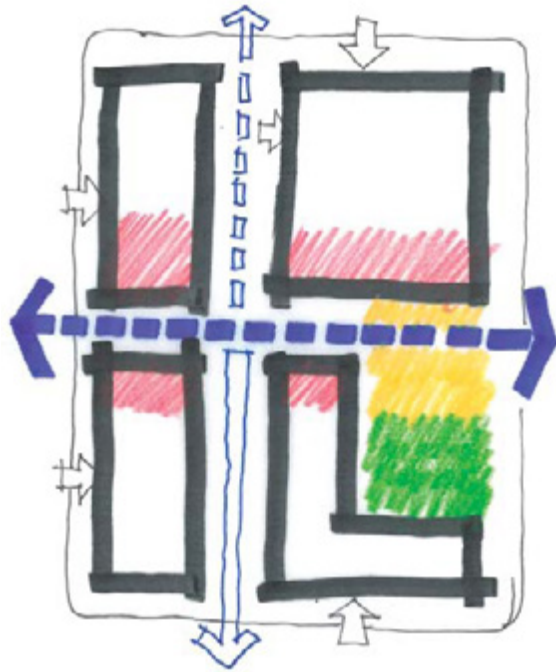
- Develop a street concept plan for Meridian Ave N
- Develop strategies to realize recommended new street and pedestrian/bike connections.

APPENDICES








1. TOD Site Design Alternatives

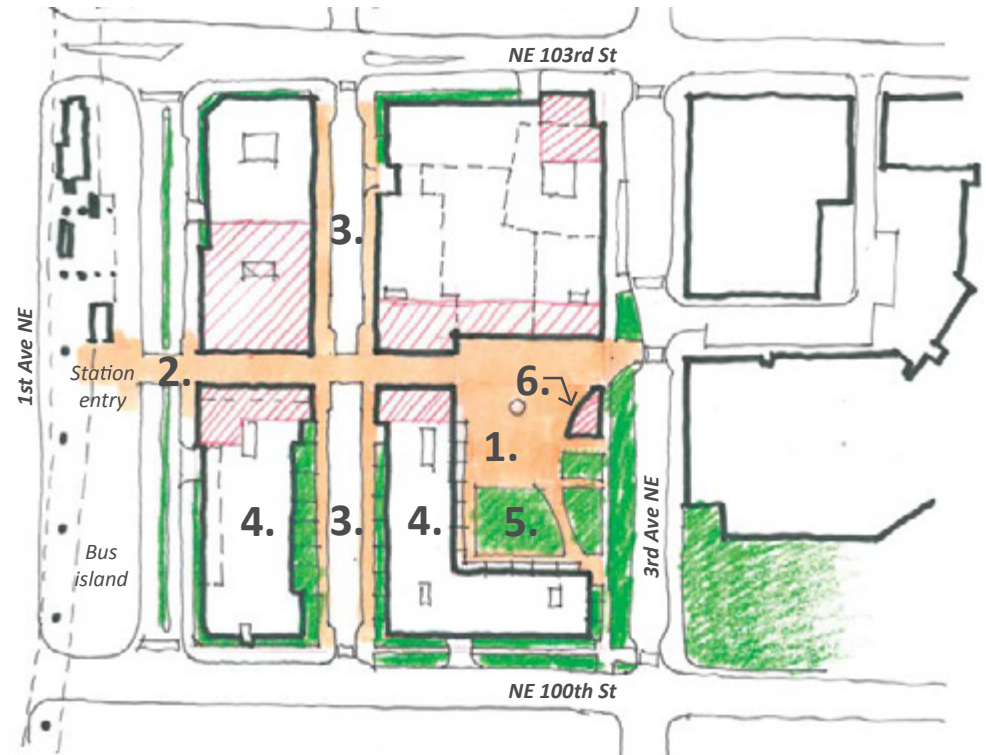
APPENDIX 1: TOD Site Design Alternatives

A DEVELOPMENT OPTION



URBAN FORM CONCEPT DIAGRAM

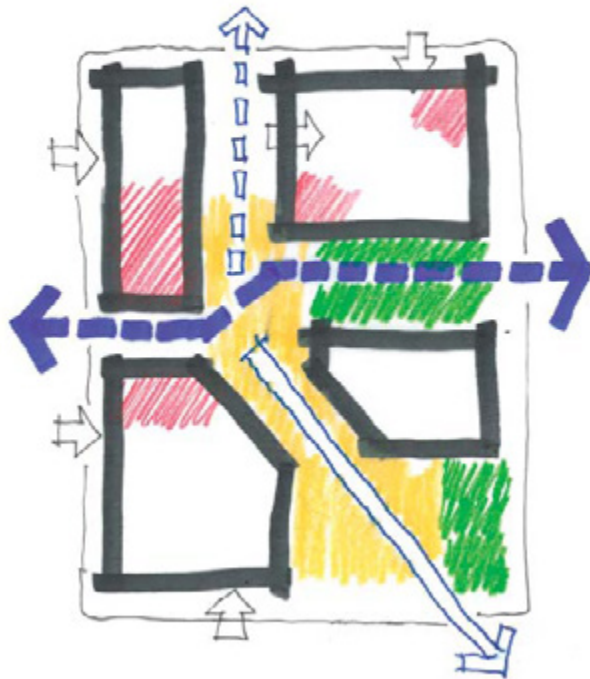
-  Building perimeter
-  Ground-floor retail/services
-  Public plaza
-  Green open space
-  Parking and loading access
-  Primary circulation
-  Secondary circulation








CONCEPTUAL SITE PLAN

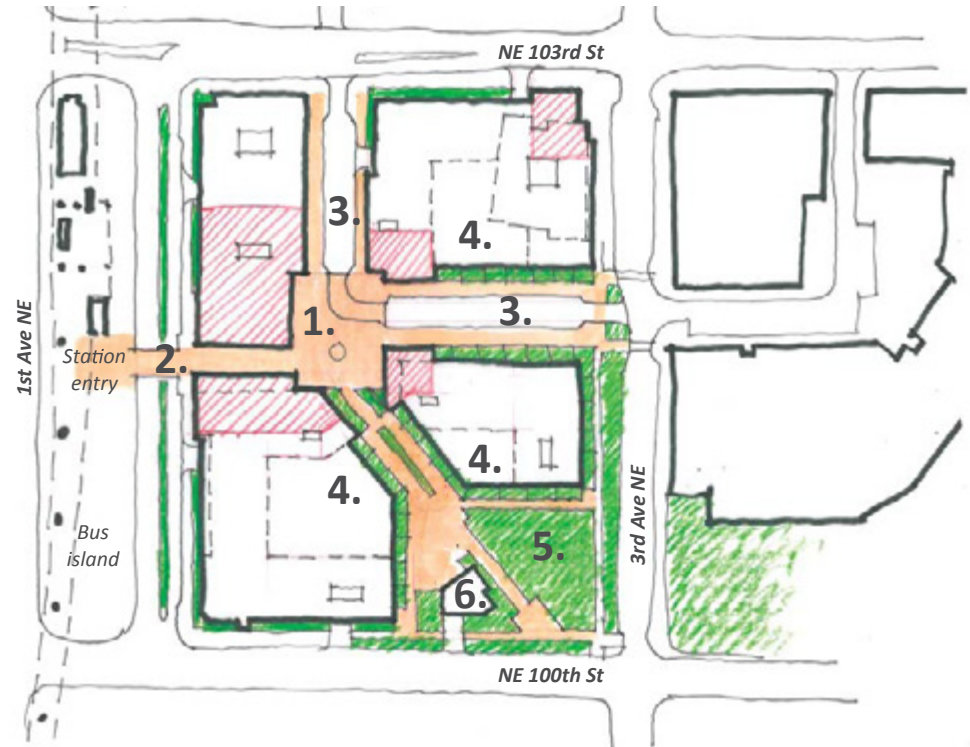
1. Town Square plaza framed by residential portion of Thornton Place development; opens up to 3rd Avenue NE
2. Primary pedestrian access from station to 3rd Ave. NE
3. Access and service lane divides the block into multiple development sites; provides some short-term parking
4. Townhomes or work lofts with ground-related entrances and landscaped stoops
5. Common green space for recreation, playgrounds, and/or raingardens
6. One-story kiosk retail

DEVELOPMENT OPTION B



URBAN FORM CONCEPT DIAGRAM

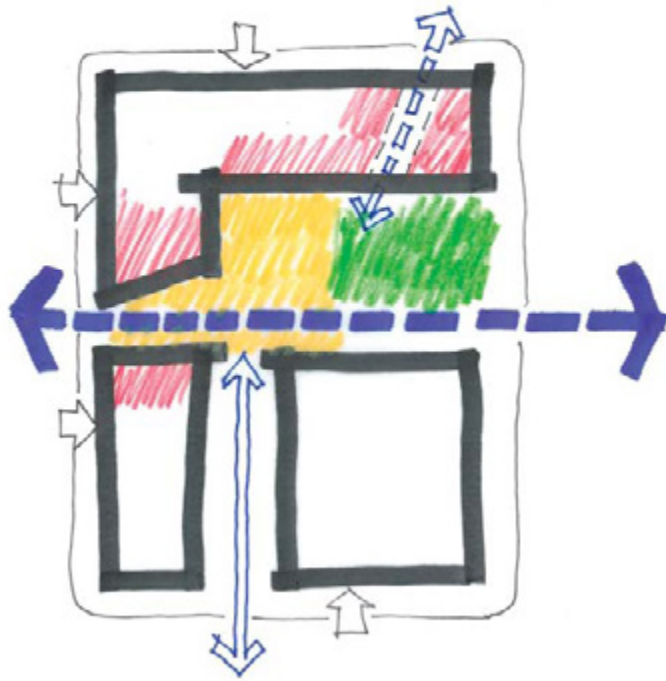
-  Building perimeter
-  Ground-floor retail/services
-  Public plaza
-  Green open space
-  Parking and loading access
-  Primary circulation
-  Secondary circulation










CONCEPTUAL SITE PLAN

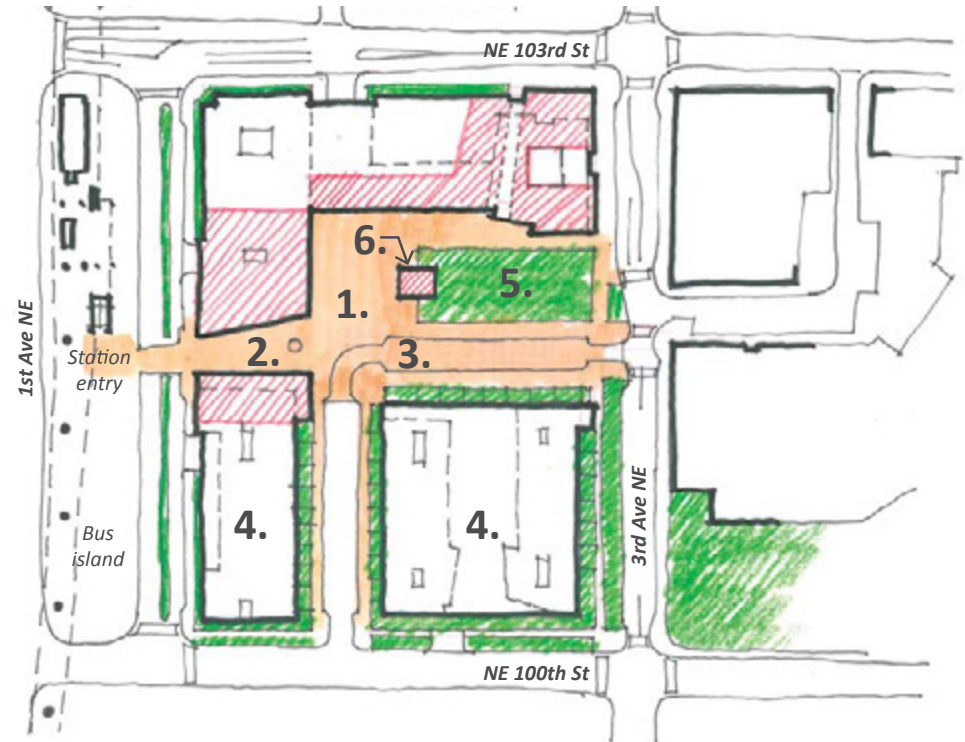
1. Town Square plaza
2. Primary pedestrian access from station to 3rd Ave. NE
3. Access and service lane divides the block into multiple development sites; provides some short-term parking
4. Townhomes or work lofts with ground-related entrances and landscaped stoops
5. Common green space for recreation, playgrounds, and/or rain gardens
6. One-story kiosk retail

C DEVELOPMENT OPTION



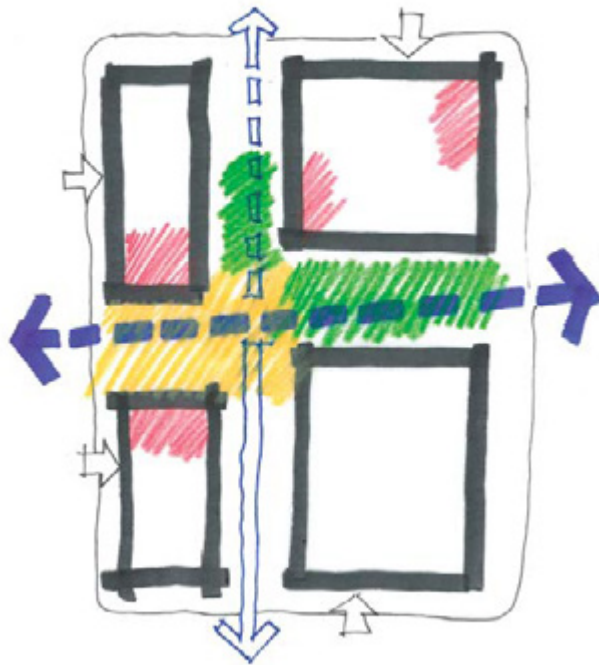
URBAN FORM CONCEPT DIAGRAM

-  Building perimeter
-  Ground-floor retail/services
-  Public plaza
-  Green open space
-  Parking and loading access
-  Primary circulation
-  Secondary circulation









CONCEPTUAL SITE PLAN

1. Town Square plaza
2. Primary pedestrian access from station to 3rd Ave. NE
3. Access and service lane divides the block into multiple development sites; provides some short-term parking
4. Townhomes or work lofts with ground-related entrances and landscaped stoops
5. Common green space for recreation, playgrounds, and/or rain gardens
6. One-story kiosk retail



URBAN FORM CONCEPT DIAGRAM

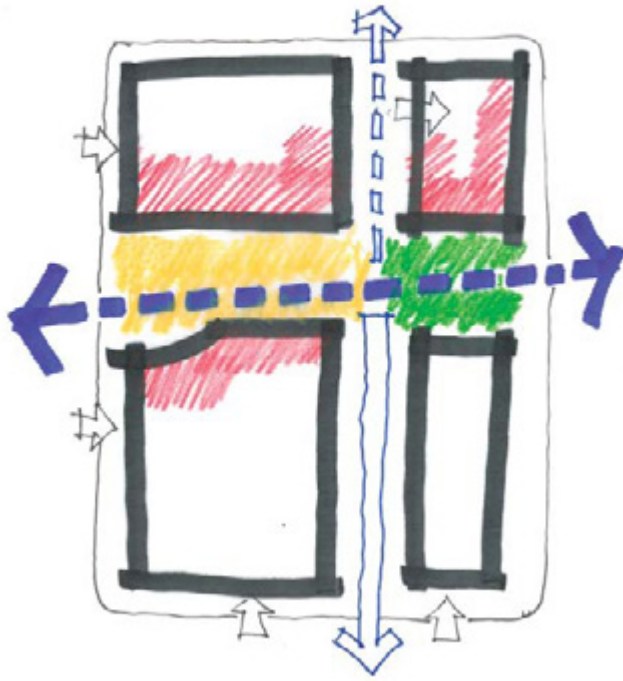
-  Building perimeter
-  Ground-floor retail/services
-  Public plaza
-  Green open space
-  Parking and loading access
-  Primary circulation
-  Secondary circulation










CONCEPTUAL SITE PLAN

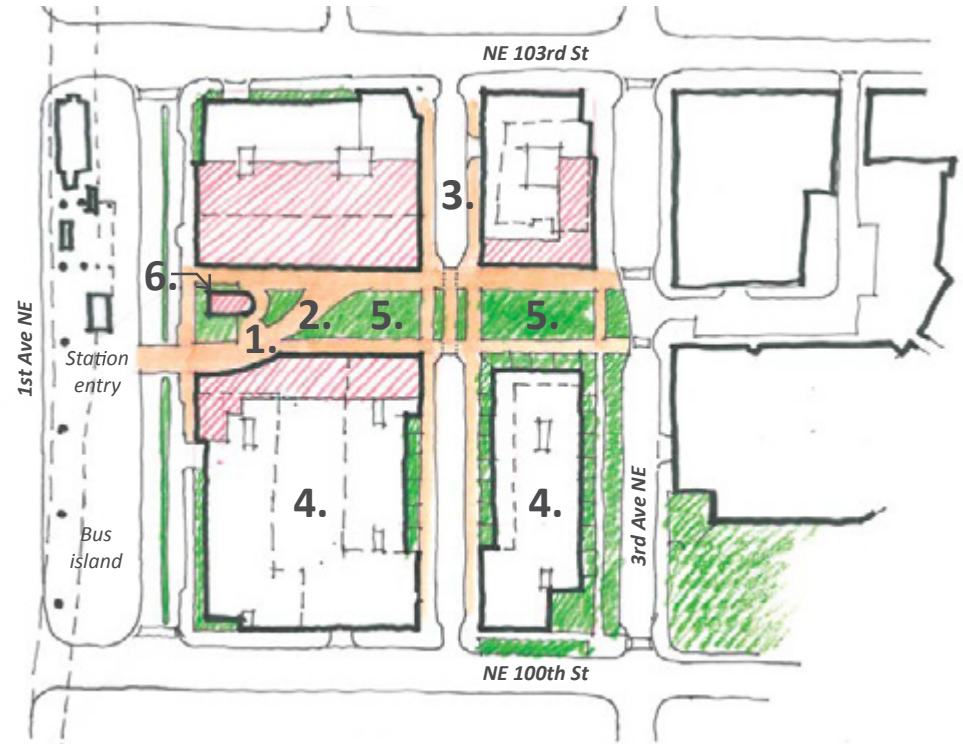
1. Town Square plaza
2. Primary pedestrian access from station to 3rd Ave. NE
3. Access and service lane loops through site and becomes a textured *woonerf* at the town square
4. Townhomes or work lofts with ground-related entrances and landscaped stoops
5. Common green space for recreation, playgrounds, and/or rain gardens
6. Dead-end service lane to access loading and parking

E DEVELOPMENT OPTION



URBAN FORM CONCEPT DIAGRAM

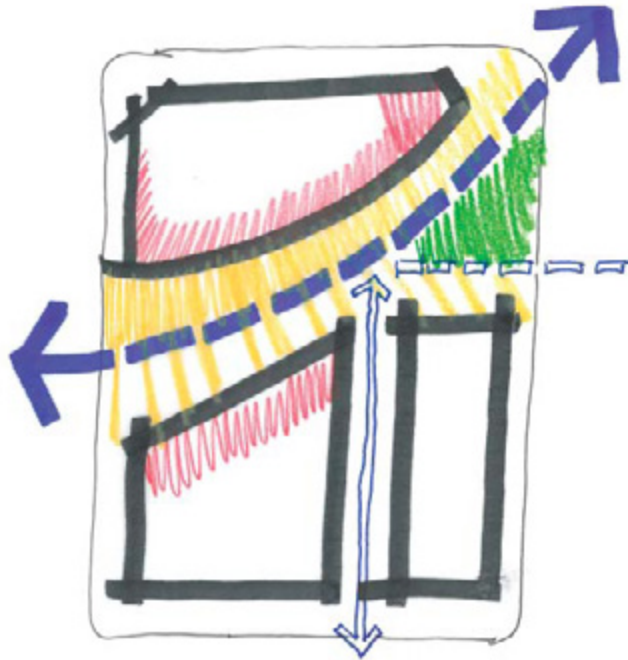
-  Building perimeter
-  Ground-floor retail/services
-  Public plaza
-  Green open space
-  Parking and loading access
-  Primary circulation
-  Secondary circulation



CONCEPTUAL SITE PLAN

1. Town Square plaza
2. Primary pedestrian access from station to 3rd Ave. NE
3. Access and service lane divides the block into multiple development sites; provides some short-term parking
4. Townhomes or work lofts with ground-related entrances and landscaped stoops
5. Generous common green space for recreation, playgrounds, and/or rain gardens creates a continuous public "mews"
6. One-story kiosk retail

DEVELOPMENT OPTION F



URBAN FORM CONCEPT DIAGRAM

-  Building perimeter
-  Ground-floor retail/services
-  Public plaza
-  Green open space
-  Parking and loading access
-  Primary circulation
-  Secondary circulation



CONCEPTUAL SITE PLAN

1. Town Square plaza
2. Primary pedestrian access from station to 3rd Ave. NE
3. Access and service lane divides the block into multiple development sites; provides some short-term parking
4. Townhomes or work lofts with ground-related entrances and landscaped stoops
5. Common green space for recreation, playgrounds, and/or rain gardens
6. One-story kiosk retail

NORTHGATE OUTREACH

**For Seattle Department of
Planning and Development**
April 2013

**Report on
Focus Group
Findings**

Tu Consulting
Judy De Barros

In the fall of 2012, the City of Seattle Department of Planning and Development (DPD), in collaboration with Public Health Seattle King County and the Growing Transit Communities project of the Puget Sound Regional Council, launched a focused outreach effort in Seattle's Northgate neighborhood. DPD contracted with a consultant team of Tu Consulting and Judy de Barros to design and facilitate the outreach activities. This report describes the results of the project. It includes three sections:

- Purpose and Planning
- Who Participated
- What was Learned

This report provides more detail to a companion Powerpoint presentation titled, "Northgate Targeted Outreach Summary." Additionally, a complementary document titled "Process Summary & Lessons" reviews the project process and outreach model, and lessons learned from it.

1. PURPOSE AND PLANNING

Outreach Purpose and Topics. The overall purpose of the project was to reach out to and receive input from neighborhood stakeholders underrepresented in broader planning efforts and events. Participants were asked their thoughts about community-wide Health and Livability, with focus on two specific topics: urban design and the light rail station.

On the topic of urban design, questions centered on two areas:

- How to achieve the Northgate Neighborhood Plan vision for the Urban Center, and
- How the Northgate Urban Center can grow in ways that support health and livability

On the topic of the light rail station, discussion focused on two general issues:

- How the station area can become a vital and attractive heart of the Northgate district, and
- How the station area can contribute to a high quality "people place."

Outreach Sponsors and Approach. The lead agency sponsor of the outreach project was the City of Seattle Department of Planning and Development. Additionally, Public Health Seattle King County and the Puget Sound Regional Council's Growing Transit Communities project collaborated and participated. The project was carried out from November 2012 through February 2013.

The outreach was designed around an approach that invited neighborhood-based groups to facilitate small discussion groups within their own communities or stakeholders. Where there was no community-based host available, discussion groups were organized directly by project consultants and agency staff.

2. WHO PARTICIPATED

14 focus groups were held from December 2012 through February 2013, and included a total of 152 participants who represented a diverse range of ages, race and ethnicities, gender, and backgrounds. The table below describes groups and participants.

Stakeholder Group	Neighborhood Facilitator/Host	#	Group Composition & Characteristics
Apartment residents	507 Northgate Residence	8	8 apartment residents, including 7 men/1 woman, mostly professionals, all recent residents of the neighborhood
Business & property owners	Consultant-organized	4	4 participants: 2 major property owners and 1 Chamber of Commerce representative
Eritrean community	HOPE Eritrean Social Services	13	13 men, women & elders, English-Tigrinyan discussion, after church
Health service employees	Group Health Cooperative & staff	3	3 Group Health employees
Faith-based community	Idris Mosque	15	15 Mosque members from throughout Seattle
Apartment residents/youth	Lake City Court/North Seattle Family Center (2 groups)	24	15 residents, 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
Students	Middle College High School	10	10 students, 4 women/6 men; 3 African American, 2 Native American, 5 Caucasian
Native American community	Urban Native Education Alliance	10	10 Native American community members, 7 women/3 men, ages 30 to 70
Senior residents	Northaven Senior Community	16	16 residents of Northaven Senior Community
Students	North Seattle Community College	10	10 students and staff, residing in Northgate and throughout Seattle
Faith-based community	Olympic View Church	5	5 church members and local residents, 2 women/3 men, ages 50s to 80s
Young students/families	Olympic View Elementary	12	12 elementary school alumni and parents
Somali community	Techno Formation Vocational Services, Inc.	12	12 community members, 8 women/3 men, most live in Northgate or Lake City
Apartment residents	Thornton Place Residence	10	10 apartment residents, 6 men/4 women, most car-less, recent residents
	Total number of participants	152	

3. WHAT WAS LEARNED

This section describes input across all the discussion groups, and is organized into several sub-sections. **Neighborhood Activities** highlights the ways in which participants interact with or are active in the Northgate neighborhood currently. **Community-wide Health and Livability** includes five elements: Public Transportation, the Physical Environment, Affordable Housing, Personal Safety, and Community Services. For each element, participant input about strengths and areas for improvement are described.

Neighborhood Activities. Participants described different ways they are active in or interact with the neighborhood today.

Tiers of activities. Many participants described having a range of activities, which fall into two “tiers.” One level includes broader-scale or neighborhood-level activities that connect to and across many stakeholders groups. The most frequent of these types of activities include:

- Mall and shopping
- Public transit use
- Public/community facilities
 - Parks
 - Library
 - Community Center

At the same time, many said they participate in activities specific to their community or stakeholder group. For example, the Idris Mosque draws over 500 members to its services and activities on a weekly basis. Native American community members are active in numerous activities that take place at the Wilson Pacific School. Somali residents take part in a range of programs and services offered by community organization Techno Formation Vocational Services, Inc. Similarly, Eritrean community members frequently interact with HOPE Eritrean Social Services.

Links and activities beyond Northgate. In addition to activities in and around Northgate, many participants spoke of links to communities and activities beyond the neighborhood. These included:

- Refugee & immigrant communities : Eritrean and Somali participants whose communities are spread across Seattle and beyond
- Lake City: an adjacent neighborhood to which Northgate stakeholders are connected as residents, business owners, and business patrons, and users of community facilities
- Native American communities: links to Native communities beyond the area
- Faith-based communities: places of worship such as the Idris Mosque, whose members come from beyond the immediate neighborhood
- Commuters
 - Students and employees coming to neighborhood
 - Residents going to jobs beyond neighborhood

Community-wide Health and Livability. Groups identified several important elements of community livability.



Neighborhood strengths. Across these elements, participants repeatedly cited several important strengths or assets that the Northgate neighborhood currently has. These included:

1. Excellent public transportation. Northgate is a major transit hub, with numerous bus routes to destinations in all directions and significant transit facilities.

2. Quality physical environment. The current physical environment is a mix of diverse uses with both an urban and suburban feel. There are several newer buildings/development that contribute positively to neighborhood activities and physical space.

3. Affordable housing. Housing is available for people and families with a range of different incomes.

5. Community services and amenities for everyone. Participants cited the numerous shopping options available in the neighborhood, inside and around the Northgate Mall.

Areas for Improvement. Participants cited several areas of concern, summarized below and discussed in the following sub-sections.

1. Excellent public transportation. It is essential to build a great light rail station, and improve transit service and accessibility.

2. Quality physical environment. Creating more of a sense of place, and improving cleanliness and maintenance in the neighborhood are important.

3. Affordable housing. There is a need to ensure adequate housing for future needs

4. Personal safety. An increased sense of safety, particularly in key areas, is needed.

5. Community services and amenities for everyone. Some services have shortfalls, and overall equity and City responsiveness in some services could be improved.

1. Excellent Public Transportation

Discussion about public transportation centered on three topics: light rail station area development, light rail station design, and transit services accessibility.

Light rail station area development. Most participants see the light rail development as positive, with a strong shared interest in avoiding negative effects.

Generally, participants wish to see a light rail station area that is safe, attractive, comfortable and offering desired services and amenities. Specific items cited included:

- A strong sense of place, station area feels and is “tied into” the neighborhood
- Amenities including plazas, green features, cafes, local retail, food vendors, ‘social commons’
- Affordable fares and fare system that is integrated across all transit systems
- Seamless bus transfers (coordinated times)
- Safe, secure, well-lit, inhabited areas in and around the light rail station
- Adequate park-&-ride capacity especially given the increase in volume of transit users

Groups described numerous things they want to avoid in relation to the new light rail.

- Increased traffic congestion. For example, one participant described, and others in one group agreed, how, “...on weekend evenings, people come for movies and parking is saturated. On game days (i.e. of Seattle professional sports teams), parking is saturated. The special event day buses are full.” There was concern about inadequate parking when light rail is added. Many participants worried that congestion will be particularly difficult as the Northgate station will be the end of the line until the light rail extends further north.
- Crime and security problems
- Poorly lit areas
- Lack of cleanliness, and proliferation of garbage
- An un-inviting pedestrian environment
- Noise pollution

Participants also wanted to be informed about construction. Said one group member, “If I know stuff is coming, I can organize and plan around it. Otherwise, folks get annoyed real fast.”

Light rail station area design. Participants shared many ideas for the physical design of the light rail station itself. These included design themes and qualities such as:

- Northwest Native American themes to signify cultural heritage and local identity
- Attention to native vegetation choices and complementary materials (stone), local character
- Water, wildlife, and glacial history themes
- European town square, main street, concerts in the park feel
- “New urban feel” - a modern setting

There were also design ideas about specific uses and features. These included:

- Sculpture garden, fountains that can be played in
- 'Social commons' – comfortable outdoor and indoor places for interaction (family-friendly)
- Features for healthy lifestyles, for example, walking
- Pubs, places for live performances
- Farmers market space
- Artist, social & community spaces; Native American museum/cultural center
- Places for start-up businesses, including ethnic or immigrant businesses
- Heated station, and shelter from the wind and rain

Improve transit services and accessibility. Public transit is an essential transportation link for many participants, who want to ensure service quality and safe accessibility. Prevalent concerns included:

- Need for more streamlined and efficient bus service and connections to other parts of the city
- More service on major bus routes
- A more direct routing to North Seattle Community College (such as the pedestrian bridge) would make it easier for students and college staff to choose light rail.
- Improve accessibility and service timing, to overcome the lost time and inconvenience of transferring buses. Many still choose driving over transit despite added cost to the driver.

Stated one North Seattle Community College student, *"I live in the U-District, but I find a 45-minute to 1 hour bus trip too much time wasted to use transit to NSCC, even though NSCC daily parking is not free."*

2. Quality Physical Environment

Participant thoughts about the physical environment primarily related to two aspects: creating or improving "sense of place" in the area, and improving cleanliness and maintenance.

Creating a "sense of place." Most group members want to improve Northgate's "sense of place" by adding activities and attractions to enhance character and destination. Their ideas included:

- Improve the physical environment to create places people want to be. Specific suggestions included parks and green spaces, grassy areas, streets that are lively and exciting, gathering spots and/or tourist destinations like a mini Pike Place Market, benches, buffering the freeway.
- More activities geared for families and youth. Examples mentioned included parks, creek trails, connecting all areas for foot traffic, more community center and library hours and space.
- Encourage local businesses, including: more lunch spots, coffee shops, street level stores, Trader Joe's, dry cleaners, Hobby Lobby, small restaurants, pubs
- Strengthen distinct identity of Northgate. Ideas included better signage, creek trails, strengthening "pride of place" and sense of destination.

Below is a selection of quotes from participants that captures the flavor of their thoughts and suggestions for improving the physical environment.

- *“When I take my kids to the park, we always go elsewhere, like Green Lake or Alki.”*
- *“Because it is geared to large retailers, Northgate feels less homey. I would rather see a collection of mom and pop shops added as the neighborhood grows.”*
- *“Change the area’s focus from business to people.”*
- *“I think of downtown Bellevue’s old Main Street and that big city park there near the mall. That area has walkable streets and shops, and is clean, which makes it a destination spot.”*
- *“You should be able to say, ‘Northgate – that’s the place with _____ [a special place or quality] where I like to go and visit.’”*
- *“My dream would be a distinctly Native American cultural center at Licton Springs that would be a great attraction for scholars, tourists, and members of all tribes.”*
- *“A feeling of getting between Point A and Point B without much in between.”*

Improve cleanliness and maintenance. Participants mentioned a number of public areas that need improved cleanliness and/or maintenance.

- Streets and sidewalks that are clean and safely passable
 - Sidewalks modernized – wide enough, smooth, ADA compliant
 - Any gaps in sidewalk network filled
 - Fix tripping hazards
 - Aesthetic streetscape improvements
 - Landscape maintenance
 - Traffic signals timed well for pedestrian crossing (including seniors) and vehicle traffic
- More attention to improving area’s appearance and neatness
 - The City should be more responsive to street cleaning, ditch/utility cleaning issues
 - Improve litter cleanup, parks appearance and civil behavior
 - More garbage cans along high traffic areas
 - Consider native landscaping treatments along streets

3. Affordable Housing

Focus group participants had one main concern related to housing: to **ensure adequate housing to meet future needs**. They wanted to know what the City of Seattle plans to do to retain existing affordable housing or encourage more of it as the Northgate Urban Center grows. Participants asserted that:

- Housing is important for active, people-friendly, destination-oriented places.
- Encourage affordable housing that serves workers in the area earning below median income.
- Affordable housing options would allow more people to enjoy a more socially connected and physically healthy lifestyle.

4. Personal Safety

Ensuring personal safety is a high priority and includes dimensions related to both traffic and transportation safety and personal security and crime.

Traffic and transportation safety. Related to traffic and transportation, participants primarily discussed pedestrian and bicycle safety. Groups wish to see more and better pedestrian connections to build a complete network that meets today's needs. They cited specific locations where sidewalk and/or other pedestrian improvements are needed. These include:

- Pinehurst Way NE and 15th Avenue NE
- NE 92nd St and I-5
- 5th Avenue NE and NE 100th Street, 5th Avenue NE and NE 95th Street (missing sidewalk)
- 5th Avenue NE and NE 105th Street (broken sidewalk)
- Expand signal timing to allow adequate time for seniors and children to cross
- 5th Avenue NE and NE Northgate Way (steep ramp)
- Midblock crossing from Northaven Retirement Community to post office
- NE 92nd Street and 1st Avenue NE (pedestrian safety)
- 5th Avenue NE and NE 95th Street (speeding vehicle traffic)
- NE Northgate Way crossings in general (More pedestrian circulation and scale)
- North of NE 85th Street generally (more sidewalks)
- Pedestrian overpass from Northgate Mall to Target
- Along 5th Avenue NE and Roosevelt Way NE (crossing safety)
- NE Northgate Way (need median to stop illegal lefts onto 5th Avenue NE)
- 1-way streets in Maple Leaf are a pedestrian hazard, need to open up NE 103rd Street
- Northbound left turn from 5th Avenue NE to NE Northgate Way (congestion)
- 3rd Avenue NE (need crosswalk to get to transit center)
- Safer walking areas crossing over I-5
- Along Thornton Creek east of 5th Avenue NE (improve corridor for safety and amenity value)

Suggestions for improving bicycle routes and rider safety included looking at 1st Avenue NE north of NE Northgate Way, and creating a bike pathway around Thornton Creek and north to Hubbard Park using internal streets.

Personal security and crime. Comments about personal security related to a general concern about improving overall sense of safety and security. Specific dimensions of this included:

- Need a special focus on ensuring safety in and around transit station
- Prune overgrown shrubs next to sidewalks, including overgrown shrubs on the west side of 5th Avenue NE on the way to target, and eliminating ivy and other invasive plants.
- Ensure adequate street lighting, with specific citation of need for lighting along 3rd Avenue NE going to Target and at the Beaver Pond.
- Address uncivil behavior on streets and in parks

- Drug activity
- Improve cultural competence in police response

Below are several quotes from participants reflecting some of their concerns about safety and security.

- *“We moved from the South End and want to make this community good for our families. But we have a problem now with police. They don’t respond to calls from refugees and immigrants... now we don’t feel so safe.”*
- *“Northgate’s been known for so long as a big parking lot with needles.”*
- *“People who come to shop at Christmas drive like maniacs.”*

5. Community Services and Amenities

Address shortfalls in services. Many participants expressed a need for key public services and facilities to be more available. Specific needs cited included the following:

- Libraries and community center: more hours, easier and free or affordable ways to use community center and library rooms, for personal or social service needs, year-round availability of community center programs for children (no seasonal shutdowns)
- Need more affordable or subsidized recreational programs for youth, such as:
 - Swimming, dance, day camps, mentoring
 - Expanded Teen Center (dance parties, computer lab, swimming), after school activities
 - Indoor play fields, sports venue, multipurpose gym – to get out of poor weather
 - More youth-oriented stores
 - Park space
 - Indoor sports facility/fields, places for youth to play sports
 - Arcade separate from mall
- Parks: picnic/barbecue spaces,
- More places for families to go. There were concerns about adequate facilities for diverse community activities and family-oriented gathering spaces.
- Food banks
- Daycare
- More availability of community support services
- Ways to bring together and engage youth and seniors
- Overall strong desire for a Somali Community Center in the area

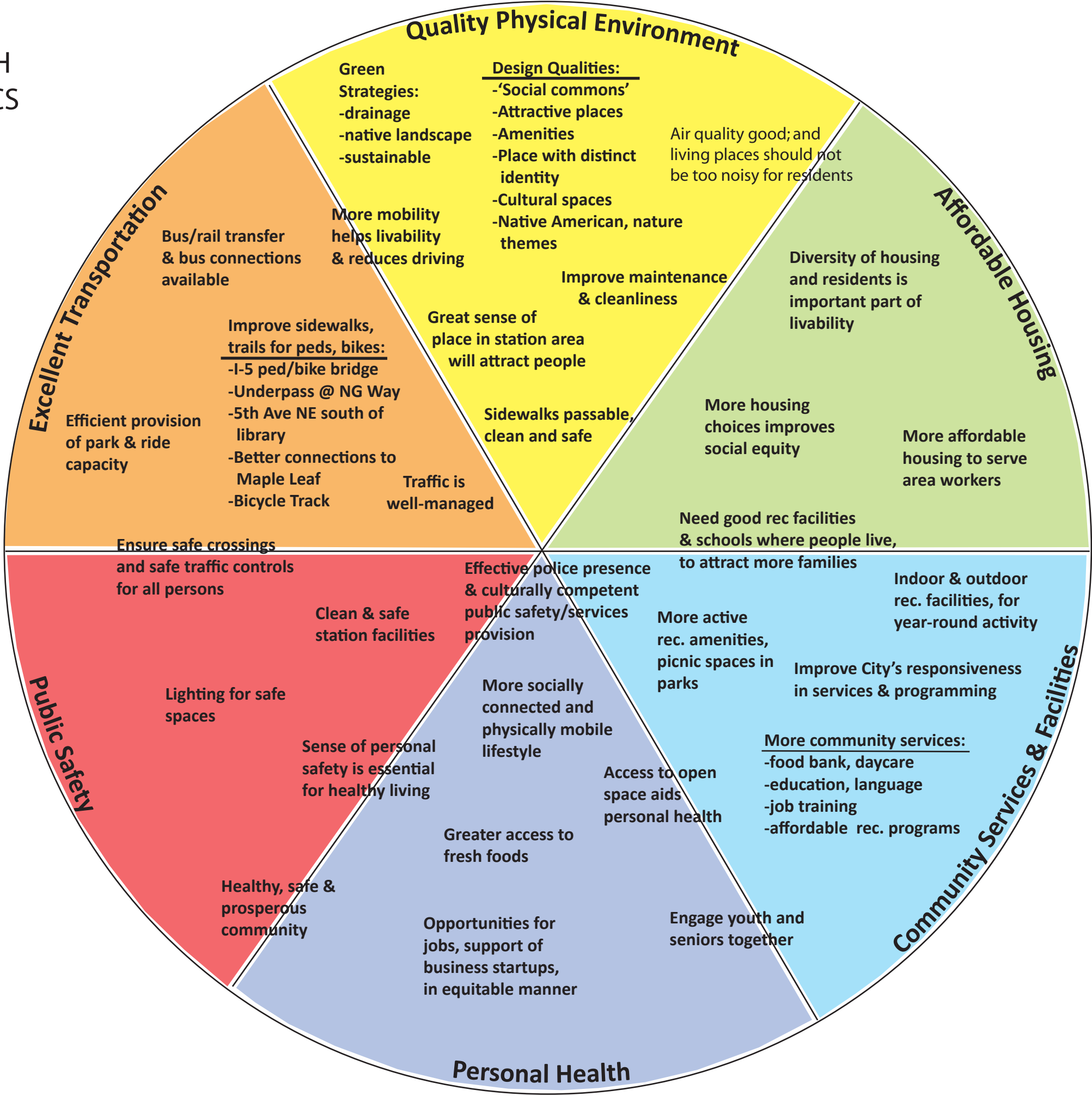
Preserve affordability of housing and support services. Many participants, particularly refugee and immigrant community members, want to ensure affordability and equity in housing and support services. Their concerns included:

- Community services and programs
 - Need more affordable services for immigrant families
 - Adequate services: childcare, disabled services, other social services, immigrant support resources
 - More social services, especially on west side of I-5
 - Resources for parents in all languages
 - After school programs including Somali classes
 - YMCA or Boys and Girls Club
 - Senior activities
- Cultural competence in services (e.g. in police response, parent resources, after school programs)
- Affordability of housing and daycare

Below are several participant quotes related to community services and programs.

- *“A facility that would be able to accommodate several families with spaces for child care, after-school tutoring, youth center, and ESL.”*
- *“We hope that when it [Northgate] grows, it won’t become so nice and expensive that we will need to move because we can’t afford it anymore.”*
- *“There’s a huge homeless population, but there are no food banks, no shelters, no youth center, and no public restrooms.”*
- *“The combination of breaking the language barrier and developing job skills are vital for more persons to be able to effectively enter into community life.”*

SPECTRUM OF HEALTH
AND LIVABILITY TOPICS
IN NORTHGATE
PLANNING



NORTHGATE OUTREACH

**For Seattle Department of
Planning and Development**
April 2013

**Summary of
Focus Groups**

**Tu Consulting
Judy De Barros**

OUTLINE

- 1. Purpose and Planning**
- 2. Who Participated**
- 3. What Was Learned**

1. PURPOSE AND PLANNING

Purpose: targeted outreach to neighborhood stakeholders underrepresented in broader planning efforts and events.

Participants were asked their thoughts about community-wide health and livability, with focus on two specific topics: urban design and the light rail station.

Health and Livability

Urban Center Neighborhood Design

- How to achieve Neighborhood Plan vision for Urban Center
- How Urban Center can grow in ways that support health and livability

Light Rail Station Area Urban Design

- How station area can become a vital and attractive heart of the district
- How station area can contribute to a high quality “people place”

Who sponsored the outreach and when and how was it done?

Lead agency: City of Seattle Department of Planning and Development

Timeframe: Nov 2012 – Feb 2013

Approach: invited neighborhood-based groups to facilitate small discussion groups within their own communities or stakeholders; directly organized discussion groups when no host was available

2. WHO PARTICIPATED

Discussion groups were held from Dec 2012 – Feb 2013 and included the following stakeholder groups and participants.

Stakeholder Group	Neighborhood Facilitator/Host	# Participants
Apartment residents	507 Northgate Residence	8
Business & property owners	Consultant-organized	4
Eritrean community	HOPE Eritrean Social Services	13
Health service employees	Group Health Cooperative/project staff	3
Faith-based community	Idris Mosque	15
Apartment residents/youth	Lake City Court/North Seattle Family Center (2 groups)	24
Students	Middle College High School	10
Native American community	Urban Native Education Alliance	10
Senior residents	Northaven Senior Community	16
Students	North Seattle Community College	10
Faith-based community	Olympic View Church	5
Young students/families	Olympic View Elementary	12
Somali community	Techno Formation Vocational Services, Inc.	12
Apartment residents	Thornton Place Residence	10

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

3. WHAT WAS LEARNED

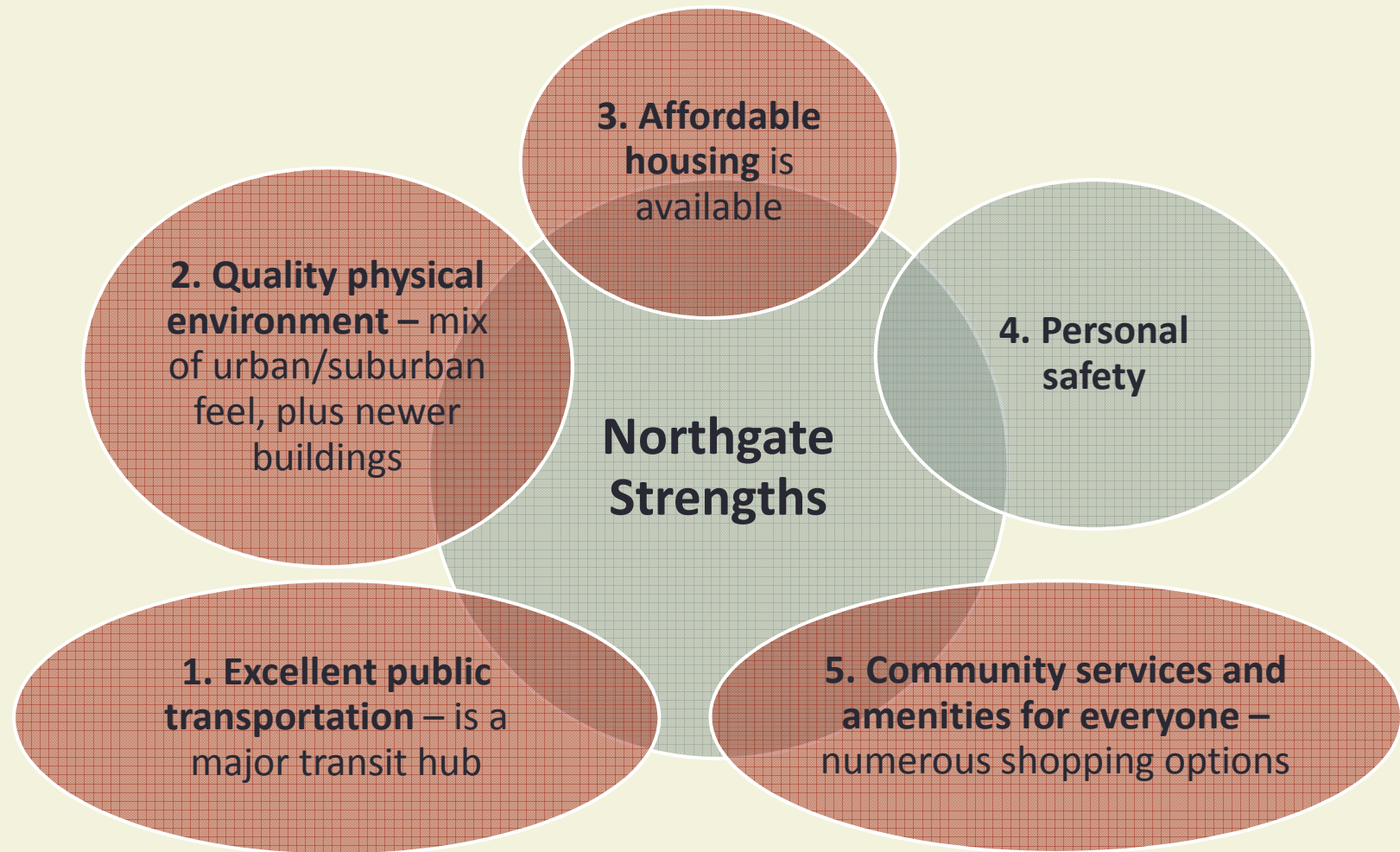
Neighborhood activities. Participants described different ways they are active in or interact with the neighborhood today.

Tiers of activities	Most frequent neighborhood activities	Links and activities beyond Northgate
<ul style="list-style-type: none">• Within specific communities or stakeholder groups• Neighborhood-level activities	<ul style="list-style-type: none">• Mall and shopping• Public transit use• Public/community facilities<ul style="list-style-type: none">• Parks• Library• Community Center	<ul style="list-style-type: none">• Refugee & immigrant communities• Lake City• Native American communities• Faith-based communities• Commuters<ul style="list-style-type: none">• Students and employees coming to neighborhood• Residents going to jobs beyond neighborhood

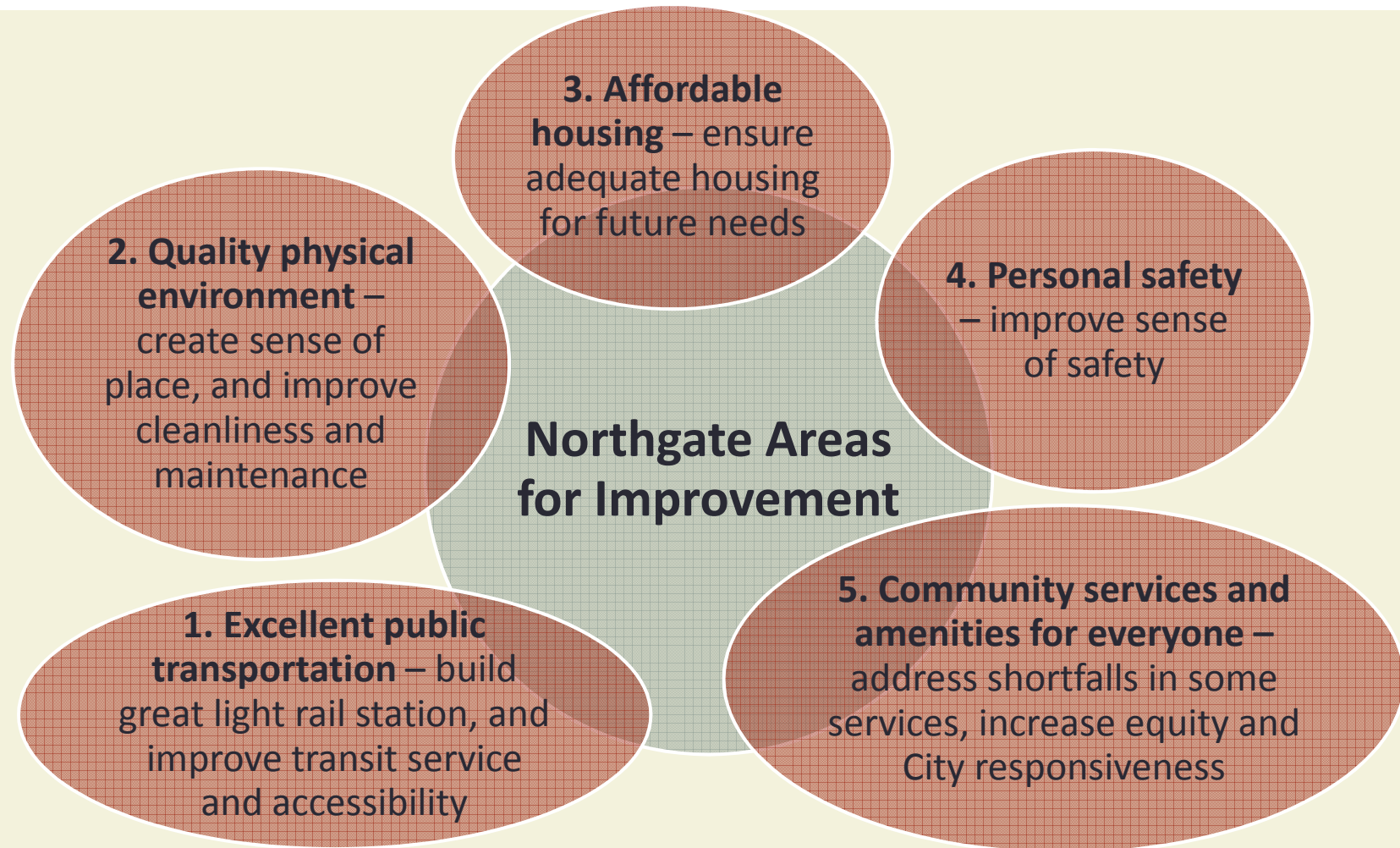
Community-wide Health and Livability. Groups identified several important elements of neighborhood livability.



Neighborhood strengths. Several important strengths or assets of the Northgate neighborhood were described.



Areas for improvement. Participants cited a range of concerns, summarized below with additional details on the following slides.



1. Excellent public transportation - light rail station area development. Most participants see the light rail development as positive, with a shared interest in avoiding negative effects.

Want to see around light rail

- A strong sense of place, and tied into the neighborhood
- Amenities (plazas, green features, cafes, local retail, food vendors, 'social commons')
- Affordable fares, integrated fare for all transit
- Seamless bus transfers
- Safe, secure, well-lit, inhabited areas in and around station
- Adequate park-&-ride capacity
- Heated station, shelter from the wind and rain

Want to avoid

- Increased traffic congestion
- Crime, security problems
- Poorly lit areas
- Lack of cleanliness, garbage
- Un-inviting pedestrian environment
- Noise pollution

Inform the public about construction:
"If I know stuff is coming, I can organize and plan around it. Otherwise, folks get annoyed real fast."

1. Excellent public transportation - light rail station area design.

Participants shared many ideas for the physical design of the light rail station area.

Design themes and qualities

- Northwest Native American themes in public spaces to signify cultural heritage and local identity
- Attention to native vegetation choices and complementary materials (stone), to enhance a distinct local character
- Water, wildlife, and glacial history themes
- Features for healthy lifestyles – walking
- Clean and safe
- European town square, main street, concerts in the park feel
- “New urban feel” - a modern setting

Uses and features

- Sculpture garden, fountains that can be played in
- ‘Social commons’ – comfortable outdoor and indoor places for interaction (family-friendly)
- Pubs, places for live performances
- Farmers market space
- Artist, social & community spaces; Native American museum/cultural center
- Places for start-up businesses, including ethnic or immigrant businesses

1. Excellent public transportation – improve transit services and accessibility. Public transit is an essential transportation link for many, who want to ensure service quality and safe accessibility.

Transit concerns

- Need more streamlined and efficient bus service and connections to other parts of the city
- More service on major bus routes
- Improve overall accessibility and service timing, to overcome the lost time and inconvenience of transferring buses. Otherwise, the automobile will continue to be chosen despite the added cost to the driver.
- A more direct routing to North Seattle Community College (such as the pedestrian bridge) would make it easier for students and college staff to choose light rail.

A student says, “I live in the U-District, but I find a 45-minute to 1 hour bus trip too much time wasted to use transit to NSCC, even though NSCC daily parking is not free.”

2. Quality Physical Environment – create a “sense of place.”

Improve sense of place by adding activities and attractions that will enhance local character and destination.

“When I take my kids to the park, we always go elsewhere, like Green Lake or Alki.”

“Because it is geared to large retailers, Northgate feels less homey. I would rather see a collection of mom and pop shops added as the neighborhood grows.”

“Change the area’s focus from business to people.”

“I think of downtown Bellevue’s old Main Street and that big city park there near the mall. That area has walkable streets and shops, and is clean, which makes it a destination spot.”

“You should be able to say, ‘Northgate – that’s the place with _____ [a special place or quality] where I like to go and visit.’”

“My dream would be a distinctly Native American cultural center at Licton Springs, that would be a great attraction for scholars, tourists, and members of all tribes.”

Thoughts about creating a sense of place

- Improve the physical environment to create places people want to be
- More activities geared for families and youth
- Encourage local businesses
- Strengthen distinct identity of Northgate

2. Quality Physical Environment – improve cleanliness and maintenance. Participants mentioned a number of public areas that need improved cleanliness and/or maintenance.

Streets and sidewalks that are clean and safely passable

- Sidewalks modernized – wide enough, smooth, ADA compliant
- Any gaps in sidewalk network filled
- Fix tripping hazards
- Aesthetic streetscape improvements
- Landscape maintenance
- Traffic signals timed well for pedestrian crossing (including seniors) and vehicle traffic

More attention to improving area's appearance and neatness

- The City should be more responsive to street cleaning, ditch/utility cleaning issues
- Improve litter cleanup, parks appearance and civil behavior

Consider native landscaping treatments along streets

Improve corridors for safer walking and amenity value

- Thornton Creek east of 5th Ave NE

3. Affordable Housing – ensure adequate housing to meet future needs. It is important to have adequate affordable housing as Northgate grows.

What will the City of Seattle do to retain existing affordable housing or encourage more of it as the Northgate Urban Center grows?

Housing is important for active, people-friendly, destination-oriented places.

Encourage affordable housing that serves workers in the area earning below median income.

Affordable housing options would allow more people to enjoy a more socially connected and physically health lifestyle.

4. **Personal Safety.** Ensuring personal sense of safety is a high priority.

Traffic and transportation safety

- Pedestrian safety – sidewalks and well-marked crosswalks
- Improve bicycle routes and rider safety
- More and better pedestrian connections to build a complete network that meets today's needs

Personal security and crime

- Special focus on ensuring safety in and around transit station
- Prune overgrown shrubs next to sidewalks
- Ensure adequate street lighting
- Address uncivil behavior on streets and in parks
- Drug activity
- Cultural competence in police response

“We moved from the South End and want to make this community good for our families. But we have a problem now with police. They don’t respond to calls from refugees and immigrants. So now we don’t feel so safe.”

“Northgate’s been known for so long as a big parking lot with needles.”

“People who come to shop at Christmas drive like maniacs.”

5. Community Services and Amenities – address shortfalls in some services. Many expressed a need for key public services and facilities to be more available.

- More library hours
- Continuous community center programs for kids – (no seasonal shutdowns)
- Easier and free or affordable ways to use community center and library rooms, for personal or social service needs (or reassign some existing City space?)
- Food banks
- Affordable/subsidized recreational programs for youth (swimming, dance, day camps, mentoring, etc.)
- Picnic/barbecue spaces in parks
- Daycare
- More availability of community support services
- Ways to bring together and engage youth and seniors

“There’s a huge homeless population, but there are no food banks, no shelters, no youth center, and no public restrooms.”

“All of the Somali Services are in South Seattle, there are none here and it is a long way to go for families.”

5. Community Services and Amenities. Many participants, particularly refugee and immigrant community members, wish to preserve affordability (e.g. housing) and support services.

Concerns about services and equity

- Facilities with community services
- Cultural competence in services (e.g. police response, parent resources, after school programs)
- Affordability of living in Northgate (housing, daycare)

“A facility that would be able to accommodate several families with spaces for child care, after-school tutoring, youth center, and ESL.”

“We hope that when it [Northgate] grows, it won’t become so nice and expensive that we will need to move because we can’t afford it any more.”

“The combination of breaking the language barrier and developing job skills are vital for more persons to be able to effectively enter into community life.”

Northgate Urban Center & Overlay District | **Design Guidelines**



City of Seattle
Department of Planning & Development

Acknowledgments

Northgate Urban Center and Overlay District Design Guidelines were first created in 2003 with significant input and support from the following Northgate community member:

Jim Zweigle

Michelle Rupp

Sue Geving

Velva Maye

Bill Lawrence

Barbara Maxwell

Bunny Hirschmann

Jeff Luth

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Sue Geving

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Marilyn Firlotte

Jerry Owens

Renee Staton

Colleen Mills

City of Seattle:

Department of Planning and Development (DPD)

Department of Neighborhoods

Seattle Department of Transportation

Seattle Planning Commission

Office of Policy and Management

Northgate Urban Center & Overlay District | **Design Guidelines**

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I. Design Review in Seattle's Neighborhoods

What is Design Review?

Design Review is a component of the Master Use Permit (MUP) application and is required for most new commercial, mixed-use and multifamily developments. It provides a forum through which developers and citizens can work together to ensure that new developments contribute positively to Seattle's neighborhoods.

Design Review has three principal objectives:

1. Encourage better design and site planning to enhance the character of the city and ensure that new development fits sensitively into neighborhoods;
2. Provide flexibility in the application of development standards; and
3. Improve communication and participation among developers, neighbors and the City early in the design and siting of new development.

Design Review, as with other components of a MUP application, is administered by the Department of Planning and Development (DPD). Design Review applications require public notice and an opportunity for comment. Projects are brought before a Design Review Board for its recommendations or, alternatively, to DPD staff in what is referred to as Administrative Design Review. The final decision on Design Review recommendations is made by the DPD Director, and is appealable to the Hearing Examiner.

What are Neighborhood-Specific Design Guidelines?

In reviewing development proposals in neighborhoods with City Council-adopted neighborhood-specific design guidelines, the Design Review Board consults two sets of guidelines. The Citywide Design Guidelines are of a general nature and apply throughout the city, whereas the Neighborhood-Specific Design Guidelines address more specific design concerns that have historical, cultural or architectural significance to a particular neighborhood.

The Northgate Urban Center and Overlay District Design Guidelines augment the existing Citywide Design Guidelines.

The Northgate Urban Center and Overlay District Design Guidelines carry forward the urban design objectives of the 1993 Northgate Area Comprehensive Plan. Thus, the Northgate Urban Center and Overlay District Design Guidelines, in conjunction with the Citywide Design Guidelines, can increase overall awareness of good design and involvement in the development review process.

More About Design Review

More information about Design Review can be found in the Citywide Design Guidelines, Client Assistance Memo #238, and in the Seattle Municipal Code (SMC 23.41). Information includes:

- Projects Subject to Design Review
- How Design Guidelines are Applied
- Who Serves on the Design Review Board
- Development Standards Departures

II. Northgate Area Context and Priority Design Issues

Building on urban design-related goals and recommendations included in the 1993 Northgate Area Comprehensive Plan, the Northgate Urban Center and Overlay District Design Guidelines are intended to provide methods and identify opportunities for how new developments can make a positive contribution to the neighborhood. The guidelines are intended to help ensure that good urban design will be achieved whenever new development is proposed.

While a few urban infill development projects have occurred in the past few years, the Northgate area is primarily characterized by a “suburban” pattern of commercial development and its role as a regional shopping and employment center. Northgate area residents would prefer new growth to create an environment that is more conducive to pedestrians and include wider sidewalks, extensive landscaping, interesting and permeable facades, decreased and screened surface parking lots, screened parking garages, below grade parking, parking behind buildings, and pedestrian amenities consistent with an urban pattern and character of development. Unlike more established neighborhoods, the Northgate area does not have much in the way of noteworthy building character and patterns of urban form to which new developments should respond.

What its residents have, however, is an overall vision of a vibrant and attractive urban center, with a mix of uses and a pedestrian orientation in terms of character, function and scale. This vision is the result of an extensive planning process involving Northgate area citizens. Since 2003, this vision has continued to come into focus with respect to the preferred open space and pedestrian network that comprises the “public realm.” Northgate’s success as an Urban Center will rely upon the continued improvement of pedestrian and open space networks that will provide new amenities, improve overall accessibility and walkability, define the urban form by “breaking up the super-blocks,” and define an identity and “sense of place” for Northgate. This underscores the critical importance of achieving pedestrian-supportive streetscapes and open spaces in future infill development, and the important role of design review processes.

Recent efforts also show interest in environmental sustainability. This encompasses not only support for protecting and enhancing natural features such as Thornton Creek, but also encouraging walking, biking and transit as alternatives to car trips. Reinforcing Northgate’s role as a dense Urban Center that is well-served by transit also will support environmental sustainability objectives.

Goals and Objectives Related to the Design Guidelines

The goals and objectives supporting the Northgate vision provide context and clarity for the design guidelines. Four key goals broadly define the community vision and provide the framework for the Northgate Urban Center and Overlay District Design Guidelines:

- 1. Provide direct and convenient pathways, comfort, visual interest and activity for pedestrians.**
- 2. Design identity should be defined block-by-block.**
- 3. Increase publicly accessible open spaces and connections between them.**
- 4. Landscape design to enhance the site or address special site conditions.**

As concepts, these goals apply to all components of a well-designed urban environment, including streets, sidewalks, open spaces and buildings. The Northgate Urban Center and Overlay District Design Guidelines further articulate these broad goals by developing specific objectives that new developments should meet. These objectives form the basis for specific design guidelines to be used in combination with the Citywide Design Guidelines.

These design guidelines will apply to new development proposals, along with Northgate Area regulations that include development standards outlined in the Northgate Overlay District (Section 23.71 of Seattle's Land Use Code). These regulations include a Major Pedestrian Street Designation for portions of 5th Avenue NE and NE Northgate Way and Green Street Designation for portions of 3rd Ave NE, which prescribe streetscape standards such as sidewalk width, street trees and minimum commercial storefront transparency. The Northgate Urban Center and Overlay District Design Guidelines are intended to augment these existing regulations with more descriptive recommendations aimed at improving the quality of the urban environment.

As part of a larger, long-range planning strategy, the design guidelines promote: development that enhances the neighborhood's visual character, function and identity; pedestrian linkages between uses, properties and streets; and high quality design of individual sites. The guidelines are not, however, intended to restrict innovation, imagination or variety in design that further enhances the pedestrian environment or the goals and objectives of the Northgate Area Comprehensive Plan. If an alternative design can be demonstrated to achieve the desired character while still meeting the basic intent of the design criteria, the design review board may consider the proposal.

Sub-Area Existing Conditions

The Northgate area is characterized by sub-areas, as defined by both existing physical conditions and redevelopment potential. New developments should respond to specific conditions particular to each of these areas.

Super Blocks

The properties surrounding 1st, 5th, 8th Avenues NE and NE Northgate Way exhibit a "super block" character in scale and automobile orientation. They are large, uninterrupted properties (some with lengths exceeding 800 feet, compared to 240-foot long blocks downtown) that are unfriendly or intimidating to the pedestrian, with expanses of parking separating structures from the sidewalk. This area was the subject of a Rezone study and Environmental Impact Statement.



Super Blocks

Mid and Low Density Residential

Midrise zones and lower density multifamily zones provide a transition from larger and more dense neighborhood commercial zones in the Urban Center core to the single family areas prevalent on the edges of the Northgate area.



Mid and Low Density Residential

Zone Edges

While zoning designations are intended to provide transitions from higher intensity to lower intensity developments, there are places within the Northgate area where abrupt edges between high density and very low-scale buildings exist. These areas require particular attention in mitigating height, bulk and scale impacts on single family houses and smaller multifamily structures.



Zone Edges

Mixed-Use Redevelopment

There are many properties within the area's retail core zoned Neighborhood Commercial where opportunities for interconnected, walkable mixed-use redevelopment exist.

High Density Residential

Several high density, multifamily developments surround the retail core. With improved sidewalks and other desirable street elements as planned in the 5th Avenue Streetscape Design Project, and neighborhood goods and services within walking distance, pedestrian activity should increase considerably. Zoning allows for higher density residential development to occur in proximity to the retail core.



High Density Residential

South of the Mall

The area south of Northgate Mall currently supports the Metro Transit Center with significant local and regional bus service and park and ride capacity. Regional voters have approved funding for Sound Transit's design and construction of a Light Rail line connecting Northgate to downtown, SeaTac Airport, Snohomish County and centers east of Lake Washington. The Northgate Station will be located in this area south of the Mall.

Design Guidelines

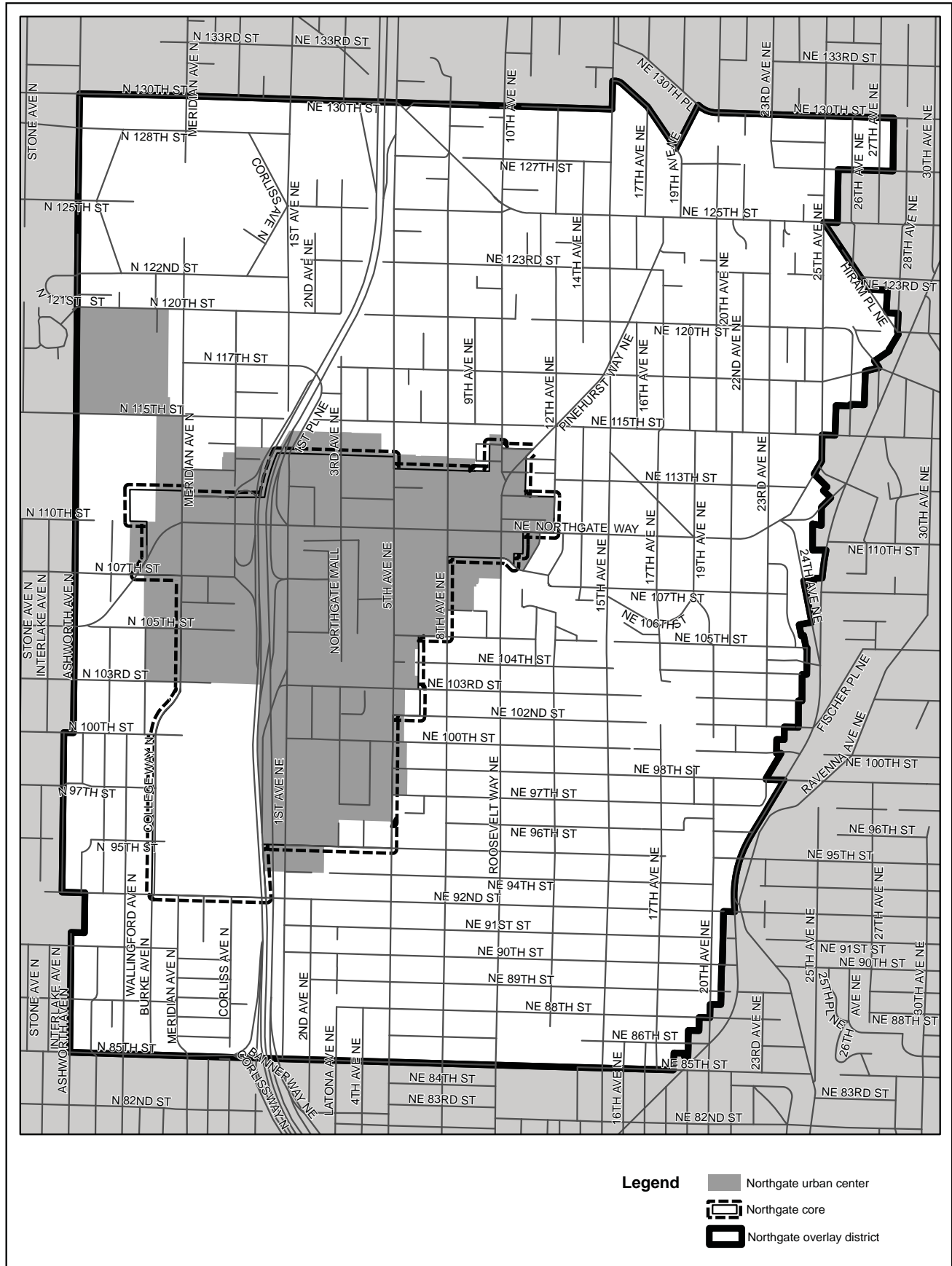


Introduction

These neighborhood design guidelines supplement the *Citywide Design Guidelines*, for projects requiring design review within the area depicted in **Figure 1** (opposite).

The guidelines for Northgate support the achievement of major **Community Goals**. The guidelines are numbered for the convenience of the reader (**1.1**, **1.2**, **1.3**, etc.). Some guidelines have multiple parts, often shown as “bulleted” items.

Figure 1: Northgate Urban Center and Overlay District



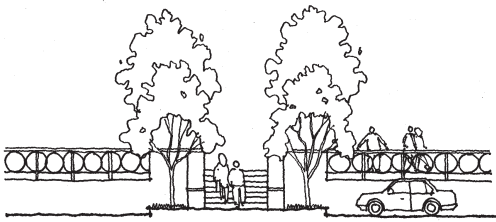
Community Goal 1:

Provide Direct and Convenient Pathways, Comfort, Visual Interest and Activity for Pedestrians

Objective: Pedestrian connectivity encourages pedestrian activity and makes it possible for people to make some of their trips on foot rather than by vehicle. Livelier street edges make for safer streets. Ensure that buildings have visual interest and quality at street level, at a human scale, with accessible, comfortable spaces that encourage pedestrian activity.

1.1 Respond to Site Characteristics

Try to match the grade of abutting public rights-of-way where properties meet. If there is a significant grade difference, create an attractive transition, using creative grading and landscaping. Be sure to incorporate pedestrian access, including walkways, stairs or similar features that can help build greater pedestrian connectivity (also see guideline 3.1).



Where a grade change is unavoidable, consider, where appropriate, incorporating pedestrian access into the design of the project.



Grade change on 5th Ave NE



Example of a dedicated bike lane

1.2 Streetscape Compatibility

Streetscape Design

Northgate's character as an urban place is influenced by the quality of its pedestrian environments, and therefore achieving high-quality design of streetscapes is essential. The community's vision of an enhanced, pedestrian-oriented urban center environment can only be achieved by improving pedestrian network connectivity throughout the neighborhood along specially designated streets including Major Pedestrian Streets, Special Landscaped Arterials and Green Streets, as well as other access streets, and pedestrian connections across private property.

The designated streets warrant special attention when designing landscaping, paving and pedestrian amenities. Detailed guidance is provided in the Overlay District, or in some cases Streetscape Plans have been incorporated into the City's *Street Right of Way Improvements Manual*, providing more detailed design guidance.

The general intent for streetscape improvements throughout the Northgate Area is to:

- Create an interconnected system of streets and open spaces to optimize neighborhood permeability (walkability) consistent with a typical urban block pattern;
- Encourage and enhance transit/multi-modal use;
- Emphasize pedestrian and bicycle safety, in part by controlling vehicle traffic speeds and managing volumes;

- Support increased use of designated crossings; and
- Increase urban green space/open space within the public realm by achieving surface treatments that are “more green and less gray.”



Commercial and Mixed-Use Buildings

- The ground floors of buildings should appear inviting to the public by containing commercial uses and open spaces with direct entry from the sidewalk. Vary these features in size, width and depth to accommodate a variety of appropriate uses and activities for the site and vicinity. This includes providing multiple entries at the street.
- For corridors between commercial spaces, open-air passageways are generally more visible and more inviting than interior hallways. This can be an attractive, successful location for store entries, store windows and restaurant/cafe seating.
- Further articulate the street level facade to provide a comfortable pedestrian experience with placement of street trees, exterior lighting on buildings, planters and overhead weather protection.

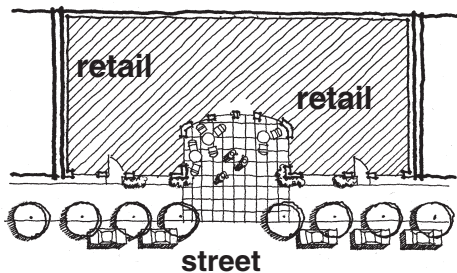
1.3 Promote Pedestrian Interaction



This area is unique in that the two main commercial corridors, 5th Avenue NE and NE Northgate Way, are designated as Major Pedestrian Streets and intersect at the northeast corner of the mall. The Major Pedestrian Street designation is intended to increase pedestrian circulation with an improved street level environment by creating a public realm that is safe, interesting and comfortable.*

New developments in these designated areas must comply with standards for types, dimensions and orientation of street level uses, and provide streetscape amenities such as overhead weather protection, seating, street trees and street lights. The guidelines in sections 1.3 and 1.4 are of highest priority in helping to meet this objective.

** See SMC 23.71.008 and Map A in 23.71. The Major Pedestrian Street designation occurs on Northgate Way and 5th Avenue NE, including the complete intersections of 3rd Avenue NE and 11th Avenue NE with NE Northgate Way, and the complete intersections of NE 105th Street and NE 113th Street with 5th Avenue NE.*

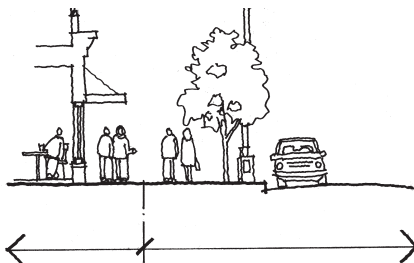


Design for uses that are accessible to the general public, generate walk-in business and contribute to a high level of pedestrian activity at street level. Consider extending street-level spaces out to the sidewalk with multiple entrances and open spaces featuring decorative paving, street furniture and artwork. Retail uses should front such spaces.

Human Activity

Sidewalks are the principal place of pedestrian movement and casual social interaction. Designs and uses should complement this function.

- Consider setting portions of the building back to create spaces at street level for pedestrian-oriented activities. Take the “indoors” outdoors by spilling interior space (e.g. dining areas, merchandise displays) onto plazas and walkways and bring the “outdoors” into the building by opening interior spaces to sunlight and views of sidewalk activity.
- Sidewalk widths throughout the Northgate area are less than ideal, and wider sidewalks will allow for more pedestrian circulation and activity. Within active retail areas, proposed developments are encouraged to set back from the street-fronting property line to provide additional space abutting the sidewalk. The Major Pedestrian Street designation calls for 12-foot sidewalks. However, 16-foot sidewalks are preferred in commercial areas, where appropriate.



Setting a building back can create more space for pedestrians and street-level activity.

Superblock Development

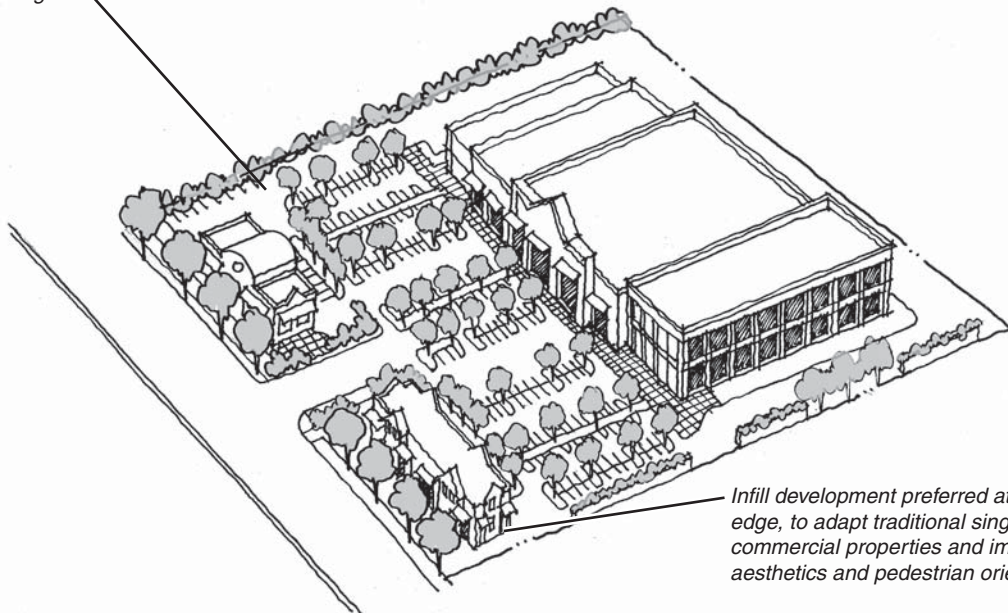
One of the most important design considerations in meeting the goal of a pedestrian-friendly urban environment is to site and design street-level commercial uses that present a welcoming public face to buildings and to encourage human activity on the street.

- Superblock developments on Major Pedestrian Streets are expected to be built up to the edge of the sidewalk and meet the other pedestrian street designation standards.
- Where superblock developments are not along designated Major Pedestrian Streets, they should achieve a pedestrian-friendly environment within the internal layout of a superblock site, where commercial buildings may be separated from the public right-of-way by parking.
- Every attempt should be made to link large sites to the greater community by creating lively, interesting pedestrian connections within the site, and also between the site and its surroundings.



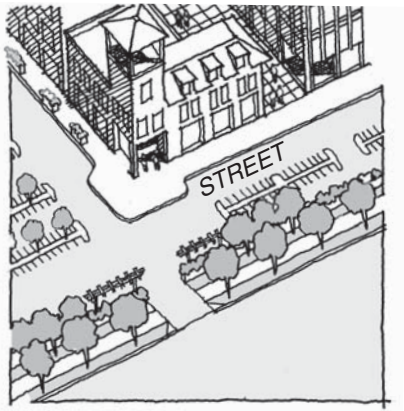
Building to edge of sidewalk is expected on Major Pedestrian Streets

Multiple walkways through parking lot and landscaping connect the site to the neighborhood and create smaller parking areas in place of one large parking lot



Infill development preferred at street edge, to adapt traditional single-use commercial properties and improve aesthetics and pedestrian orientation

Community Goal 1 • Provide Direct and Convenient Pathways, Comfort, Visual Interest and Activity for Pedestrians,



Street trees, landscaping and architectural elements such as trellises can present a human-scaled street edge and comfortable pedestrian environment in the public realm. The commercial buildings, when set back from the street, create an internal “streetscape”, with open storefronts, special paving and other amenities to create usable and welcoming spaces for people entering the stores from parking areas or surrounding streets.

- Key internal at-grade passageways accommodating pedestrian and vehicular circulation on large sites should not be ignored as locations for pleasant pedestrian places.
- Developments should have internal drives and walkways adjacent to buildings designed with the basic elements of a good pedestrian-oriented shopping street: buildings oriented close to walkways, landscaping, pedestrian-scale lighting, walkways of sufficient width to encourage social interactions without impeding pedestrian movement, and other similar enhancements.
- Usable pedestrian spaces, such as a plaza or extra-wide sidewalk near entrances to buildings with pedestrian enhancements, are encouraged either at the street or within the site adjacent to a private drive.
- Parking Lots - Surface parking areas located between primary buildings and the public right-of-way should include walkways, landscaping and lighting to delineate safe and comfortable pedestrian circulation within the site.

Street Level Transparency

The intention of transparency in the street level facades of commercial and civic buildings is to provide for interaction between people in the interior of a building and people near the exterior of a building—particularly on the sidewalk—through a direct visual connection. The following are examples of less desirable design treatments that should be discouraged:

- windowless walls;
- mirrored or non-transparent glass;
- glass block;
- display cases;
- narrow windows not meeting the intent above;
- windows located above waist level to persons outside the building on the sidewalk;
- windows into areas that are too small, shallow, or narrow to support normal human activity (e.g. the back of a tall display case, a narrow hallway); and
- any interior wall, equipment, or functional layout that hampers the intent of transparency stated above.



example of intended function of street level building transparency

Parking and Vehicle Access

Minimize Pedestrian/Vehicle Conflicts

Site and design driveways to minimize conflicts between vehicles and pedestrians. This is especially important along Northgate Way, 1st Avenue NE, 5th Avenue NE, Roosevelt Way NE, 15th Avenue NE, NE 100th Street, NE 103rd Street, and NE 125th Street. Minimize the number of curb cuts and width of driveways and curb cuts along these streets.

Locate Parking to the Rear

Where feasible, parking areas should be located to the rear of buildings that face NE Northgate Way, 1st Avenue NE, 5th Avenue NE, Roosevelt Way NE, 15th Avenue NE, NE 100th Street and NE 103rd Street. Where surface parking must be located to the side of structures, the following is recommended:

- Place surface parking away from the corners of blocks fronting on NE Northgate Way, 5th Avenue NE, 8th Avenue NE, Roosevelt Way NE, 15th Avenue NE, NE 100th Street, NE 103rd Street and NE 125th Street.
- Limit the frontage of surface parking areas that face NE Northgate Way and 5th Avenue NE (outside the Major Pedestrian Street designations).

Encourage the Creation of Multi-Purpose Parking Areas

These areas can provide parking as well as public open space, such as places for special neighborhood functions (markets, gatherings), cultural events (outdoor theater, music), and recreational activities. Examples of elements for public open spaces include: special surface treatments, art, fountains and seating, locations for removable bollards or other elements to restrict automobile access to public spaces when not used for parking, use lighting to create a safe environment while minimizing glare onto adjacent properties and sidewalks.

Bicycle Parking

When providing bicycle parking, consider incorporating features such as storage and wayfinding for bicycle users into the overall site plan and building design.



1.4 Foster Human Scale (Architectural Materials and Elements)

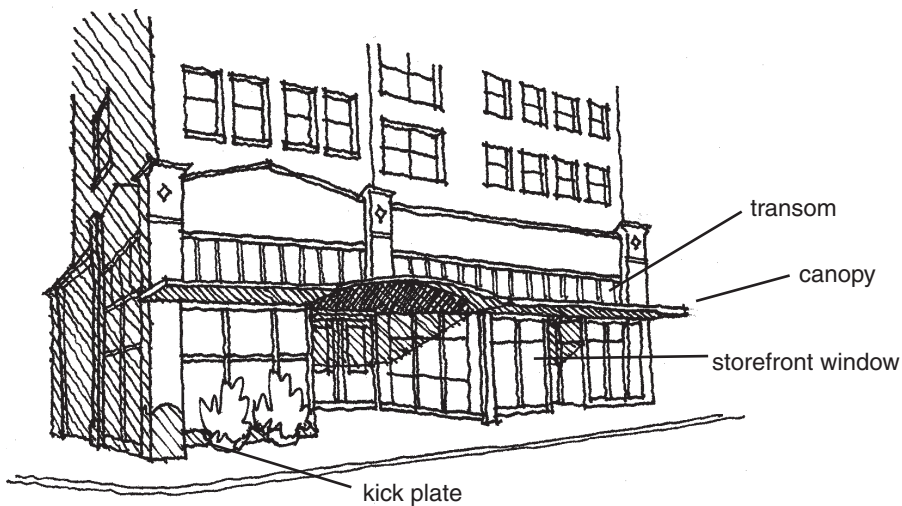
Commercial and Mixed-Use Buildings

The ground level of the building must offer pedestrian interest along sidewalks. This includes windows, entrances, and architectural details. Signs, overhead weather protection and ornamentation are encouraged.



All New Developments

Exterior building materials should have a human scale; this helps people relate to the size of the building. Good examples include stone and brick. Non-modular exterior materials, such as stucco, and those in large modules, such as concrete panels, will need finer details to reduce the perceived bulk and create human scale.



Examples of How Materials are Used to Establish Human Scale

Example of desirable scale and proportion in the facade composition of a large building achieved by its fenestration patterns and detailing, and variegated exterior finish materials and detailing.



Human scale elements include:



bays;

Vertically proportioned elements, including windows and porches, articulate the building into intervals.



roof forms; and

Example of a residential building articulated into intervals by its multiple roof line and building elements.



entrances.

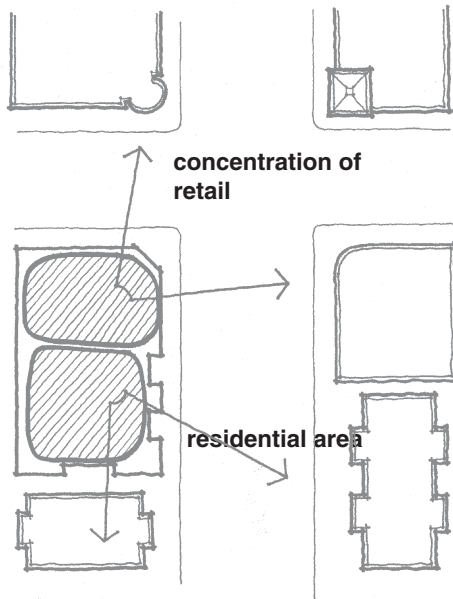
Community Goal 2:

Design Identity Should be Defined Block by Block

Objective: Design the character, form and function of the building in an appropriate manner, responding to the immediate surrounding context - both existing and as envisioned through neighborhood planning documents and concepts supported by the community.



Commercial buildings can blend into a residential corridor providing the overall design is sensitive to the surrounding conditions



break the building down into smaller volumes to relate in similarity to the scale, height and configuration of nearby residential structures.

2.1 Streetscape Compatibility

The architecture of individual buildings should relate to their surroundings. This does not necessarily mean a historical approach, but rather one that is sensitive to the surrounding urban, built and natural environments. In areas zoned for mixed-use development outside the retail core area, orient and design the commercial facade at street level to be compatible with the streetscape of the surrounding residential neighborhood. Compatibility can be accomplished through a combination of the following:

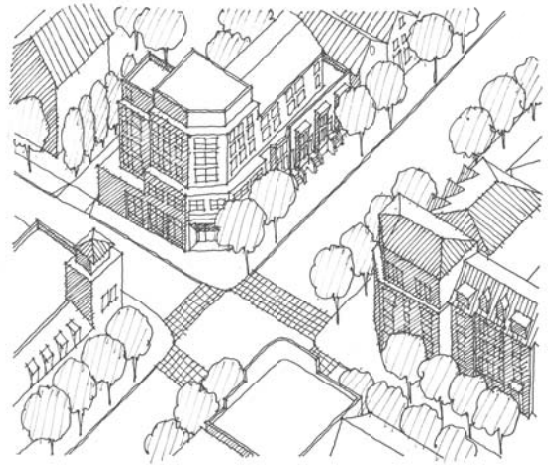
- The overall proportion of the facade;
- Building setbacks;
- Placement of windows and bays;
- Location of entries; and
- Exterior materials.

2.2 Corner Lots Treatments

New buildings should reinforce street corners and enhance the street level environment at these key pedestrian areas. Street corners are common areas for informal interaction, and the building's relationship to the street and related elements should promote comfort and interest within the public realm. Provide a building entry and additional building mass at the corner; and provide space for movement and activity.

The following streetscape elements are encouraged to help meet this objective:

- Special paving or surface treatments;
- Art;
- Water features;
- Landscaping;
- Seating; and
- Kiosks.

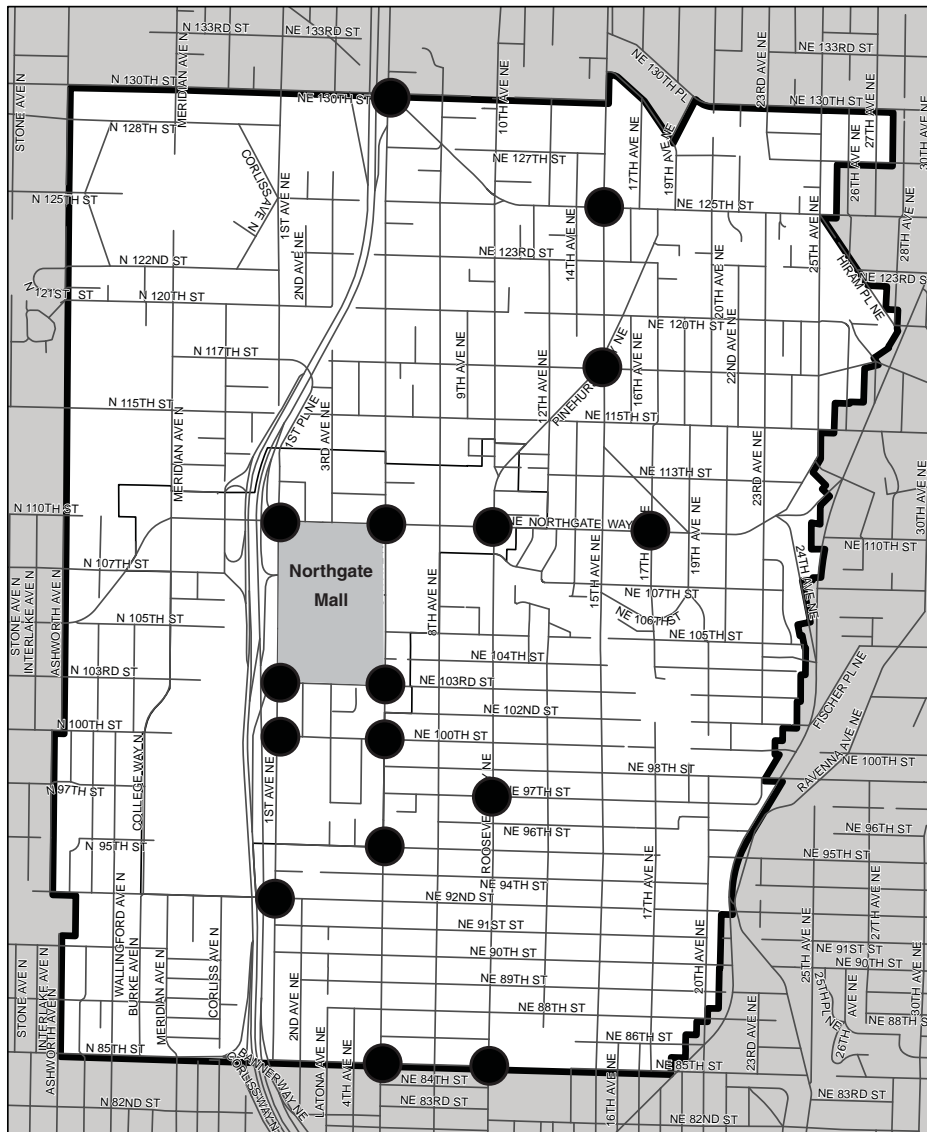


Building form and architectural expression can reinforce the street corner.



Corner Lots as Gateways

New developments on corner lots can aid significantly in marking entry and defining an intersection by “announcing the block” through building forms and features that are visually stimulating and inviting. A gateway can have many forms: a literal gateway expressed through a building form or by the placement of features such as those outlined above. The areas surrounding the following intersections are encouraged to pay particular attention to these guidelines:



NE Northgate Way & 1st Avenue

NE Northgate Way & 5th Avenue
(both Major Pedestrian Streets)

NE 103rd Street & 1st Avenue NE

NE 103rd Street & 5th Avenue NE

NE 100th Street & 1st Avenue NE

NE 100th Street & 5th Avenue NE

NE 92nd Street & 1st Avenue NE

NE Northgate Way & Roosevelt Way NE

NE Northgate Way & 15th Avenue NE

NE 85th Street & Roosevelt Way NE

NE 97th Street & Roosevelt Way NE

NE 85th Street & 5th Avenue NE

NE 95th Street & 5th Avenue NE

**15th Avenue NE & Pinehurst Way NE &
NE 117th Street**

15th Avenue NE & NE 125th Street

Roosevelt Way NE & NE 130th Street

2.3 Height, Bulk and Scale Compatibility

There are several important zone edges within the Northgate Overlay District that warrant special consideration in creating sensitive transitions in height, bulk and scale. Consistent with the 1993 Northgate Area Comprehensive Plan, the following are methods to establish compatible relationships between different scales of development. These methods are intended to augment building setbacks similar to those specified in the Land Use Code for zone edges where a proposed development project within a more intensive zone abuts a less intensive zone; and techniques specified in Citywide Design Guidelines.

Lowrise 4, Midrise, or Highrise development abutting a Single Family, Lowrise Duplex/Triplex, Lowrise 1 or 2 zone:

- Multifamily developments should maintain the established front setback pattern of the subject block.
- Pay particular attention to structure depth on the abutting lot lines. Orient the massing of the structure away from less intensive zones to the greatest extent possible.

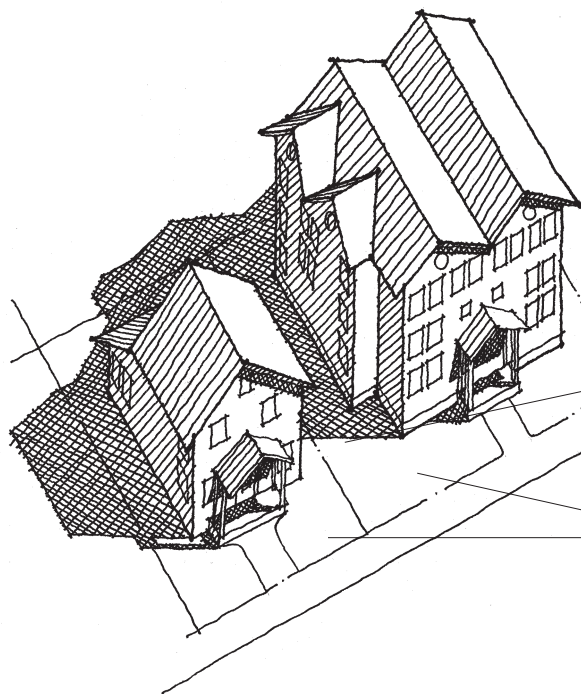
NC2-40', NC3-40' and higher abutting Single Family, Lowrise Duplex/Triplex, Lowrise 1 or 2:

- Step back the ground-level commercial space to match the established front setback pattern on the subject block.
- Pay particular attention to the depth of the commercial level and upper residential levels along the abutting lot line. Orient the massing away from the lot line of an abutting less intensive zone to the greatest extent possible.
- Soften the commercial facade on the abutting lot line with elements such as dense landscaping.
- Repeat residential architectural elements of surrounding buildings on portions of the commercial facade adjacent to such buildings. Examples include roof lines and window styles and proportions.

Along a zone edge without an alley, consider additional setbacks, softening elements, and architectural compatibility to help reduce the potential 'looming effect' of a much larger structure in proximity to smaller existing buildings.



Example of a building stepping back away from smaller adjacent structures in the neighborhood.

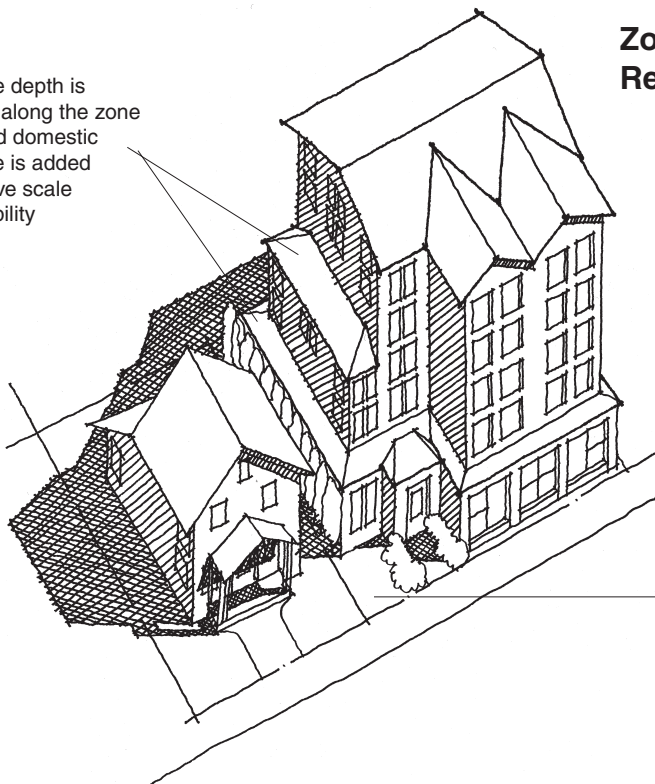


Zone Edge Between Higher and Less Intensive Residential Zones

Generous separation between structures

Similar front setback

Structure depth is reduced along the zone edge and domestic roof style is added to improve scale compatibility



Zone Edge Between Mixed Use and Residential Zones

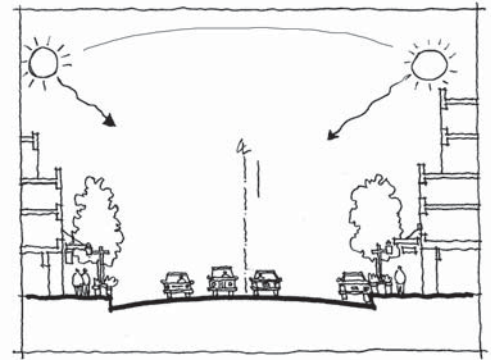
Commercial level stepping back to match the front setback line of abutting property

2.3 Super Block Development

A large site should pay particular attention to massing and scale both in terms of its relationship to the surrounding area and within the site itself. Large monolithic structures are discouraged.

Ideally, development on a large, super block-scale site should be arranged into multiple buildings that lend a human scale and provide for pedestrian permeability (see guideline 1.3).

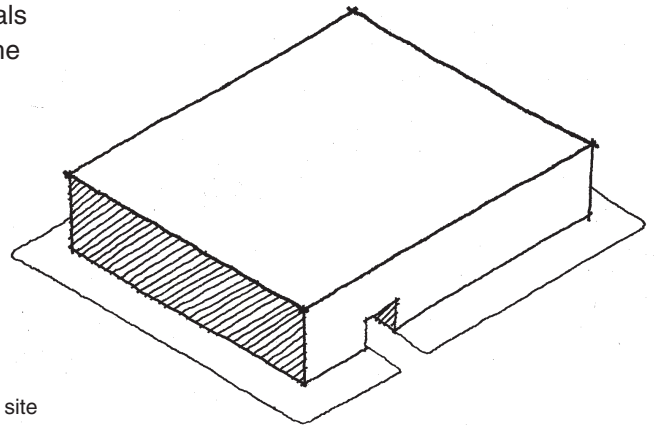
If multiple buildings are not feasible, break down the mass of the building, horizontally and vertically, into a hierarchy of volumes. Within each volume the windows, doors and architectural elements should help define the scale of the structure.



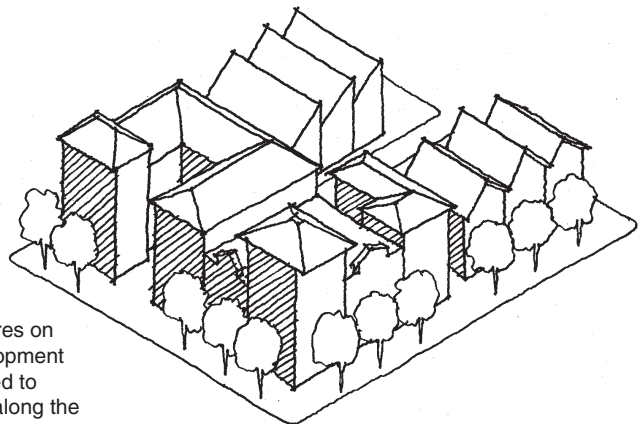
More sunlight at street level with upper level recesses

2.3 Upper Stories

Recessing the upper stories of developments on arterials allows sunlight to pass onto the street and minimizes the impact of height on pedestrians.



Effect of a large site developed with an unarticulated structure devoid of entrances.



Multiple structures on this large development site are designed to create interest along the entire street frontage and within the interior of the site.



Signs that hang underneath awnings and canopies...



add interest to the pedestrian environment.



Signs that are integrated into the building facade are also encouraged.

2.4 Design Signage Compatible with Human Scale and Consistent with Architectural Concept

Signage should be designed so that it is appropriate for the scale and character desired in the area. Signs should be oriented and scaled for both pedestrians on sidewalks and persons in vehicles on streets within the immediate neighborhood. Signs should add interest to the street level environment. They can help unify the overall architectural concept of the building, or provide a unique identity for an individual business within the larger structure. While regulatory sign review is not in the purview of design review, integration with the overall architectural expression of a building and appropriate scale and orientation are important design considerations. Franchises should not be given exceptions to these guidelines.

The following types of signs are encouraged:

- pedestrian-oriented blade signs; and
- Signs integrated into the design of the building: along a sign band, on canopies and marquees, located in windows.

These types of signs are discouraged:

- Large illuminated box signs (backlit “can” signs); and
- Post-mounted signs.

Community Goal 3:

Increase Publicly Accessible Open Spaces and Connections Between Them

Objective: Improve pedestrian movement throughout the Northgate area by creating quality spaces and pathways through and within development sites connecting to the street system and, where appropriate, public open spaces and parks.

Many streets in the Northgate area are composed of “superblocks” at a scale oriented to the movement of vehicles, rather than pedestrians. North-south streets through the Urban Center create uninterrupted corridors with very few opportunities for movement east to west. The simulation of an urban street grid through sites is an important urban design consideration, and creating interior block pedestrian connections through sites and to the surrounding street system (particularly east-west) is a critical element of an improved pedestrian environment.



3.1 Incorporate Open Space

The Northgate Plan places a high priority on open space, especially public spaces that are accessible, comfortable, and in proximity to or on routes to high activity areas. The Northgate Overlay District (Ch.23.71 of the Seattle Municipal Code) includes detailed and specific open space requirements, defining “usable open space” that are open to the public and abutting a sidewalk. The overlay categorizes such spaces by scale and function, ranging from small courtyard spaces to urban plazas and town squares.* The following guidelines augment the open space requirements for some of the categories by providing additional guidance on scale, character and relationship to the public realm.

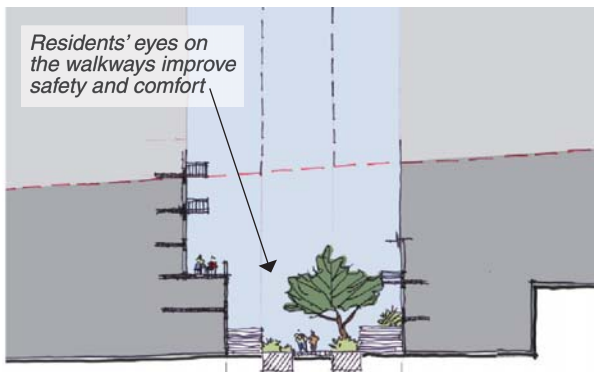
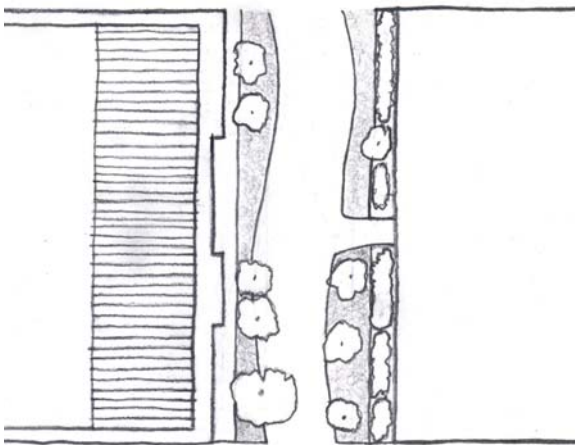
Open spaces (including parking areas) can also help improve site and project sustainability. Refer to guidelines in Section 4 below as well as the Leadership in Energy and Environmental Design (LEED).** Examples include sustainable landscaping and stormwater run-off, detention and filtration systems.



* Refer to SMC 23.71.014 for specific Northgate Overlay District open space standards.

** The LEED Green Building Rating System™ is a program of the US Green Building Council. It is a rating system for what constitutes a “green building.” Visit www.usgbc.org for more information.





Typical interior block pedestrian connection with landscaping, activated street level environment, and upper-level setbacks for light and air

Interior Block Pedestrian Connections

Larger development sites are encouraged to incorporate pedestrian walkways and open spaces to create breaks in the street wall and encourage movement through the site and to the surrounding area. Such walkways, which could be for pedestrians only, for pedestrians and bikes or adjacent to vehicular access through the site, should meet the sidewalk of key pedestrian streets in an engaging and identifiable manner.

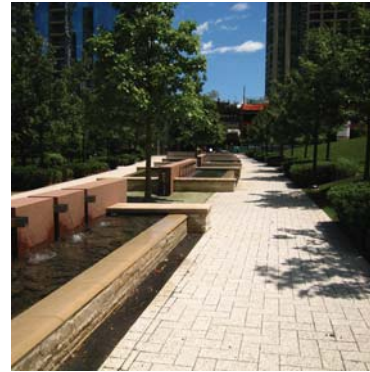
Short blocks encourage people to walk. Locating interior block pedestrian connections that create 200 – 300 foot long blocks are optimal. In siting such street level interior block pedestrian connections, designers should analyze the subject site, and the relationship to surrounding properties, streets and activity areas.

Several key community amenities are of particular significance regarding pedestrian movement through the area. The Northgate Transit Center/future light rail station and the adjacent mixed-use transit-oriented development (TOD) with its urban plaza and access to the Thornton Creek Water Quality Channel are important pedestrian destinations. The Northgate Civic Center, Hubbard Homestead Park, the natural areas along Thornton Creek and North Seattle Community College are also important neighborhood amenities that should inform the location and site design of new open space and interior block pedestrian connections in large lot developments.

Consider Interior Block Pedestrian Connections that:

- Optimize neighborhood connectivity;
- Promote a variety of pedestrian uses such as walking, exercise and relaxing;
- Minimize pavement, and provide an equitable balance between pavement and planting areas;
- Use pervious/pedestrian scaled paving for walking surfaces (minimize standard concrete, discourage use of asphalt);
- Accommodate vehicular access only for emergency vehicles;

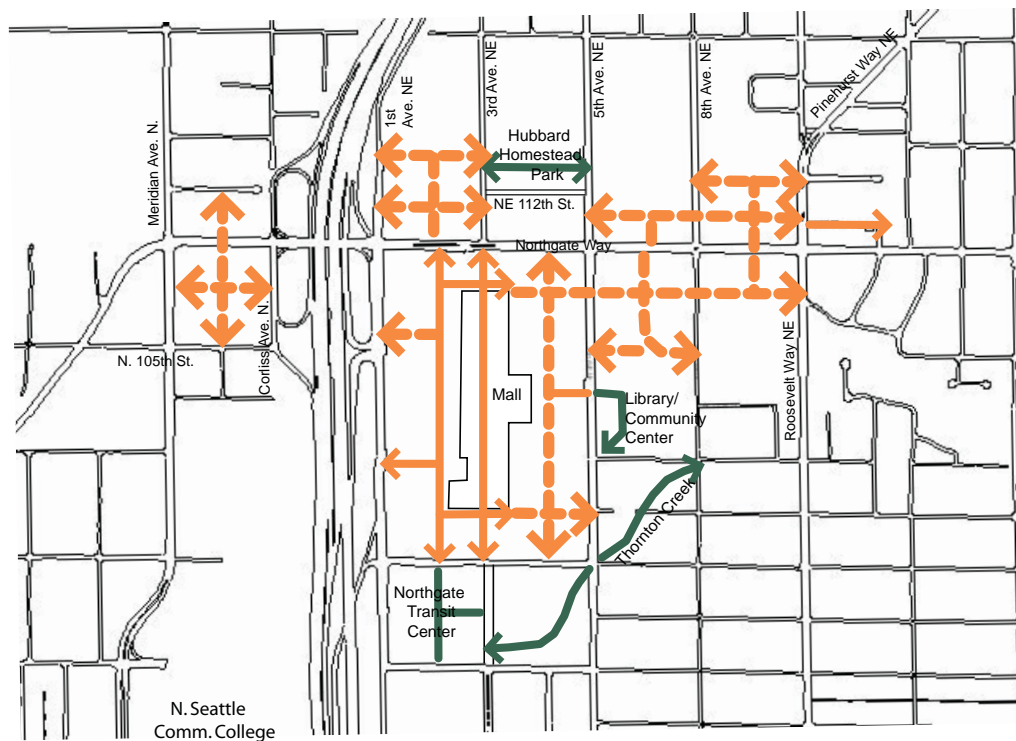
- Develop integrated rainwater strategies such as rain gardens, natural drainage collection, building water collection and art;
- Provide “garden entries” for townhomes at the base of larger residential buildings; and
- Incorporate built-in and movable seating to optimize flexibility of use.



Walkway with water feature

The illustration below depicts existing and potential future pedestrian routes in the heart of the Northgate Urban Center. When development occurs, designers should consider the opportunities to incorporate interior block pedestrian pathways that add to the network.

Concept: Existing and Potential Future Network of Interior Block Pedestrian Connections



- ↔ Existing Pedestrian Routes on Private Properties
- ↔ Potential Future Pedestrian Routes on Private Properties
- ↔ Existing Pedestrian Routes on Public Properties

Lots adjoining public open spaces

Strive for transitions between public, semi-public, semi-private and private space in the design of new development abutting public open space. The following can help accomplish this goal:

- Where appropriate, site commercial uses facing the public space with outdoor seating to enliven the space.
- For ground floor residential uses, locate residential stoops with a grade separation to provide a transition between the residences and the public space.



Active park with landscaped edge



Commercial uses facing park edge are encouraged, with pedestrian walkways and/or shared pedestrian/vehicle access



Residential uses facing park edge are encouraged, with stoops for transition to public spaces



An effective transition from retail use to park edge

The following are examples of less desirable design treatments that should be discouraged:

- windowless walls;
- fences and/or tall, dense plantings that create areas that are invisible to passers-by.

Consider upper story balconies, terraces and windows to provide visual interest and eyes and ears on the public open spaces for greater public safety.

Hierarchy of Open Spaces

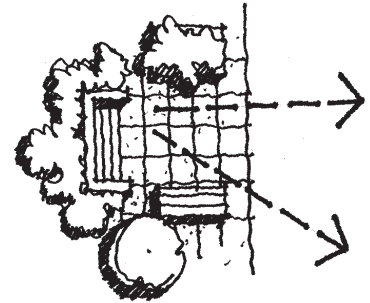
Urban Gardens

- New public spaces should provide as many seating opportunities as possible;
- Planter walls should be set at a height that allows for their use as seating; and
- Moveable chairs and tables are strongly encouraged.

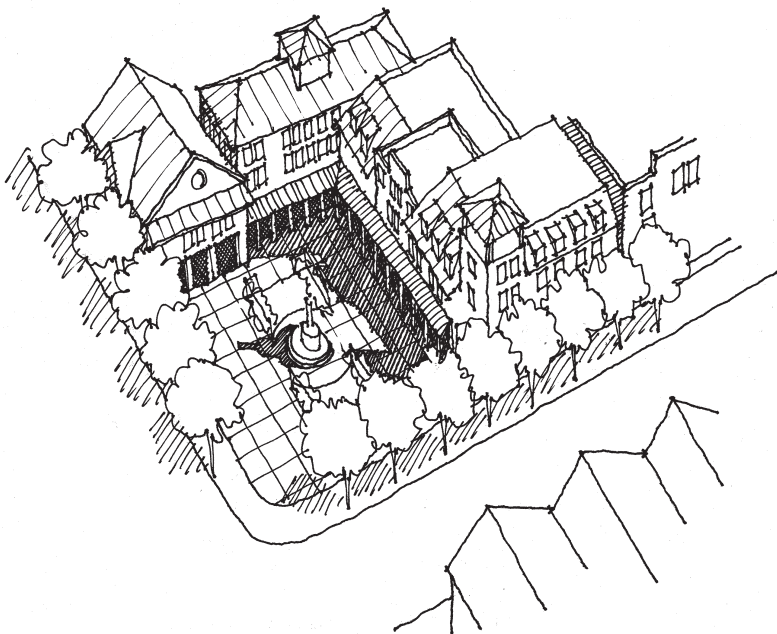
Courtyards

Elements such as planters, benches and steps can be sited to break down the scale of an open space, and provide comfortable seating and opportunities for viewing. Courtyards should be integrated with the scale, character and function of the adjoining building.

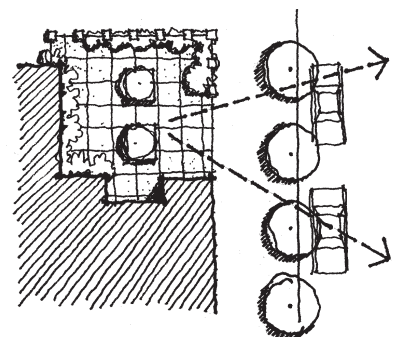
Urban Garden



A comfortable, intimate space with a visual and physical connection to the public realm



Courtyard



Urban Plazas and Town Squares



Urban Plazas and Town Squares

Public space should be enclosed by active buildings around the perimeter to encourage its use and maintain its safety. Plazas and squares should be surrounded by pockets of activity: shops, stands, benches, displays, gardens. These various pockets of activity should all be next to paths and entrances to facilitate constant movement. The ultimate goal should be to gather enough people in and around these spaces so that they will overlap and spill in toward the center of the square.

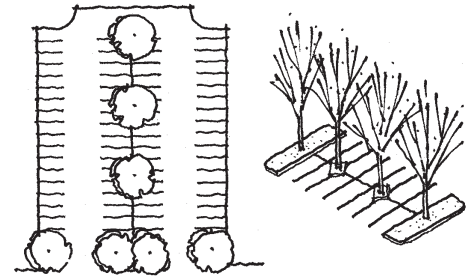
The following can help accomplish this goal:

- Arrange open space elements in a manner that reduces the scale of the larger plaza into smaller spaces more suitable for pedestrian use.
- Design retail spaces that will comfortably “spill out” and enliven public space.
- Provide landscaping that enhances the space and architecture.
- Provide visual and pedestrian access (including barrier-free access) into the site from the public sidewalk.
- Site furniture, art work.
- Pedestrian-scaled lighting and other amenities such as fountains, seating (steps provide excellent seating) and kiosks.
- Design landscaping to enhance the space and architecture and assist in absorbing run-off from paved plaza areas.

3.2 Design of Parking Lots Near Sidewalks

Interior landscaping, in addition to perimeter landscaping, should be installed to help soften the visual impact of surface parking and enhance natural site drainage. To meet this objective, consider the following:

- Interior landscaping: Use landscaping to break large areas into a series of smaller areas. Plant low landscaping in left over portions of parking areas (e.g., turning radii);
- Site landscaping strategically to minimize stormwater run-off;
- Innovative drainage control measures such as swales or treatment islands or pervious pavements;
- Plant enough trees, which at maturity form a canopy over large portions of the parking area with trees interspersed between parking spaces;
- Select tree species that do not obscure signage, amenity features, or opportunities for surveillance;
- Plant a mixture of evergreen and deciduous trees for year-round greenery. Select types of trees, such as sapless trees, that do not impact parked cars.

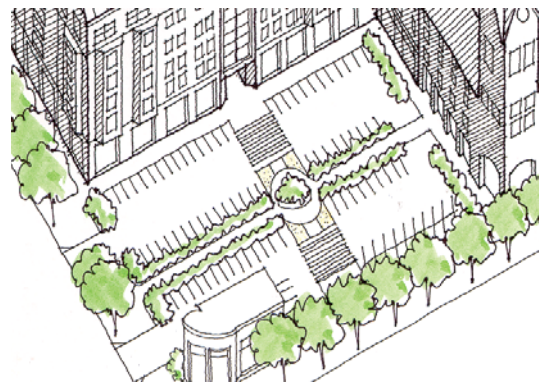


Four foot tree cutouts can be accommodated without losing parking spaces

Large Scale, “Super Block” Development

Surface parking areas should be seen as a resource for the creation of public space. There are many site planning techniques and elements that can help create pedestrian-oriented space.

- The parking area should be laid out as an urban block, at a scale that promotes walking within.
- A network of clearly defined pedestrian walkways should serve as a “grid”, connecting these walkways to uses within the site and to the larger street network in a safe and comfortable manner. The necessary elements—lighting, pavement and plantings—should be placed to support those pedestrian objectives.
- The space should be defined by buildings, and secondary structures such as shelters and small retail spaces (placed at corners) should further define the scale.



Thoughtful design provides attractive walkways and connects to sidewalks at street edges



Example of retail fronting the street with parking set back



Landscaping examples in commercial settings

3.3 Parking Structures

Parking structures merit the same quality materials and finishes as the principal buildings in a development.

- Site parking structures away from Major Pedestrian Streets.
- Design a well-proportioned and unified parking structure. Consider techniques specified in Citywide Design Guidelines – those relating to height, bulk and scale compatibility; architectural concept and consistency; and fostering a human scale – to achieve good scale and architectural design quality.
- Consider placing retail at the ground level of a parking structure along the primary facade, where appropriate.
- Parking structure facades should be treated with high quality materials and given vertical articulation and emphasis similar to the principal structure. The facade should be designed to visually screen cars.
- Pedestrian entries should be clearly visible and architecturally expressed on the exterior of the building.

3.4 Landscaping

Landscaping to Reinforce Design Continuity with Adjacent Sites

Consistent placement of the same types of street trees creates a unified theme in a pedestrian environment. Consider trees on surrounding sites and consult the City Arborist's recommended list when selecting street tree species.

Landscaping to Enhance the Building and/or Site

Quality landscaping is an essential component of the built urban form. Good use of existing and new landscaping adds considerable value to the design of new development and blends new development with surrounding areas, and reduces stormwater runoff.

- The corners of street intersections should be distinguished by special landscape treatments: special paving, low planters and flower displays, sculpture, and decorative lighting.

- Mark and define pedestrian crossing and walkways with specimen trees and shrubs.
- Ease of maintenance and durability should help guide the selection of plant species and landscape materials such as paving, seating and other site materials. Use native, drought tolerant species of plants and avoid invasive plant species.

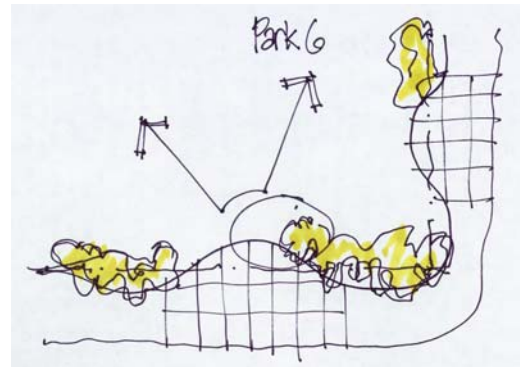
Landscape Design to Address Special Site Conditions

The natural area east of 5th Avenue NE from NE 103rd to NE 105th and east of 8th Avenue NE from NE 105th Street to Roosevelt Way NE will be developed as per the Thornton Creek Park 6 Long Range Plan prepared by Seattle Public Utilities and Seattle Parks and Recreation. New development adjacent to the natural area should consider:

- Retaining natural greenbelt vegetation, where possible.
- Incorporating gathering areas and lookout points along the edge of the natural area into the design of the project.
- Incorporating native plants into the landscape design to provide the feeling of an extension of the natural area into the project site.
- Providing linkages to the natural area that direct people to designated pathways and away from protected areas.
- The plant list developed for the Thornton Creek Park 6 Long Range Plan can help guide the selection of plant species. Native plants provide ease of maintenance and durability, and are usually drought tolerant.



Thornton Creek natural area



New development adjacent to Park 6 can take advantage of the natural area as an amenity

Community Goal 4:

Landscape Design to Enhance the Site or Address Special Site Conditions

Objective: Incorporate existing natural features into the site design and consider including new landscaping that could provide areas of interest and enhance the site.



In the Northgate Urban Center, opportunities for sustainable design are enhanced through the presence of Thornton Creek and its tributaries and the considerable transit investment including light rail and bus service. The neighborhood is challenged by its proximity to Interstate 5 and a history of site design in the Northgate Way corridor emphasizing auto-oriented commercial activity with limited emphasis on the pedestrian environment and landscaping.

4.1 Retain Existing Natural Systems and Site Features as Landscaping



Consider design strategies to preserve existing on-site natural habitats, significant vegetation or other natural features including drainage features that can be incorporated into the site design. For example, consider retaining natural features such as existing vegetation and wetlands that are aesthetically pleasing, would emphasize natural features like that of Thornton Creek and its tributaries and can create a pedestrian friendly environment by providing natural areas of interest. Also, features such as larger planting strips located adjacent to sidewalks can be used for landscaping to enhance the site and can effectively separate pedestrians from the impacts of traffic.

4.2 Use Landscaping Design to Enhance the Site

Consider design strategies to create natural features or systems that can be incorporated into the site design. For example, consider incorporating rain gardens or drainage swales that are aesthetically pleasing, would emphasize natural features and can create a pedestrian friendly environment by providing landscape designed features or areas of interest. Landscaping features such as larger planting strips can enhance the site and can effectively separate pedestrians from the impacts of traffic.



For more information about Design Review in Northgate and citywide, please visit:

www.seattle.gov/dpd/designreview



The Seattle Department of Transportation

2012

ACTION AGENDA

Laying the Groundwork



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MISSION STATEMENT
To deliver a safe, reliable, efficient, and socially equitable transportation system that enhances Seattle’s environment and economic vitality.

MESSAGE from the MAYOR



Dear friends,

Our streets are more than a transportation system. They are the canvas on which we build a great place to live. Streets provide mobility and access to homes, jobs, education, and services. They also reflect our values, allowing us to support our neighborhoods, address global warming, and build healthy communities.

Seattle's transportation policies should support those priorities. To do that, the Seattle Department of Transportation (SDOT) has developed this Action Agenda. It lays out a clear set of policies and actions the department will advance over the next two years. In a time of tight budgets, we have to focus our efforts on actions that yield the biggest returns. We want you to know what we're working on, what we prioritize, and how we will get it done.

Our transportation system has to help the city accomplish a variety of goals – providing safe, affordable, and efficient means of travel; improving the transit connections between our neighborhoods; offering healthy choices like walking and biking; reducing our environmental impact; and supporting economic development and sustainable growth. Successful stewardship of the system requires thoughtful, deliberate, and strategic action.

I look forward to working with SDOT, the City Council, and the public to achieve our goals. I encourage you to read the Action Agenda and share your comments with me and SDOT. Together, we will protect what makes Seattle great and build a safe, healthy, thriving community.

Sincerely,

A handwritten signature in blue ink, reading "Mike McGinn".

Mike McGinn
Mayor of Seattle

MESSAGE from the DIRECTOR



Dear fellow Seattleites,

The Seattle Department of Transportation is charged with the responsibility for keeping the transportation system working for all who live, work, and visit this great city. This Action Agenda describes how SDOT intends to carry out this responsibility.

Making the transportation system work for everyone is a complex job that becomes even more of a challenge in times of financial hardship.

In addition, SDOT is part of a larger community working to improve the transportation system and affect public behavior. We rely on strong partnerships with transit agencies and state entities to enact change. For example, while we can help make buses run more reliably by improving streets and signals, it is King County Metro that ultimately delivers the service. There are many factors at play, and while we are not always in full control of the transportation network, we will continue to work with our partners.

We must keep our city moving, and we are up for the challenge. The Action Agenda makes our work easy to understand and lets you know what we intend to accomplish over the next two years.

With a shrinking budget, we've worked hard to adjust to our lower revenues and to focus on what is most vital to keep our streets safe, our infrastructure in shape, to enhance our communities and businesses, to involve the public and to spend your money wisely.

This document reflects my best thinking and that of my staff. It demonstrates the values of our mayor and council and what we have consistently heard from residents and businesses at many venues. I welcome your thoughts and ideas as we go forward.

Sincerely,

A handwritten signature in black ink, reading "Peter Hahn".

Peter Hahn
Director, Seattle Department of Transportation

INTRODUCTION

Every day, people count on Seattle’s transportation system to get to places for work, shopping, play, or learning – and then to get them home again. While connecting people, places, and products is the core mission of a transportation system, it provides so much more than just mobility. A robust transportation system can:

- Enable people to pursue opportunities by providing ready and affordable access to jobs, education, housing, and cultural activities
- Power our economy by moving goods and enhancing the attractiveness of business districts
- Improve health by making it easier to walk, bike, and ride transit
- Build community by inviting people to linger and enjoy places that contribute to neighborhood character
- Empower people by offering safe, efficient, and equitable choices for how and when to travel
- Improve our environment and address climate change through low-carbon travel options and the nurturing of trees, greenery, and urban wildlife in street rights of ways

In Seattle, we want people of all abilities – from our 5-year old kids to our 80-year old grandparents – to be comfortable moving about the city, whether on foot, by bike, riding transit, or driving a car.

In addition to relying on roads, sidewalks, and trails for our travel paths, we can make efficient, affordable, and safe travel choices available through programs that educate, encourage, and provide timely information. We ensure that quality services and facilities won’t be limited to those who can afford and choose to own a car.

Of course, there are challenges. Transportation rights of way comprise nearly 27 percent of Seattle’s land area, and pedestrians, bicycles, buses, cars, and trucks all compete for that limited space. Vehicles moving within this street space account for 40 percent of Seattle’s greenhouse gas emissions, making transportation the primary climate change culprit.

Luckily, the transportation system also provides us with the opportunity to address these challenges head on. By offering people more choices, we can decrease the demand on our streets and reduce our impact on the environment. In doing so, we can build a network that supports healthy and sustainable communities, keeps more money in people’s pockets, increases economic competitiveness, and adds to the character of our great city.

All of these conditions require significant investments and new solutions to meet our current and future transportation needs. The challenge is to do so in a manner that meets our residents’ expectations for physical and economic well-being, while dealing with finite spaces and limited financial resources.



This document outlines a set of policies, actions, and measures of success that SDOT will use to achieve these ends. It is organized around five core principles:

1. **Keeping it Safe:** Safety is SDOT’s number one priority. We are committed to improving safety for all users of the transportation system and reducing the number of fatalities and injuries.
2. **Focusing on the Basics:** Making sure our streets, sidewalks, and bridges are in good condition is vital to the success and safety of our city. We’re focused on maintaining and enhancing infrastructure in a way that promotes long-term fiscal and environmental stewardship.
3. **Building Healthy Communities:** Neighborhoods are the core of our city. SDOT is dedicated to developing an equitable transportation system that offers healthy travel choices and great public spaces.
4. **Supporting a Thriving Economy:** The efficient movement of people and goods is essential to economic vitality. A robust transportation network can reduce household transportation costs by providing efficient and practical alternatives to driving, enhance our quality of life, and draw new businesses and visitors to our city.
5. **Providing Great Service:** A solid workforce is essential to carrying out the first four principles. We strive to be good financial stewards, deliver services equitably, and engage all parts of the community in our work.

Laying the Groundwork for

KEEPING IT SAFE

Engineer, educate, enforce, and evaluate.



Safety is SDOT's most important priority. Our long-term goal is a city with zero traffic fatalities and serious injuries.



As one of the leading causes of death for younger people (ages 5 to 34), road safety is a public health concern. This is one of the reasons that safety is our number one priority.

People also expect to feel safe and comfortable as they are out and about on Seattle's streets, sidewalks, and trails. Well-placed investments that improve safety for our most vulnerable road users can encourage more people to try getting around on people power, especially for short trips. Additionally, **safer streets are efficient streets**. They have fewer and less severe collisions, allowing everyone to get where they are going safely and with less hassle.

Seattle has made substantial progress toward improving safety for the traveling public. **The number of traffic collisions is steadily decreasing**, a trend that is much more pronounced here than in national figures. Something good is happening in our city – it may be a combination of improved engineering, smart investments, alert travelers, and better enforcement.

Seattle has long been a leader in innovative transportation and traffic engineering, including the kinds of things that make our streets safer and more efficient for everyone. We were one of the first cities in the country to routinely deploy pedestrian countdown signals, bicycle sharrows, green bike lanes, and bike boxes. These newer methods make it easier and safer for people to get around in Seattle. We've found, however, that not everyone knows how these newer tools work, nor is everyone following the rules. To that end, we're working on **educating the public and improving overall awareness**.

Our **30-year old neighborhood traffic calming program** has served as the model for programs in other cities. We have built thousands of traffic circles, speed humps, and other traffic calming measures that have made reported residential street collisions a rarity. SDOT also recently deployed a small-scale social marketing tool kit for neighborhoods that want to raise awareness about speed on their streets, including yard signs and intersection repair. As part of our continuous improvement efforts, we are committed to evaluating physical changes in our street and safety programs to learn more about what works to reduce collisions.

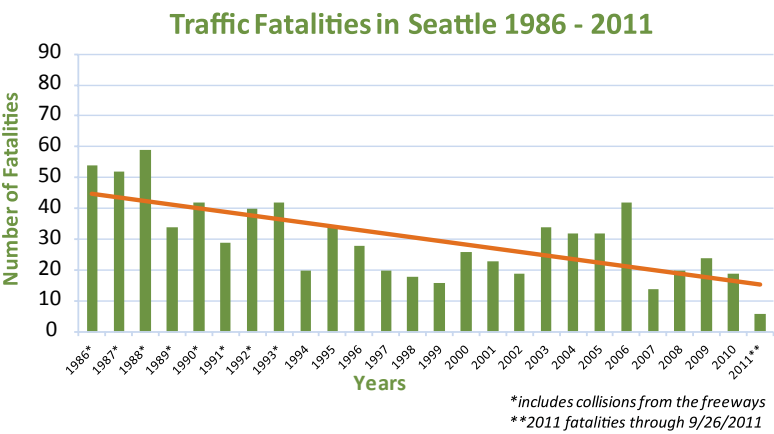
Keeping residents and visitors safe also means we **must be prepared to respond to emergencies**. SDOT's Winter Weather Plan is one example of our efforts to ensure we're ready for inclement weather incidents.

KEEPING IT SAFE

Did You Know?

Compared with cities with a population higher than 500,000, Seattle ranked sixth in traffic fatality rate, behind Boston, New York City, San Jose, CA, San Francisco and Washington DC.

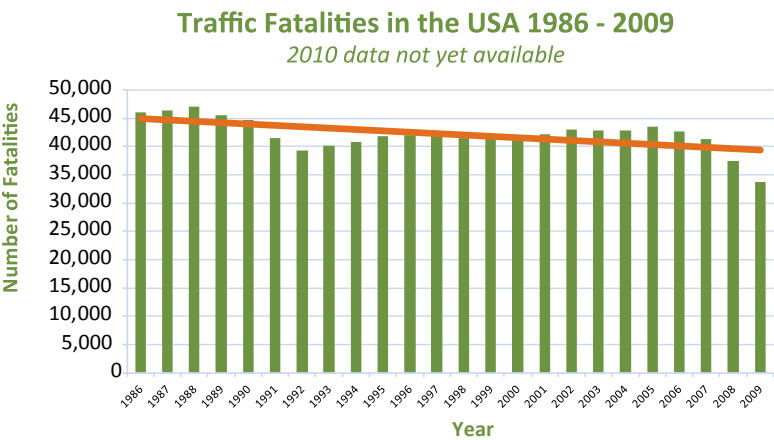
National Highway Traffic Safety Administration, 2009



Partnerships with the Seattle Police Department (SPD), schools, and advocacy organizations are critical to improving safety for our residents and visitors. We emphasize safety for elders, children, pedestrians, bicyclists, and people with disabilities, who are statistically more vulnerable in a traffic collision.

Our Safe Routes to School and School-Zone Automated Speed Enforcement programs, annual holiday pedestrian safety campaign, and ongoing partnership with the Washington Traffic Safety Commission’s corridor safety program contribute to improved safety.

Through these efforts we saw traffic fatalities decrease more than 26 percent and fatalities involving pedestrians decrease nearly 55 percent from 2009 to 2010. While significant, this still falls short of our ultimate goal of zero traffic collision fatalities.



Road Safety Summit

In late 2011, Mayor McGinn and members of the Seattle City Council convened a Road Safety Summit to collect public input and review data about the safety of our streets. They assembled a working group made up of elected officials, major employers, advocates, business leaders, and community leaders to help determine next steps for road safety in Seattle. Through public meetings and an online survey, the city received over 3,000 comments and suggestions.

Using these comments and their expertise, the working group recommended that the city and community partners develop a long-term, sustained campaign with the long-term vision of zero traffic fatalities and serious injuries on our roads.

The city is currently developing strategies to achieve these goals using a multi-pronged approach consisting of education, enforcement, engineering, evaluation, and empathy. In order to be successful, this effort will rely on a larger community of people that are committed to creating a lasting change on Seattle roads.

The policies and actions listed in sections one through three of “Keeping it Safe” are all supportive of the Road Safety Summit effort. Later in 2012, more actions will be identified citywide (not just through SDOT) that will help get us move closer toward our long-term goal of zero traffic fatalities and serious injuries.

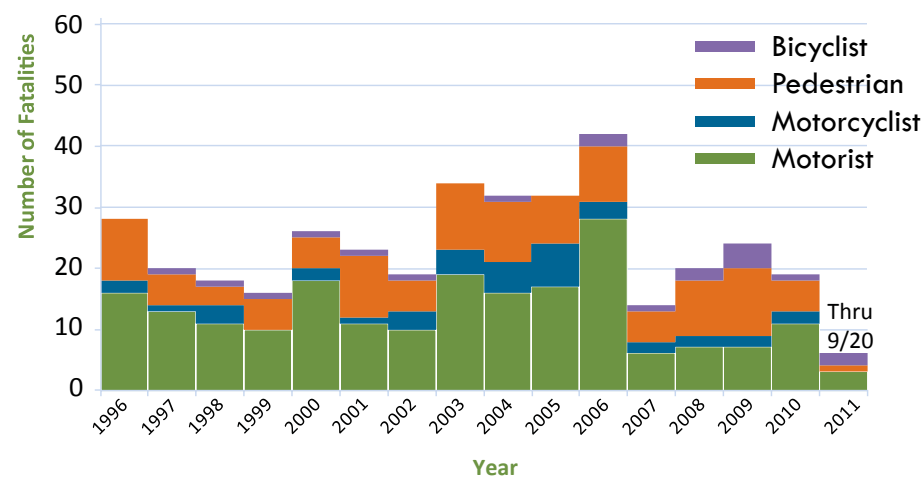




Reduce collisions for all modes and work toward zero fatalities and serious injuries

- Perform engineering reviews at all traffic fatality and high collision locations
- Implement roadway design features and traffic controls that have been demonstrated to reduce collisions and their severity
- Implement measures to calm traffic and reduce speeds on streets where excessive volumes and speeds warrant traffic calming
- Support changes to lower non-arterial speed limits and increase penalties for motorists who cause a collision with pedestrians or bicyclists
- Use intelligent transportation system (ITS) technology to provide real-time information that alerts roadway users of traffic incidents
- Implement safety spot improvements as funds support
- Continue to develop and implement the recommendations from the Road Safety Summit

Fatalities on Seattle Streets by Mode



Improving Safety on Nickerson Street



In August 2010, we reconfigured the travel lanes on Nickerson Street (from 13th Avenue West to Florentia Street) to **improve pedestrian safety and increase driver compliance with the speed limit.** We added two new marked crosswalks and monitored traffic speeds over the next year.

The year following the rechannelization saw a **23 percent reduction in collisions over the preceding five-year average.** The project improved traffic safety by dramatically reducing the percent of drivers traveling more than 10 miles per hour over the speed limit. The percent of drivers traveling over the speed limit has been reduced by more than 60 percent, and top-end speeders have fallen by 90 percent. Meanwhile, traffic volume remains roughly the same as it was before the rechannelization, with no evidence of traffic diversion.

MEASURE	2010 BASELINE	2014 GOAL
Collisions per 1M vehicle miles traveled	60	56
Number of collisions	11,913	<11,000
Number of fatalities	19	<10
Pedestrian collisions per 100,000 residents	87	<75

2

Educate the traveling public to respect and protect one another

- Invest in education measures that increase mutual awareness among motorists, pedestrians, and bicyclists
- Continue to work with Seattle Police Department to use enforcement measures that keep traffic at or below the speed limit
- Replace all pedestrian signal heads with countdown-style heads
- Continue SDOT’s Holiday Pedestrian Safety Campaign
- Continue to implement the Safe Routes to Schools program
- Continue to develop and implement the recommendations from the Road Safety Summit

MEASURE	2010 BASELINE	2014 GOAL
Percent of elementary schools participating in Safe Routes to School	30%	56%
Percent of identified corridors where 85th percentile speeds are at or below speed limit*	30%	40%
Percent of signals with countdown-style heads	24%**	35%

*Identified corridors include Aurora Ave N, Stone Way N, 24th Ave NW, Rainier Ave S, and Fauntleroy Way SW. 85th percentile refers to the speed at which 85 percent of motorists are traveling at, or below.
**2011 baseline

3

Minimize conflicts in the right of way to accommodate all travelers

- Coordinate use of the right of way for all major activities and permitted uses
- Inspect all permitted work to ensure safety and accessibility standards are met
- Encourage private contractors and partner agencies to achieve permit compliance by providing a process that is more efficient and predictable
- Work with the Department of Planning and Development to enforce code-required clearances for privately maintained trees and other encroachments in the sidewalk and right of way
- Maintain code-required clearances over roadways and sidewalks on all SDOT-owned trees

MEASURE	2010 BASELINE	2014 GOAL
Percent of Street Improvement Plans reviewed within 6 weeks	70%	70%
Average wait times for walk-in customers for over-the-counter Street Use permits (minutes)	<15	<15
Number of SDOT-owned street trees pruned to address height clearances	1,000	1,215

Aurora Traffic Safety Corridor

Between April 2005 and March 2008, there were **1,581 collisions on Aurora Avenue – that’s more than 40 per month**. SDOT began a two-year safety corridor project in June 2009. Washington Traffic Safety Commission provided funding for the public education component of the project, managed the Seattle Police Department and Washington State Patrol overtime funds, and are the main drivers of the Corridor Safety Program. The goal was to reduce collisions by 25 percent.

We installed new curb ramps, radar speed signs, reflective pavement markers, and crosswalks and launched an education campaign. **Collisions have decreased 20 percent.**

4

Be ready to respond to emergencies

- Conduct regular and ongoing training for all Incident Management Team staff and crews
- Ensure that resources are in place to meet anticipated incident demands, such as wind, snow, downed trees and ice events
- Participate in regional emergency preparedness exercises and drills
- Perform seismic upgrades to bridges and roadway structures
- Analyze landslide prone areas and develop mitigation projects
- Expand the intelligent transportation systems network to respond to emergencies and incidents
- Increase public awareness of the Winter Weather plan

MEASURE	2010 BASELINE	2014 GOAL
Percent of incident management staff completing 24 hours of annual training	70%	75%
Percent of high-priority bridges that have undergone seismic retrofits	40%	53%
Number of Winter Weather brochures distributed and downloaded	47,700*	52,600

*2011 baseline

Winter Weather Plan

Here in Seattle, some winters bring heavy snowfall and other years see no snow accumulation at all. A weather phenomenon called the Puget Sound Convergence Zone causes some parts of the city to get inches of snow, while other parts get rain or even sun.

Steep topography, like the Queen Anne Counterbalance, First Hill and the intersection of 35th Avenue SW and Avalon Way, add to the complexity of snow fighting in Seattle. Hills can consume lots of time and effort and still not be drivable. A few stuck cars can tie up an important arterial for hours. SDOT commits to clearing snow from identified routes throughout the city within a specified time frame. We’ve developed a map that shows what streets we’ll plow first - our top priority is to maintain emergency vehicle access.

We commit to using all the tools at our disposal to make sure that the people of Seattle as well as our interagency partners are fully informed and involved in our snow response. SDOT and King County Metro have worked together to ensure that bus routes will be clear. People will be able to get around the city by bus, making it easier to leave their cars at home. Property owners, both in residential and business areas, are responsible for shoveling their sidewalks and steps.



Did You Know?

Throughout the January 2012 snow storm, SDOT dispatched 22 pedestrian crews to downtown and various business districts to apply deicer and shovel snow and ice from over 2,000 sidewalk landings and public stairs.

In total, over 55,000 gallons of anti-icing magnesium chloride was applied, 3,373 tons of rock salt was used, and 5,015 labor hours clocked.

Laying the Groundwork for

FOCUSING ON THE BASICS

Maintain, protect, preserve, and enhance our capital assets.

The public trusts SDOT to be the steward of the right of way. Being a good steward means that we must have reliable information, make wise decisions about how limited resources are spent, and get the best value from the public's transportation dollars.

SDOT manages and maintains over \$13 billion in transportation assets. From substantial and long-lasting structures such as bridges, roadway pavement and sidewalks, to smaller, more frequently maintained assets like signs, street trees, traffic signals, bike racks, and marked crosswalks – we are responsible for it all.

Focusing on the basics is about maintaining, preserving, and protecting our transportation infrastructure. It's also about looking for opportunities to enhance, expand, and improve our system. For example, SDOT is focused on repairing existing sidewalks and building new sidewalks to make it easier for more people to walk.

And as we build new or repair existing assets, we look for ways to reduce our impact on the planet, especially because the transportation sector is the primary contributor to local greenhouse gas emissions. Reducing greenhouse gas emissions is a basic underpinning of the work we do as a transportation agency to help the city reach its commitment of carbon neutrality by 2050. Through our internal environmental management system, GreenDOT, we can maximize the environmental benefits of our projects and contribute to a healthier city.

In 2011, we filled over 25,000 potholes, repaired 25 blocks of sidewalk, planted over 800 street trees, restriped 1,100 lanes miles of pavement, and installed 15 miles of bike lanes and sharrows. We also issued nearly 19,000 permits – for sidewalk cafes and new street improvements projects – to ensure that work in the right of way was done safely and that projects were built sustainably.

To keep infrastructure in the best condition possible and prolong its useful life, we must make regular investments in preventive maintenance. Over the years, a backlog of deferred maintenance has amassed, and the inventory has grown. Even though Seattle is in better financial shape than many cities in the nation—especially due to the voter-approved Bridging the Gap transportation levy—the needs far outweigh available dollars.

When simple repair is no longer an option and full reconstruction is necessary, costs escalate substantially. With regular maintenance, a well-built road can easily last nearly a century, while one deprived of maintenance will have one-third the lifetime.

To make the best investments possible, SDOT has an asset management program—an industry “best practice” that enables us to assess, maintain and track the quality, costs and value of our infrastructure. This information allows us to make informed decisions on the highest priorities for maintenance before the asset requires high cost reconstruction or full replacement.

SDOT continues to focus on the basics by maintaining what we have and planning for the future. We are fine tuning our systems to address backlogs while building new infrastructure to keep people and goods moving, and to enhance the overall built environment of the city. As we do so, we're also improving our work through programs that utilize new technologies, encourage community interaction, and celebrate creativity. We take our stewardship role seriously and are dedicated to creating and maintaining a truly sustainable transportation system.

1 Build and maintain transportation infrastructure to meet the latest standards

- Continue to invest in street paving projects and major maintenance programs
- Respond to pothole and sidewalk shim requests in a timely manner
- Maximize the life cycle of new construction projects
- Regularly maintain crosswalk markings
- Regularly inspect bridges and roadway structures and prioritize maintenance operations
- Remove graffiti on signs, traffic signals, and parking pay stations
- Ensure accountability for timely and high-quality repair of street restorations
- Optimize traffic signal corridors, taking into account the needs of all modes
- Continue replacing street signs
- Continue replacing roadside safety devices, such as guard rails and crash cushions


Did You Know?

You can report a pothole online or by calling (206) 684-ROAD, and track the status of your request on SDOT's Pothole Map at <http://www.seattle.gov/transportation/potholes>.

15th Ave NE Paving Project

In 2011, we rebuilt 15th Avenue NE between NE Pacific and NE 50th streets with new concrete pavement and resurfaced the roadway between NE 50th and NE 55th streets with asphalt.

The project team also installed 52 curb ramps to improve accessibility, placed 6 new bus shelters, installed 4 new pedestrian lights, 7 new street light poles, and 16 new stormwater catch basins to improve water quality, and rebuilt nearly 6,500 linear feet of sidewalk.



MEASURE	2010 BASELINE	2014 GOAL
Percent of pothole repair and sidewalk shim requests responded to within 3 business days	59%	80%
Percent of street name sign replacement program completed	67%	95%
Percent of reported graffiti removed within 6 business days	95%	95%

2

Maximize the environmental benefits of the transportation system

- Work to reduce greenhouse gas emissions
- Continue to support and implement SDOT’s environmental management system, GreenDOT
- Reuse and reduce construction materials whenever possible
- Increase the use of “green” concrete and asphalt for roadway and sidewalk projects
- Reduce vehicle idling at bridges, schools, and loading zones
- Improve water quality by enhancing and expanding the Street Sweeping/Vacuuming for Water Quality Program partnership with Seattle Public Utilities (SPU)
- Develop and implement standards for green stormwater infrastructure (GSI) projects in partnership with SPU
- Reduce electricity used to operate bridges and lighting

MEASURE	2010 BASELINE	2014 GOAL
Percent of capital projects reviewed to maximize the use of “green” concrete and asphalt	34%*	75%
Percent of lane miles swept for water quality (out of total lane miles swept)	60%* (9,758/15,998 miles)	71%

*2011 baseline

Elliott Bay Seawall Project

The Elliott Bay Seawall is the foundation for Seattle’s future waterfront. It runs from South Washington Street to Broad Street along Elliott Bay and was built between 1916 and 1934. Over the last 70 years, the seawall has deteriorated significantly and could fail in the event of an earthquake or even a large storm. Replacing the seawall is a critical public safety issue and is a top priority for the City of Seattle. The need to replace the seawall and the removal of the Alaskan Way Viaduct also presents Seattle with an opportunity to enhance critical marine habitat along the shoreline.

Failing to replace the seawall puts our local economy at risk of major disruptions. Major transportation facilities—ferries, railways, and roads—provide commuters access to work, freight access to markets, and visitors access to the waterfront. Seattle’s front porch, which includes historic piers, tourist activities, passenger cruise lines, office buildings, and residential buildings, is supported by this important structure.

The project team has completed 35% design of a staff-recommended alternative and is actively seeking permits and environmental approvals for the project. The project will move into final design this spring, maintaining a very aggressive schedule in order to address this critical safety project as quickly as possible.

Construction of the seawall is planned to occur in two phases, beginning as early as September 2013. The goal is to complete the first phase of seawall construction—from Washington to Virginia streets—prior to the demolition of the Alaskan Way Viaduct’s central waterfront section in early 2016.



3

Manage Seattle’s public street trees and landscapes

- Plant, prune, and care for street trees to increase tree canopy, improve neighborhood streetscapes, and address public safety concerns
- Update the Street Tree list to ensure the right tree is planted in the right place and to reduce maintenance needs
- Maintain trees and vegetation around intersections, crosswalks, regulatory signs, etc. to increase visibility
- Maintain tree pits to meet the dual goals of tree health and pedestrian safety
- Educate the public and tree service providers on proper planting and extended care, and on reporting illegal pruning or removals
- Enforce regulation related to tree retention and protection

MEASURE	2010 BASELINE	2014 GOAL
Percent of tree canopy coverage within the right of way	16%	18%
Percent of customer inquiries on 684-TREE hotline responded to within 2 business days	90%	95%
Tree maintenance pruning cycle (number of years)	13.4	13.4*

**Maintaining the 13.4 yearly cycle is an increase, as inventory continues to grow each year*

Community Tree Program

When it comes to reducing the impacts of climate change, there is no substitute for responsible behavior. Planting trees can help lessen some of the problems that face us today, while providing benefits that enhance our neighborhoods and our lives.

Trees reabsorb carbon dioxide out of the air. They can reduce energy needs, by cooling homes in the summer and blocking cold winds in the winter. They capture storm water and filter dust and dirt from the sky. They beautify our neighborhoods, encourage song birds, and help increase property values.

Thanks to the voter-supported Bridging the Gap initiative, SDOT is planting over 800 street trees per year. We’re interested in finding neighborhoods where we can plant about 100 trees within about a 4- to 5-square block area. These trees will be planted, watered through establishment, and maintained by SDOT.



Did You Know?

You can request free street trees for your neighborhood. Check out http://www.seattle.gov/transportation/btg_streettrees for guidelines, or call (206) 684-TREE.

Laying the Groundwork for BUILDING HEALTHY COMMUNITIES

Support sustainability, livability, and equitable growth.

Streets and sidewalks provide pathways to get us from point A to point B. But if we look closer, we can also see them as opportunities for making community connections, supporting active lifestyles, and contributing to vibrant neighborhoods.



A key ingredient to a great city is public space that encourages people to linger, enjoy, and connect with neighbors and strangers. SDOT sees [placemaking as an essential part of sustainability, livability, and equitable growth](#). We are rethinking how to use the right of way and how the transportation system contributes to the overall physical feel of the city. We're prioritizing transit, building more sidewalks, making more space available for bicycles, and creating hubs where people can connect between modes.

In addition to making streets friendlier for all travelers, we are calming neighborhood streets to increase safety, reduce vehicle speeds, and re-route auto traffic from neighborhoods onto arterial streets. We are designing neighborhood greenways that promote bike and pedestrian travel on streets with low volumes and speeds. And, we are making buses and rail a real option for many trips from our neighborhoods to major destinations. In doing so, SDOT develops streetscape designs that consider the function, form, and feel of a space and its place within the larger community.

By making it easier to ride transit and offering non-motorized options, [people can choose to lead more active and environmentally sustainable lifestyles](#). These choices often influence our decisions about where we live, shop, go to school, work, and recreate. They can affect stress levels, finances, our sense of independence, and the time we spend with our friends and family.

Although many people wouldn't consider it a determinant to health, the way our transportation system is planned, designed, and built has far-reaching implications for our risk of obesity, diabetes and injuries. This is significant considering that over half of adult residents and 30 percent of school-aged children are overweight or obese in King County. And the prevalence of obesity among African American adults is 60 percent higher than for whites, which makes achieving equity a serious challenge.

We have an [opportunity to provide healthy, affordable choices and create great places](#) that encourage people to get out and enjoy streets on foot or by bike. In doing so, we can also reduce greenhouse gas emissions, smog and soot. [We can also improve the health of our residents, support environmental sustainability, and bring people together in places where they want to be.](#)



WALK BIKE RIDE

We’re at a turning point in transportation. We can’t sustain the financial, environmental, and health costs of a transportation system that is overly reliant on automobiles. We need a new path forward that enables people to make healthy, affordable, and convenient choices.

Launched in 2010, the Mayor’s Walk Bike Ride initiative encourages a balanced approach to how we use our streets, how we spend our transportation dollars, and how we collaborate with partner agencies. It commits us to giving people better transit choices and safer routes for walking and biking. In doing so, we can build a transportation system that supports safe and healthy communities, creates a dependable, connected, and equitable network, and promotes placemaking. Walk Bike Ride is about making the healthy choice the easy choice.

Our neighborhoods and the way they’re designed affect the way we get around in the city. Our lifestyles and activities have changed, and the obesity trend has hit an alarming trajectory in a very short time period. By designing our communities in the context of health and equity trends, and by providing better walking, biking, and transit opportunities for all Seattleites, we can begin to reverse these negative impacts.

In 2011, over 1,800 people signed up for the Walk Bike Ride Challenge and pledged to convert at least two car trips per week. This resulted in over 300,000 miles of driving converted to walking, biking, and transit, and prevented over 300,000 pounds of greenhouse gases from entering our atmosphere. We aim to increase the number of participants by 5 percent each year.



1 Increase mobility and access for everyone

- Use equity criteria for prioritizing transportation investments and maintenance activities
- Respond to curb ramp requests and continue to install them through other projects
- Continue to install accessible pedestrian signals
- Minimize obstacles in the right of way that interfere with pedestrian and bicycle access
- Ensure that SDOT capital projects consider the needs of all modes, consistent with the city’s Complete Streets ordinance
- Use real-time and static maps to provide information to all travelers

MEASURE	2010 BASELINE	2014 GOAL
Percent of crossing improvements completed in high priority areas (defined in Pedestrian Master Plan)	63%	75%
Percent of requested curb ramps completed to date	65%	80%

2

Make transit the efficient, affordable choice for a variety of trips

- Implement the recommendations of the Transit Master Plan
- Use transit infrastructure and facilities to create public spaces that attract people and connect walking, biking, and transit
- Partner with transit agencies to implement programs that encourage riding transit
- Work with Metro to further enhance RapidRide bus rapid transit corridors
- Work with Metro to ensure that route planning and service hour allocations best serve the city’s transit priorities
- Install real-time bus schedule technology at stops on high ridership bus routes

MEASURE	2010 BASELINE	2014 GOAL
Miles of operating streetcar lines	1.3	3.8
Citywide bus ridership (average weekday boardings)	282,000	303,000
Miles of completed bus corridor projects	9	30

SDOT is building better public transportation infrastructure through projects that improve corridors and connections. The goals of these projects are to:

- Help transit run faster and more reliably
- Improve overall capacity to move people around the region
- Improve transit connections and rider experience

Transit Priority Corridors



3

Make healthy travel choices the easy choices

- Implement the recommendations of the Pedestrian and Bicycle Master Plans in collaboration with the Pedestrian and Bicycle Advisory Boards
- Complete the update to the Bicycle Master Plan
- Partner with agencies, non-profits, and private organizations to promote walking and biking
- Expand pedestrian and bicycle wayfinding signage to encompass more destinations
- Add more bike parking in urban centers and villages

MEASURE	2010 BASELINE	2014 GOAL
Pedestrian volumes*	25,700 **	26,500
Bicycle volumes*	3,900 **	4,000
Percent of Bicycle Master Plan on-street bike facility network (bike lanes and sharrows) completed	45%	69%

* These are an average quarterly aggregate of evening peak-hour counts conducted at 50 locations throughout the city
** 2011 baseline

4

Activate public spaces

- Designate pedestrian plazas and festival streets in the right of way
- Improve public access to shoreline street ends
- Continue issuing permits for festival streets, mobile food vending, farmers markets, and block parties

MEASURE	2010 BASELINE	2014 GOAL
Number of street food vending carts and trucks, sidewalk cafes, and farmer’s market permits issued	311	326

Did You Know?

In July 2011, the city passed legislation that created new rules for mobile vending on city streets. The new permit type helps activate the street and supports local businesses.

Painted Intersections

Painted intersections lend a sense of place to a community and are a great way to organize your neighborhood around a common goal. SDOT allows painted intersections on residential (non-arterial) streets. Our Street Use Division made it easier for neighborhoods to create street murals by developing step-by-step instructions for painted intersections. Our Neighborhood Traffic team works with the community to make their design a reality while meeting SDOT standards.



SUPPORTING A THRIVING ECONOMY

Keep people and goods moving and create great places that attract businesses.



Seattle has a rich history of industry, ingenuity, and entrepreneurialism – from manufacturing and trade activities to new technologies and start-ups. Transportation plays a critical role across this spectrum, as it moves goods and people into and around the city.

Freight and goods make up a significant sector of our local economy. In 2010, our manufacturing and maritime sectors supported more than 90,000 jobs, generated \$6 billion each year in taxable retail sales, and contributed to over \$37 million annually in business and occupation taxes. Container ships, trains, trucks, airplanes, and delivery vehicles all play a role in what we consume and what we export to the world. Moving goods safely and efficiently is vital to our city's economic success.

People also rely on a solid transportation network to get around. **Transportation is the second largest expense for American households – accounting for nearly 20 cents of every dollar spent –** more than food, clothing, and health care. Research shows that a two-person household that uses public transportation saves an average of \$6,251 annually compared to a household with two cars and no public transportation accessibility. By providing convenient and affordable transportation choices, we can **move people efficiently and keep money in their pockets.** Every dollar saved means more money retained in the local economy.

In addition to saving money, an **efficient transportation network saves time.** Consider all the time spent in traffic back-ups that could have gone toward developing and implementing new ideas. Or circling the block in search of a parking space when you could have been shopping or dining. **A thriving city is one in which people can access jobs, educational opportunities, retail districts, and community services quickly and easily.**

Lastly, a high-quality transportation network contributes to a thriving economy by adding to the vibrancy of our city. **A well-designed transportation network, pleasant streetscapes, and great public spaces attract people and spur economic development.** To maintain this competitive advantage, we must continue to grow intelligently and recognize the vital role that transportation plays, not only in moving goods and people, but also in attracting new economic opportunities.

1

Keep freight and goods moving efficiently

- Continue the freight spot improvement program to reduce bottlenecks and improve safety
- Work with the Seattle Freight Advisory Board and other stakeholders to plan for current and emerging freight needs
- Develop travel time guidelines along Major Truck Streets and other arterials
- Collect truck volume data on the arterial network to inform decision making
- Use intelligent transportation system (ITS) technology to alert drivers of delays at traffic bottlenecks
- Partner with Washington State Ferries to improve access at ferry terminals

MEASURE	2010 BASELINE	2014 GOAL
Number of annual spot improvements for freight mobility	11	15

Did You Know?

Every billion dollars spent on public transportation creates over 10,000 jobs.

Center for Neighborhood Technology, 2009

2

Increase efficient and affordable access to jobs and education

- Prioritize transportation investments that serve major employment and education centers
- Increase the speed and reliability of priority bus corridors that connect people to major employment and education centers
- Leverage transportation investments with private development opportunities
- Implement programs that inform employees and students about travel options

MEASURE	2010 BASELINE	2014 GOAL
Percent of commute trips to Center City using non-drive alone modes	65%	68%
Number of Walk Bike Ride Challenge participants	1,886*	2,100

*2011 baseline

The Mercer Corridor project will widen Mercer Street to create a two-way boulevard, reconstruct Valley Street as a local access street, provide new and wider sidewalks, improve connections to transit, and add bicycle lanes. The project replaces major utility infrastructure and integrates many environmentally-friendly and sustainable design features.

In addition to improving mobility for over 100,000 people each day, the project will create 600 direct construction jobs, support 22,000 new jobs in South Lake Union, and improve links to Port facilities, industry and research/development uses.

Mercer Corridor Project



3

Build great streetscapes to promote economic vitality

- Work with business districts to design streetscapes that address the needs of the retail community
- Utilize public art to promote street activation
- Finalize the Pedestrian Lighting Plan
- Maintain trees and landscapes in business districts and the Center City to encourage and attract customers
- Work with the Department of Planning and Development to designate and develop Green Streets projects

MEASURE	2010 BASELINE	2014 GOAL
Number of annual SDOT-sponsored art projects	7	8
Number of annual pedestrian lighting projects completed	7	5

Waterfront Seattle

Waterfront Seattle is a partnership between the City of Seattle and the entire community to create a dynamic public waterfront along 26 city blocks from Pioneer Square to the Olympic Sculpture Park. With the Alaskan Way Viaduct coming down and the replacement of the Elliott Bay Seawall, Seattle has a unique opportunity to make a range of improvements to our waterfront, creating an exciting destination with vibrant public and cultural spaces, access to the water and a new urban street that will accommodate all modes of travel and provide an important connection in the City’s transportation system.

This effort is led by Seattle’s Department of Planning and Development, SDOT, and the Department of Parks and Recreation. The project’s guiding principles are to create a waterfront for all, put the shoreline and sustainable design at the forefront, reconnect the city to its waterfront, embrace and celebrate Seattle’s past, present and future, improve access and mobility for people and goods, create a bold vision that is adaptable over time, and develop consistent leadership – from concept to construction to operations.

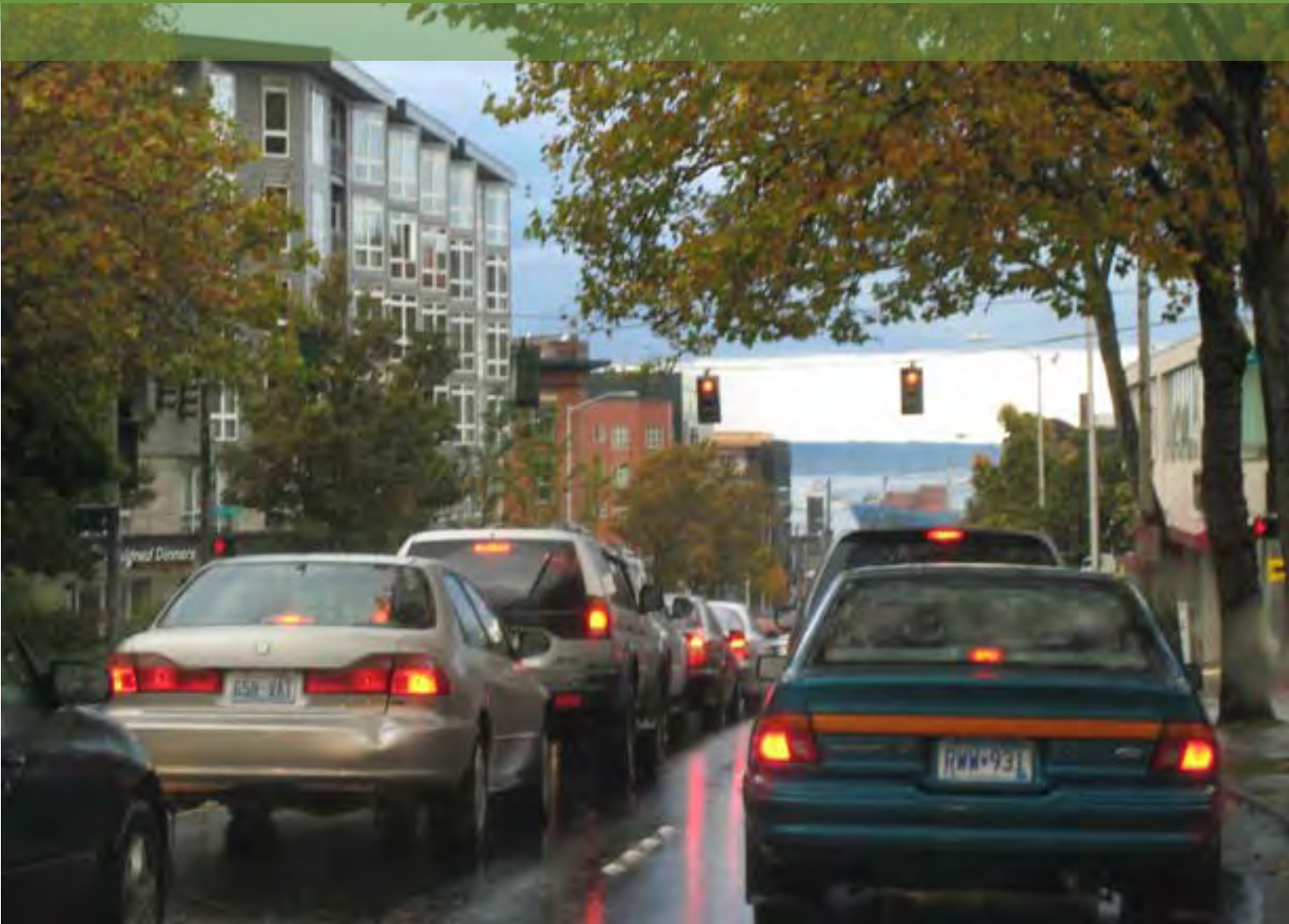


4

Support Center City and neighborhood business district access

- Partner with business districts to improve loading and customer access and educate the public about on-street parking rules
- Adjust parking rates and hours based on annual data collected to improve parking access
- Guide Center City visitors to short-term off-street parking through the e-Park electronic parking guidance system
- Prioritize pedestrian, bicycle, and transit investments that serve urban villages and centers
- Minimize construction impacts on business districts
- Integrate pay-by-cellphone technology into on-street parking pay stations

MEASURE	2010 BASELINE	2014 GOAL
Number of parking facilities in e-Park	6	10-15
Percent of paid parking areas with occupancies within the range of 1-2 available spaces per block face	32%	60%
Percent of new bike parking spaces installed that are in urban villages and centers	70%	70%



Did You Know?

In 2010, Washington and Oregon combined paid about \$16.6 billion for oil imports—over \$1,550 per person, or more than \$6,200 on average for a family of four. The increase in oil prices in the first part of 2011 has put the region on track for its highest level of petroleum spending ever.

Sightline Institute, 2011

Downtown Seattle shines with world-class arts, shopping, dining, and entertainment. e-Park signs let you know space availability in six garages throughout the Downtown Retail Core and Pike Place Market.

Look for dynamic signs at key points to guide you to participating garages. The signs show how many spaces are currently available in each garage. Real-time information takes the guesswork out of parking and helps reduce congestion.

e-Park



Laying the Groundwork for

PROVIDING GREAT SERVICE

Help people access transportation services and information.



Customer service is at the core of what we do. Designing safe streets, paving roads and filling potholes, keeping people and goods moving, and making it easier to walk, bike, and ride transit – we do all of these things for the public's benefit. The way in which we deliver services and communicate our projects is a critical component of our work.



Behind all of our projects is a [quality workforce that strives to implement innovative, cost-effective, and sustainable solutions](#) to Seattle's transportation challenges. SDOT continues to invest in building the skills and expertise of our staff to meet the complex demands of an urban transportation system.

Seattle is a diverse community with a broad range of transportation needs and concerns. We strive to create a workforce whose composition reflects the diversity of the community we serve. And we have a responsibility to ensure services we provide are equitably delivered.

[To provide great service, we need to understand constituent needs.](#) To do this, we must listen to the community, and communicate our work clearly and through a variety of inclusive outreach methods. Participating in community meetings, going door-to-door to share project information, and responding to letters, phone calls, and emails will continue to be central elements of our strategy.

We also recognize the increasing reliance on technology and are actively using Twitter, Facebook, Flickr, online surveys, and a blog to update our customers, take input, and answer questions. With a few clicks of the mouse, people can go online and find the latest traffic alerts, construction and event street closures, and a map of on-street and off-street parking. [We're working hard to maintain and upgrade SDOT's technology to help people travel smarter.](#)

And, we're exploring creative methods of community outreach that connect with different audiences, including those who don't speak English as a first language or who might not normally attend a public meeting. [Our transportation system must serve everyone.](#)

Lastly, it is our goal to deliver quality projects and service in a timely and financially-responsible manner. The public entrusts us with its purse, and this is a relationship we take seriously. Incorporating performance measures, gathering feedback, and continually evaluating our work will strengthen SDOT as an organization and improve our ability to meet community needs. It's our job to serve the public, and we intend to do just that.

Did You Know?

Every year, SDOT responds to over 1,200 email inquiries and 2,580 phone calls on the 684-ROAD line.



Public Engagement

In late 2011, SDOT partnered with other city departments to engage eight different language groups about long-range city planning. We used an interactive voting tool to get immediate feedback around a series of questions about growth, transportation, and climate change. Participants enjoyed using this new tool and seeing live results.

1 Ensure a quality department workforce

- Provide on-going training opportunities at all occupational levels
- Reduce incidents of on-the-job accidental injuries and vehicle collisions
- Recognize employees who perform “above and beyond”
- Explore the development of apprenticeship programs and vehicle operations training programs
- Establish preferred training levels for technical employees

MEASURE	2010 BASELINE	2014 GOAL
Percent of employees completing Race and Social Justice Initiative training	96%	100%
Percent of employees injured per 100 workers	12.4%	9%

2

Be inclusive and transparent in public engagement

- Use social networking tools to share information and engage the public
- Reduce response time for customer requests and inquiries
- Keep all project websites updated, accessible, accurate, and easy to navigate
- Improve community connections and outreach tools to work effectively with Seattle’s diverse population
- Work with neighborhoods on the selection, design, and implementation of Neighborhood Street Fund projects
- Make more SDOT data available on Data.seattle.gov

MEASURE	2010 BASELINE	2014 GOAL
Number of SDOT Facebook page followers	457*	1,000
Percent of large capital projects using RSJI** public engagement toolkit checklist	n/a	100%

*2011 baseline
**Race and Social Justice Initiative

Did You Know?

You can connect with SDOT on Facebook, Twitter, Flickr, and our blog at <http://www.seattle.gov/transportation/interactive>.

3

Ensure equity in service delivery, hiring, and contracting

- Deliver transportation projects based upon objective criteria and demonstrated need
- Provide information and technical assistance to women and minority-owned business enterprises (WMBEs)
- Strive to make SDOT workforce reflect regional demographics
- Provide internships and training opportunities for high-school and college students

MEASURE	2010 BASELINE	2014 GOAL
Number of information meetings held for WMBEs	3*	4
Number of Summer Youth Employment Program interns	12	12

*2011 baseline

Race and Social Justice Initiative (RSJI)



participation.

SDOT employees are becoming more engaged and better aware of the City’s Race and Social Justice Initiative (RSJI) – an effort to end institutionalized racism and race-based disparities in our communities. SDOT’s RSJI Change team has developed and implemented a comprehensive workplan. One of our priorities is to increase Women and Minority-Owned Enterprise (WMBE) contracting, which not only raises awareness of issues of race, but also helps us connect with our community. The King Street Station Project is exceeding goals of 6 percent Disadvantaged Business Enterprise (DBE) and 10 percent WMBE set for this project by achieving 7 percent DBE participation and 21 percent WMBE

Our workforce is becoming more empowered and better able to understand RSJI because of our ongoing efforts through Lunch & Learns, newsletters, and increased conversations about race and equity with senior leadership. These efforts equip employees to engage the public on issues of race and social justice and provide equitable service to our customers.

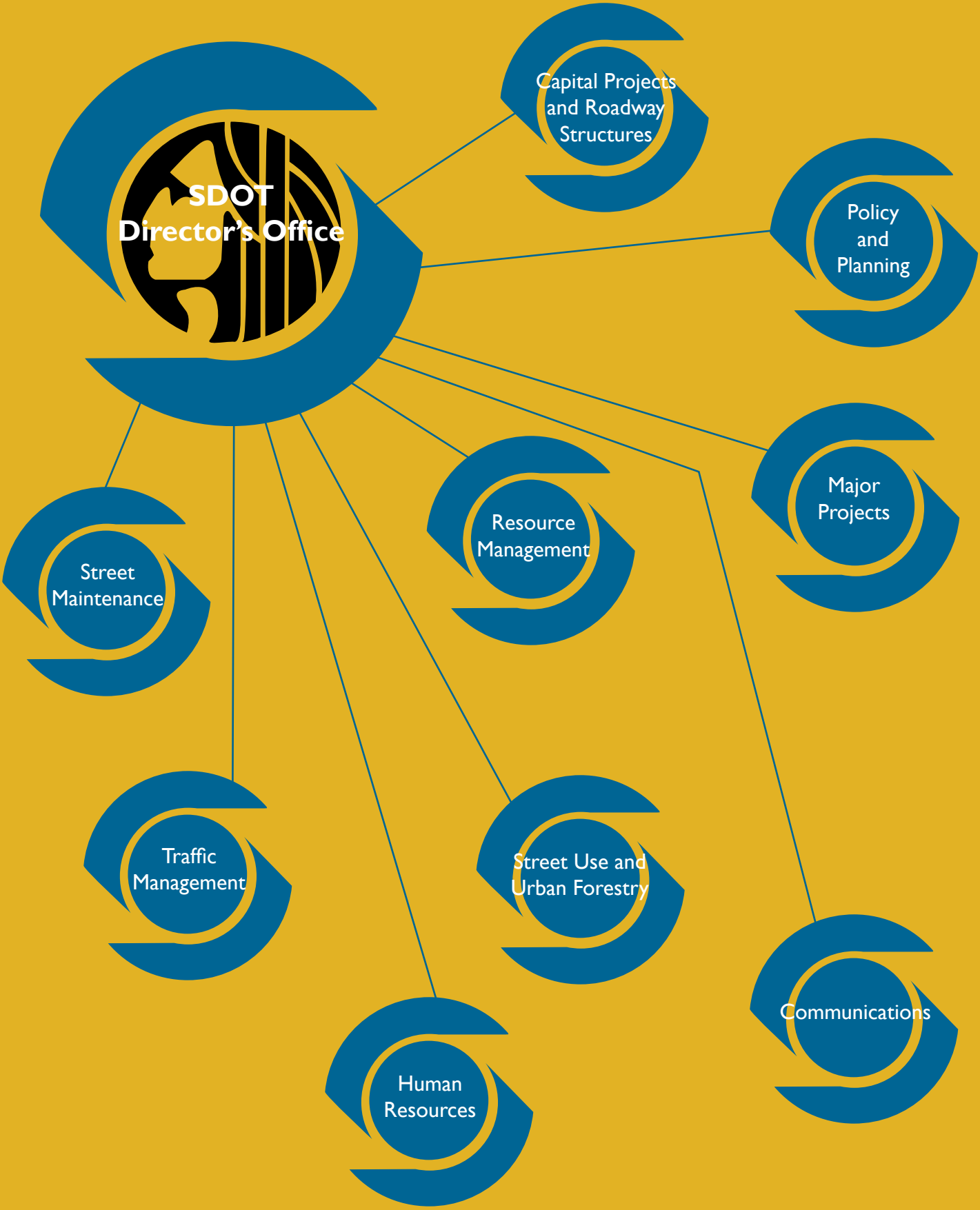
4

Demonstrate strong financial stewardship

- Meet Bridging the Gap (BTG) levy and \$20 Vehicle License Fee (VLF) objectives and deliverables
- Complete all construction projects within engineer’s estimated budgets
- Manage all projects within respective lines of budget control as adopted by the city and resolve financial issues in a timely manner
- Secure grants to help fund the city’s transportation priorities
- Use documented objective criteria to prioritize transportation projects and programs
- Work with city departments and other governmental agencies to make the most of capital investments

MEASURE	2010 BASELINE	2014 GOAL
BTG and VLF projects delivered on time and on budget	100%	100%
Grant funding secured	\$24M	\$19M

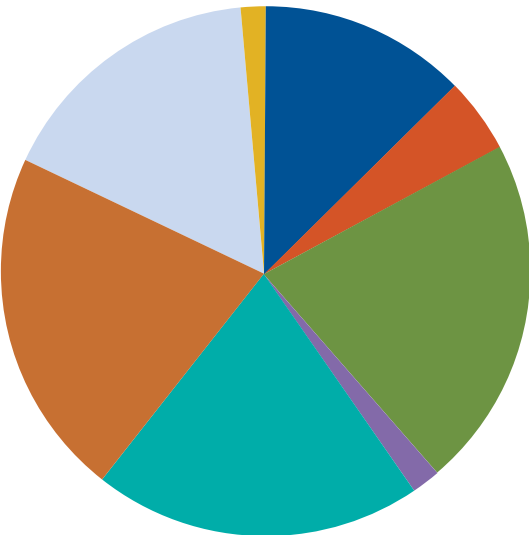
ORGANIZATIONAL CHART



BY THE NUMBERS

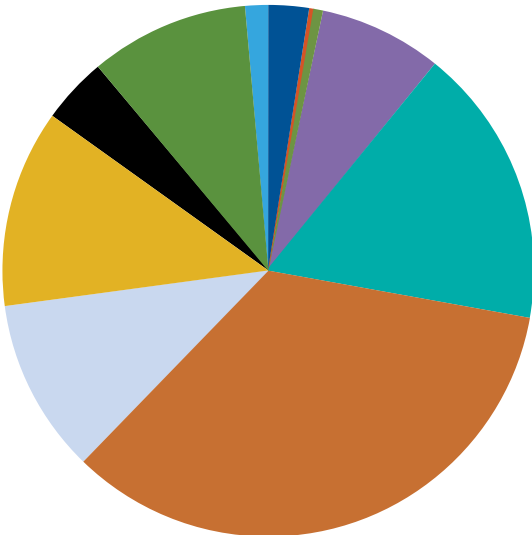
At a time when belt-tightening is the norm, we have been fortunate to have the voter-approved Bridging the Gap transportation levy, as well as other grant and partnership funding. These dedicated funds have allowed us to implement transportation improvements despite declining revenues.

In 2011, revenues and expenditure budgets decreased by approximately \$3.8 million from 2010. This decrease reflected continued economic weakness, with stagnant General Fund and Gas Tax support losing ground against inflation, as well as decreased capital funding.



2011 Revenue: \$306 million

- General Fund: \$39M (13%)
- Gas Tax: \$14M (4%)
- Debt: \$66M (22%)
- CRF: \$5M (1%)
- BTG: \$63M (20%)
- Charges for Service: \$66M (22%)
- Grants & Other: \$51M (17%)
- Fund Balance: \$4M (1%)



2011 Budget: \$306 million

- Bridges & Structures: \$8M (2%)
- Department Management: \$1M (0%)
- Engineering Services: \$2M (1%)
- General Expense: \$23M (7%)
- Major Maint/Replacement: \$53M (17%)
- Major Projects: \$105M (34%)
- Mobility-Capital: \$33M (11%)
- Mobility-Operations: \$37M (12%)
- ROW Management: \$12M (4%)
- Street Maintenance: \$30M (10%)
- Urban Forestry: \$4M (1%)

In 2011, SDOT’s expenditure budget decreased with substantial reductions in major maintenance, partially offset by increased spending on major projects such as the First Hill Streetcar, Alaskan Way Viaduct and Seawall replacement, and Spokane Street Viaduct.

Here’s a snapshot of our 2011 accomplishments, by the numbers. In many cases, this list goes into more detail than the information provided in the performance measures, and it adds another level of detail on how we’re providing core services to the community. The orange text signifies work that was funded in part or entirely with Bridging the Gap levy revenues.

BIKES AND PEDESTRIANS	2011
Bike lanes and sharrows installed (miles)	15
Bike route signs installed (miles)	31
Pedestrian/bike trails built (segments)	0
Bike parking spaces installed	210
Bike maps issued	34,366
New sidewalks built by Sidewalk Development Program (blocks)	10
Sidewalk blocks rehabilitated	25
Crosswalks remarked	306
Curb ramps constructed	295
Stairways retrofitted	3
Walking routes to schools improved for safety	6
Signage of school zones improved	10
Pedestrian crossings improved	51
BRIDGES	
Bridge repairs completed	230
Bridges painted	1
Guardrail replaced (feet)	1,891

PARKING	2011
Pay station inquiries resolved	9,660
Pay station transactions processed	10.5 million
PAVEMENT	52
Lane-miles paved	
Potholes filled	25,110
TRAFFIC	
Construction and Special Event Traffic Control Plans Approved	2,436
Lane - miles of pavement restriped	1,151
Regulatory traffic signs replaced	5,065
Street name signs replaced (number of intersections)	1,156
Radar speed signs installed	12
Speed watch trailers deployed	51
TRAFFIC SIGNALS	
Traffic Signals Optimized	107
New traffic signals installed	3
Traffic signals maintained	1,055
Pedestrian countdown signals installed	26
URBAN FORESTRY	
Street trees planted*	822
Street trees pruned	3,385
Landscape maintained (square feet)	912

OTHER	2011
Transit hours secured	44,000
SDOT public website visits	5,630,023
Grants/appropriations/authorizations received	\$23,649,000
Grants/appropriations/authorizations submitted for future funding	\$44,240,000
Percentage of contracts issued to women and minority business enterprises for Goods and Services**	8.2%
Percentage of Completed Construction Projects by Women and Minority-Owned Business Enterprises (WMBE) contracts **	11.25%

* SDOT either plans or facilitates

** Dollars expended with WMBE vendors are reported based on actual payments in the current year

making a DIFFERENCE

To minimize printing costs and reduce paper use,
a limited number of copies were printed on recycled paper.

The document is available to view at
<http://www.seattle.gov/transportation/sdotreports.htm>

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MOVING the NEEDLE

SEATTLE'S ENVIRONMENTAL PROGRESS REPORT

— 2014 —



Letter from the Mayor



Dear Fellow Seattleites,

You'd be hard pressed to find a list of the nation's greenest cities that doesn't put Seattle at or very near the top. I'm incredibly proud to be mayor of a city that's known worldwide for its environmental leadership.

Moving the Needle is a report about the City of Seattle's environmental goals and our progress in achieving them. This report details key goals previously set by the City of Seattle, ranging across seven areas: buildings and energy; transportation and land use; food; waste; water; trees and green space and climate change.

The report illustrates that there are many reasons why Seattle is an environmental leader. We are on-track to achieve many of our goals, such as electricity and water conservation; however, there are other goals, like climate change, where the challenge looms large and there is much work to be done.

Moving the Needle is just a start. We intend to use this report to evaluate how we are doing on our environmental commitments and identify areas for improvement. Working with the community, we will evaluate our goals and metrics to ensure they adequately reflect our priorities and reliably track our progress. We will update Moving the Needle biennially to hold us accountable for what we care about over time.

I hope that all of us—policy makers, environmental leaders, businesses and residents—will continue our efforts to create a green, prosperous, and equitable future for our city.

Thank you for all that you've done to make Seattle an environmental leader and thank you for all that you will do to help us aim high, achieve more, and stay at the top of those 'greenest city' lists.

Sincerely,

Mayor Ed Murray



**Buildings
& Energy**

PAGE 3



**Transportation
& Land Use**

PAGE 5



Food

PAGE 7



Waste

PAGE 9



Water

PAGE 11



**Trees &
Green Space**

PAGE 13



**Climate
Change**

PAGE 15

ABOUT MOVING THE NEEDLE

City of Seattle has hundreds of environmental goals expressed in various plans, policies, and programs, which City departments track in many ways. *Moving the Needle* is our first step in assembling a set of high level environmental goals and accomplishments in one report for improved tracking and accountability. It reports on select environmental goals already in place, with the community in mind.

Environmental areas covered in this report include: Buildings & Energy, Transportation & Land Use, Food, Waste, Water, Trees & Green Space and Climate Change.

Moving the Needle is not a sustainability report nor is it an exhaustive accounting of all of Seattle's environmental activities. Please visit www.seattle.gov/environment for more detailed information about the City's environmental plans and activities.

ACKNOWLEDGEMENTS

Thank you to the many City of Seattle staff members from the following departments who contributed to the development of this report.

- Office of the Mayor
- Office of Housing
- Office of Sustainability and Environment
- Department of Human Services
- Department of Finance and Administrative Services
- Department of Neighborhoods
- Department of Transportation
- Department of Parks and Recreation
- Department of Planning and Development
- Seattle City Light
- Seattle Public Utilities

MOVING THE NEEDLE 2014

JILL SIMMONS, Director, Office of Sustainability and Environment
MICHELLE CAULFIELD, Environmental Sustainability Manager
SARA WYSOCKI, Communications Advisor



Buildings & Energy

Leading with conservation
& renewable energy



Seattle is fortunate to have a robust supply of clean hydroelectric power with 7 of its own hydro facilities and several renewable power contracts. Today, hydropower supplies 92 percent of Seattle's electricity. Conservation has long been the City's first-priority, with energy conservation programs dating back to the 1970s.



**RANKED 1ST
IN THE
NATION**
for green
building
policy

**1ST UTILITY
IN THE
NATION**
to achieve
zero-net
carbon
emissions

ENVIRONMENTAL STEWARDSHIP is fundamental to how we manage our energy resources. Seattle protects some **13,000 acres of habitat** in our hydro watersheds, including old-growth forest & spawning grounds for salmon.

OUR STRATEGIES:

The City is committed to meeting future energy needs through conservation and renewables as well as protecting our important energy resources for today's generation and the next. Our strategies include:

Energy Conservation

Energy efficiency is our first-priority for meeting electricity needs.

Green Buildings

Seattle is one of the top green building markets in the nation.

Renewable Energy

Seattle is well-positioned to meet future energy needs with low carbon sources.

THE BENEFITS:



**Climate
Protection**



**Healthy
People**



**Natural Resource
Protection**



**Less
Waste**



**Economic
Benefit**



**Clean
Air**

THE CHALLENGE AHEAD:

Aggressive energy codes and green buildings programs are dramatically reducing the amount of energy new buildings use. Now our challenge is to achieve the same results in the buildings that we already live and work in.

Energy Conservation

1 GOAL **105,200** MEGAWATT HOURS OF ELECTRICITY SAVED ANNUALLY **ACHIEVED!**

PROGRESS

121,290 Megawatt hours saved in 2013.
This is equivalent to:

14,190 homes powered for one year
 or
16,040 vehicles garaged for one year

2 GOAL **REDUCE** HOME ENERGY USE BY 20% AND COMMERCIAL ENERGY USE BY 10% BY 2030 (2008 BASELINE)

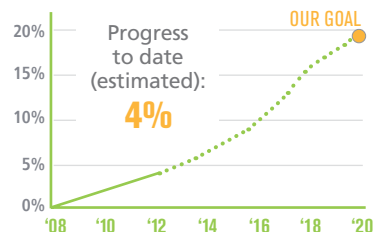
PROGRESS

3% Reduction RESIDENTIAL
2% reduction COMMERCIAL
2008: 18.4M BTU
2012: 17.9M BTU
2008: 27.9M BTU
2012: 27.4M BTU

A BTU accounts for total energy (not just electricity) & is the amount of energy needed to heat one pound of water one degree.

3 GOAL **20%** ENERGY SAVINGS IN CITY FACILITIES BY 2020 (2008 BASELINE)

PROGRESS

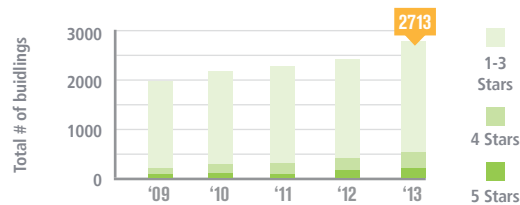


Green Buildings

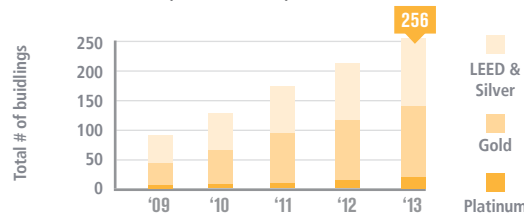
4 GOAL **INCREASE** THE NUMBER AND LEVEL OF GREEN CERTIFIED BUILDINGS

PROGRESS

Built Green: Residential
40% increase (2009 - 2013)



LEED Rated: Primarily commercial
179% increase (2009 - 2013)



32 out of 34 City-owned buildings completed between 2000-2013 achieved a LEED rating:

Platinum: King St Station
Gold: 20 projects
Silver: 9 projects
Certified: 2 projects

Renewable Energy

5 GOAL **15%** OF ELECTRICITY ACQUIRED FROM NEW RENEWABLE SOURCES BY 2020

PROGRESS

In 2013, almost **5%** of Seattle's electricity came from new renewable sources. New renewable sources includes:

Methane gas capture from Columbia Ridge Landfill (Seattle's municipal solid waste)
Wind projects
Waste-to-heat cogeneration at West Point Treatment Plant (Seattle's wastewater)

6 GOAL **INCREASE** SOLAR ENERGY PRODUCTION IN THE COMMUNITY

PROGRESS

Over **1,000** residents & businesses have installed solar panels in Seattle since 2006.

Our solar capacity is now **6 MW → 38 times** more than in 2008.

Seattle Aquarium recently installed a solar installation through Seattle City Light's **Community Solar Program**.

THE LEADING EDGE

COMMUNITY POWER WORKS

Seattle's energy upgrade program helps residents with low-cost energy assessments, rebates, financing, and pre-approved contractors. Community Power Works delivers energy efficiency solutions and lasting environmental and economic benefits. Customers gain more than energy savings – they're making their homes healthier, safer, more comfortable places to be.



Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT

3,040 families with upgrades complete or in progress
1,175 of these are low-income families
30% average energy savings

220,847 TONS of greenhouse gas emissions avoided over the lifetime of the measures



Transportation & Land Use

Advancing a Dynamic & Connected Seattle



120,000
NEW RESIDENTS



& 115,000
NEW JOBS

are expected in Seattle over the next 20 years.

40%

OF SEATTLE'S GREENHOUSE GAS (GHG)
EMISSIONS COME FROM TRANSPORTATION



This includes both how we get around and how we move goods & services.

OUR STRATEGIES:

As Seattle grows, we will continue to reduce our impact on climate change and build a thriving city. Our strategies include:

Transportation Choices

Providing affordable and reliable transportation options that lower greenhouse gas emissions.

Complete Neighborhoods

Building economically diverse urban neighborhoods where what you need is close to where you live.

Safe Streets

Improving pedestrian & bicycle safety to make walking & biking more appealing.

THE BENEFITS:



Clean
Air



Connected
Communities



Healthy
People



Optimal
Mobility



Reduced
Congestion



Vibrant
Neighborhoods

THE CHALLENGE AHEAD:

With strong community input, Seattle has adopted transit, bicycle and pedestrian plans to achieve our vision of moving people and goods efficiently and with less environmental impact. Our challenge now is to make this vision a reality on-the-ground.

Transportation Choices

1 GOAL **25% OF COMMUTERS DRIVE ALONE BY 2035**

PROGRESS



Seattle has joined an elite group of cities where less than 50% of workers commute by a single occupancy vehicle.

2 GOAL **INCREASE TRANSIT BOARDINGS BY 37% BY 2040 (2012 BASELINE)**

PROGRESS



3 GOAL **INCREASE THE NUMBER OF BICYCLISTS AND PEDESTRIANS**

PROGRESS



Safety improvements, bike lanes & greenways are making it easier to get around by bike and foot. The City counts bicyclists and pedestrians quarterly at 50 locations citywide.

Complete Neighborhoods

4 GOAL **45% OF HOMES LOCATED WITHIN URBAN VILLAGES BY 2030** **ALMOST THERE!**

PROGRESS



Seattle's Comprehensive Plan identifies 30 urban villages across the city. These are designated areas to attract new jobs, housing, & investments to connect residents to nearby jobs & amenities.

5 GOAL **85% OF JOBS LOCATED WITHIN URBAN VILLAGES BY 2030** **ALMOST THERE!**

PROGRESS



* % increase in jobs from 2004-2012

6 GOAL **ENHANCE NEIGHBORHOOD WALKABILITY**

PROGRESS



*According to Walk Score™

This allows people to leave their cars at home more often.

Safe Streets

7 GOAL **ELIMINATE SERIOUS & FATAL CRASHES BY 2030**

PROGRESS



THE LEADING EDGE

ELECTRIFIED TRANSPORTATION An important climate strategy

Seattle's carbon neutral electricity makes electric transportation a key climate strategy. Growth in Metro trolley buses, the Seattle Streetcar, and Link Light Rail are expanding our electric transit options and Seattle has one of the highest electric car ownership rates in the nation.

The City of Seattle is leading by example with our growing electric fleet:



43 EV Sedans



32 Off Road Utility Vehicles



24 fork lifts



5 Road scooters

9,000 GALLONS

of gasoline saved in 2013 with our electric vehicles



Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT



Food

Healthy people, healthy
economy, healthy land



The food we produce and consume impacts our health, our economy, and our environment.

Rising obesity and diet-related diseases cost money and lives. Chemically intensive agriculture degrades the quality of our land, our air, and our water.



ONE IN FIVE CHILDREN IN KING COUNTY

does not always have enough to eat and healthy food is even harder for some to afford.



A DIET RICH IN LOCAL FRUITS AND VEGETABLES reduces greenhouse gas emissions, protects our natural resources, and is good for everyone. Growing, eating, and sharing food brings people together.

OUR STRATEGIES:

Seattle is committed to increasing healthy food access while continuing to protect our farmlands and grow our local food economy for all. Our strategies include:

Healthy Food Access

Seattle residents should have enough to eat and access to affordable, local, healthy, sustainable, culturally appropriate food.

Local Food Production

It should be easy to grow food in Seattle for personal use or business purposes.

Strong Food Economy

Businesses that produce, process, distribute, and sell local and healthy food should grow and thrive in Seattle.

THE BENEFITS:



Healthy
People



Economic
Benefit



Farmland
Protection



Climate
Preparedness



Social
Equity



Connected
Communities

THE CHALLENGE AHEAD:

Sprawl, rising food prices and the changing climate all affect our food system. Parts of Aurora, Lake City, High Point, Delridge, Georgetown, and South Park have limited food and transit access. Consuming local fresh food - and organic wherever possible - promotes health and a thriving food economy.

Healthy Food for All

1 GOAL INCREASE HEALTHY FOOD ACCESS

PROGRESS

Farm to Table brings fresh local produce to children & older adults in Seattle & King County.

45% increase in Seattle early learning centers purchasing healthy food from local farmers. → **29 sites** in 2012
42 sites in 2013



300% + increase in early learning centers engaging in food & nutrition education & training.

Fresh Bucks doubles the purchasing power of Supplemental Nutrition Assistance Program (SNAP) shoppers at Farmers Markets.

70% + increase in use of Fresh Bucks at Seattle Farmers Markets.

2012: 1,500 participants
2013: 2,600 participants

In 2013:



90% said they ate more fruits and vegetables.



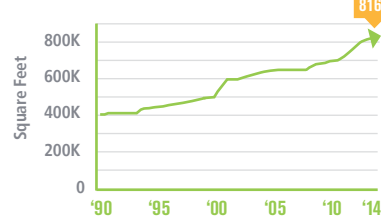
94% said Fresh Bucks made a difference in their families' diet.

Local Food Production

2 GOAL INCREASE URBAN FOOD PRODUCTION

PROGRESS

104% Increase in publicly accessible land for growing food since 1990*



*Best estimate available from Seattle Parks & Seattle P-Patch

Seattle's community gardeners are growing too:

of P-Patch gardeners:

2010: 4,772
2011: 5,159
2012: 5,830
2013: 6,329

Donated by P-Patch gardeners to Seattle food banks and meal programs.



Strong Food Economy

3 GOAL INCREASE LOCAL FOOD CONSUMPTION

PROGRESS

Farmers markets connect farmers directly to consumers resulting in healthier food for us and economic benefit for farmers.

Total Farmers Market Sales

2010 — \$11.9M*



2011 — \$12.1M



2012 — \$13.2M



Seattle's 2013 Farmers Market Snapshot:

215 unique farmer vendors

4 farmers market associations

16 farmers market locations

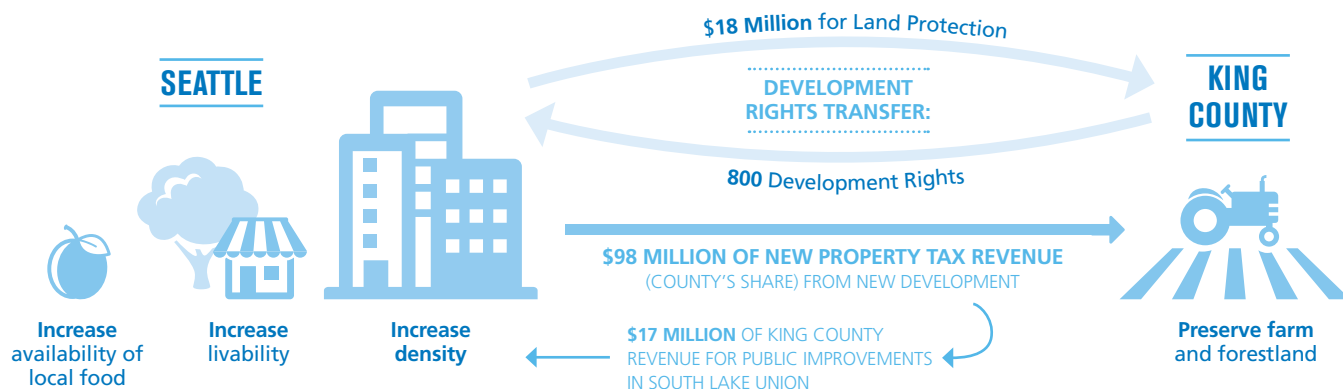
4 year-round farmers markets

THE LEADING EDGE

2013 TRANSFER OF DEVELOPMENT RIGHTS

Seattle and King County's watershed Transfer of Development Rights agreement in 2013 will sustain the production of fresh, local food to supply to residents, restaurants and retailers for generations to come. Seattle developers can now purchase development rights from rural forest and farm lands for increased development capacity in South Lake Union.

Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT





Waste

Picking Up the Pace
Toward Zero Waste



OVER THE PAST 25 YEARS, Seattle residents saved over 3 million metric tons of greenhouse gas emissions by recycling.



As households have increased recycling, the amount of waste sent to the landfill has decreased.



OUR STRATEGIES:

Seattle residents and businesses divert more waste than nearly every other city in the nation. We strive to maintain and improve on that level of excellence. Our strategies include:

Waste Prevention

Reducing waste by not creating it in the first place.

Recycling & Composting

Expand recycling and composting through services, incentives, and regulations.

THE BENEFITS:



THE CHALLENGE AHEAD:

While Seattle continues to be a leader in recycling and composting, approximately half of what we send to the landfill is either food waste or recyclable material. We can do better!

Waste Prevention

1 GOAL INCREASE PRODUCTS WHERE WASTE IS MANAGED BY MANUFACTURERS

PROGRESS

In part because of Seattle's efforts, manufacturers are now responsible for safe handling of these discarded products:



Electronics
(2006)



Mercury-containing
lights (2010)



Medicines
(2013)

Future product
stewardship
laws for:

- Paint
- Carpet
- Batteries

2 GOAL BAN OR DISCOURAGE PROBLEM MATERIALS

PROGRESS



2011 PHONE
BOOK OPT-OUT

Over 20% of Seattle's residents have "opted out" of phone book delivery:

Estimated **1M**
fewer delivered
in 2011 vs 2010 → **900 tons**
of paper
saved



2009
POLYSTYRENE
CONTAINER BAN

A 2009 polystyrene food container ban requires that all single-use food packaging be either compostable or recyclable:

66% decrease in polystyrene
in commercial garbage from
2008 to 2012



2012 PLASTIC
BAG BAN

Plastic bag pollution poses serious threats to Puget Sound's wildlife.

292 M plastic
bags used annually
in Seattle before
2012. Only 13%
were recycled.

The 2012 Ban
eliminated
the use of
these bags.

Recycling & Composting

3 GOAL REDUCE WASTE SENT TO LANDFILL

PROGRESS

27% decrease in
landfill waste over
the past 7 years:

438,400 tons
in 2006 → **318,600 tons**
in 2013

360 lbs per
resident is sent
to the landfill
annually in Seattle



4 GOAL RECYCLE 70% BY 2022

PROGRESS

Overall recycling
rate:



Average monthly pounds
of recyclables collected
per household:

Single
Family:
63 lbs.



Multi
Family:
30 lbs.

SINGLE-FAMILY HOUSEHOLDS



70%
of waste
recycled
in 2012

We achieved our highest
ever recycling rate yet in
2012. Key to this success
has been organics collection &
disposal bans.

MULTI-FAMILY SECTOR



30%
of waste
recycled
in 2012

While achieving their
highest recycling rate yet
in 2012, more work is
needed to help landlords &
tenants recycle more.

COMMERCIAL SECTOR



61%
of waste
recycled
in 2012

2,500 businesses recycled
organic waste in 2012
compared to 900 in 2008.

THE LEADING EDGE

CONSTRUCTION & DEMOLITION PROGRAM

As Seattle continues to grow, it's imperative that we look for better ways to manage our waste stream. Waste from construction and development is substantial. Recently, the City took steps to significantly reduce the waste from these activities that goes to our landfills. New requirements have been adopted for new construction, remodeling and demolition activities in Seattle.

SEATTLE CITY COUNCIL HAS ADOPTED A GOAL FOR RECYCLING 70% OF CONSTRUCTION WASTE BY 2020.

70% BY 2020

Materials banned from
landfill disposal and
year ban becomes
effective:

- 2015 -
Tear-Off
Asphalt
Shingles

- 2012 -
Asphalt Paving,
Bricks &
Concrete

- 2014 -
Metal

- 2014 -
Cardboard

- 2014 -
New Construction
Gypsum Scrap

- 2015 -
Carpet

- 2015 -
Plastic
Film

- 2015 -
Clean
Wood

UNDER
CONSTRUCTION

As of January 1, 2014 construction projects file a Waste Diversion Plan before starting a project, and at the end, they file a report on materials delivered to recycling facilities.



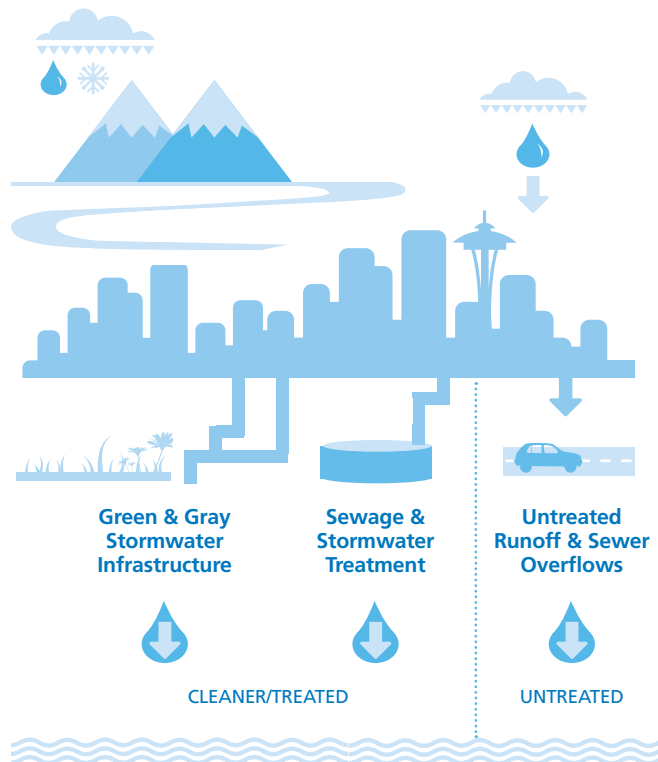
Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT



Water

Enhancing quality of life
and health through our
water system

Seattle is committed to delivering high-quality drinking water and protecting our local waterways.



OUR STRATEGIES:

Seattle will cost-effectively manage the drinking water supply and stormwater runoff while protecting public health and the environment.

Water Conservation

Ensure that saving water continues to be second nature for people by providing excellent education, tools & incentives.

Watershed Protection

Protect water quality & restore habitat in the mountain watersheds that supply our drinking water.

Pollution Prevention

Partner with the community to stop pollution at its source.

Sewage Overflow Prevention

Use system improvements, green stormwater infrastructure, & flow reduction strategies to protect our waterways.

THE BENEFITS:



THE CHALLENGE AHEAD:

For more than 100 years, Seattle has enjoyed plentiful and high-quality drinking water from protected mountain sources. In the future, we will likely see more rain, leading to more sewage overflows and polluted stormwater runoff. Protecting our water supply from the effects of climate change and polluted runoff will preserve our quality of life for future generations.

Water Conservation

1 GOAL USE LESS THAN 105 MILLION GALLONS OF WATER PER DAY*



PROGRESS

In 2013, **93M** gallons per day (mgd) were used by customers of the Saving Water Partnership.

The **Saving Water Partnership** is a collaboration between Seattle Public Utilities & 18 other water utilities to help our region conserve water.

22% increase in population since 1990.



Even so, there has been a **24%** decrease in regional water consumption since 1990

This is a **38%** decrease in water consumption per person!



* for the Saving Water Partnership

Pollution Prevention

3 GOAL MANAGE 700 MILLION GALLONS OF RUNOFF ANNUALLY WITH GREEN INFRASTRUCTURE BY 2025

PROGRESS

Annual runoff managed through **Green Stormwater Infrastructure**:

Today



By 2025



GSI Methods: Bioretention and rain gardens, permeable pavement, green roofs, urban canopy cover, rainwater harvesting, soil building, biofiltration, and depaving.

4 GOAL INCREASE POLLUTANT REMOVAL FROM ROADWAYS

PROGRESS

50% increase in pollutant removal between 2011 & 2013

Miles Swept:

2011 **6,650 MILES**

2013 **10,330 MILES**

Pollutants Removed:

66 tons

99 tons

Street sweeping is an incredibly simple and cost-effective method of preventing pollution from getting into our waterways.

Sewage Overflow Prevention

5 GOAL REDUCE SEWER BACKUPS TO LESS THAN 4 PER 100 PIPE MILES BY 2025



PROGRESS

3.1 sewer backups per 100 miles of pipeline in 2013

Fats, oils, and grease (FOG) (i.e. sauces, cooking oil, food scraps & oil from cooked meats) build up in sewer pipes & cause costly blockages & sewer backups.



Keep your drains fat free: Dispose of FOG in a sealed container in your garbage.

6 GOAL REDUCE COMBINED SEWER OVERFLOWS TO NO MORE THAN 1 OVERFLOW PER OUTFALL PER YEAR BY 2025

PROGRESS



Overflows from **52** outfalls are controlled

87 Outfalls are owned by the City of Seattle. The outfall is considered controlled when it has no more than one overflow per year.

Watershed Protection

2 GOAL DECOMMISSION 236 MILES OF LOGGING ROADS IN CEDAR RIVER WATERSHED BY 2020

PROGRESS

Decommissioned to date:

152 miles

Left to go:

84 miles

Decommissioning decreases sediment input into adjacent streams and habitat fragmentation, benefiting aquatic animals and water quality.

THE LEADING EDGE SEATTLE'S RAINWISE PROGRAM

Rain that falls on roofs, roads, driveways and compacted soils collects quickly, then runs off into local waterways. During heavy rain storms this "stormwater" can back up and flood homes, overflow sewers, and erode hillsides. It also carries pollutants from cars, lawn chemicals, cleaners and pet waste into Seattle's creeks and swimming beaches.

The **RainWise program** helps homeowners reduce this polluted runoff by providing rebates for natural drainage solutions on their property.

AS OF JANUARY 2014, SEATTLE residents have installed more than:

350 RAINWISE PROJECTS

This filters **5.4 M GALLONS** of stormwater annually

The average project controls the runoff from **1,398 SQ FT** of roof area



Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT



SEATTLE IS A TOP 10 CITY NATIONWIDE FOR

urban forests. Our urban forest is accessible; it benefits from strong community partnerships; and is managed through specific policies aimed at protecting our trees.

PARKS AND NATURAL AREAS COMPRISE 11% OF SEATTLE'S LAND AREA.



465 parks
& extensive
natural areas



25 miles of
boulevards



120 miles
of trails

MORE THAN HALF OF OUR PARKLAND is natural beaches, forests, and wetlands. These natural areas are vital to growing a healthy and livable city and yield social, environmental, and economic benefits.

OUR STRATEGIES:

Seattle will preserve and enhance its open spaces, parks and trees to maximize ecological, social, and environmental benefits for all. Our strategies include:

Tree Canopy

Preserve and maintain trees, maximize benefits, and increase community engagement in taking care of trees.

Green Space

Provide safe and welcoming places for people to play, learn, contemplate, build community, and experience nature.

Stewardship

Engage the whole community in sustaining and enhancing our parks, natural areas, and trees.

THE BENEFITS:



Healthy People



Clean Waterways



Clean Air



Vibrant Neighborhoods



Healthy Fish & Wildlife



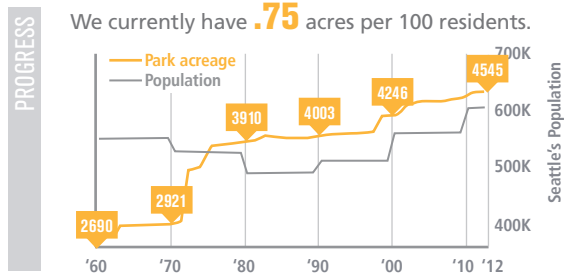
Connected Communities

THE CHALLENGE AHEAD:

Since the majority of Seattle's trees are on private property, residents play a critical role in protecting our urban forest. Ongoing community support is absolutely essential to a thriving park system—including on-the-ground volunteer restoration and strong community partnerships that ensure Seattle parks and green spaces will continue to be treasured by future generations.

Green Space

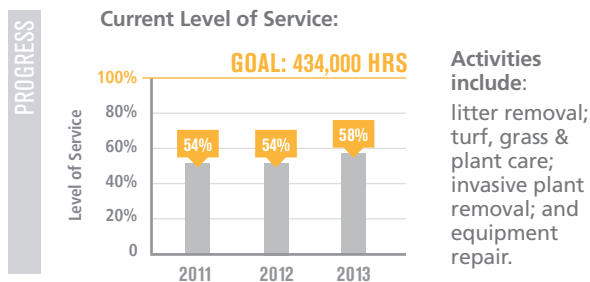
1 GOAL ONE ACRE OF OPEN SPACE PER 100 RESIDENTS



2 GOAL ALL RESIDENTS LIVE WITHIN 1/4 MILE OF A PARK

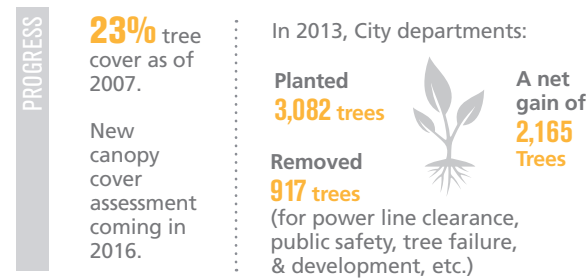


3 GOAL 100% LEVEL OF SERVICE FOR CARE OF SEATTLE'S GREEN SPACES



Tree Canopy

4 GOAL 30% TREE CANOPY COVER BY 2037

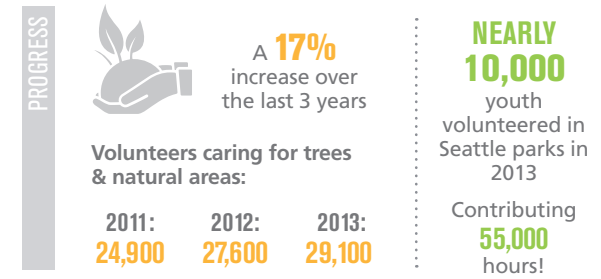


5 GOAL 2,500 ACRES OF FORESTED PARKLAND RESTORED BY 2025



Stewardship

6 GOAL INCREASE VOLUNTEERS CARING FOR NATURAL AREAS AND TREES



7 GOAL PLANT 1,800 TREES IN NEIGHBORHOODS ANNUALLY THROUGH COMMUNITY PARTNERSHIPS



= THE LEADING EDGE = GREEN SEATTLE PARTNERSHIP

The Green Seattle Partnership is a unique public/private partnership between the City of Seattle, Forterra, and thousands of community volunteers, who, with the support of businesses and nonprofits, actively work to restore and maintain Seattle's forested parklands. The Partnership relies on large-scale civic engagement to ensure that our children and their grandchildren continue to enjoy the health and economic benefits of vibrant parks, forests, and natural areas throughout Seattle.



Forest Stewardship Council™ certified - Seattle's forested parks meet the highest international standards in sustainable forest management



Learn more about Seattle's environmental work
WWW.SEATTLE.GOV/ENVIRONMENT

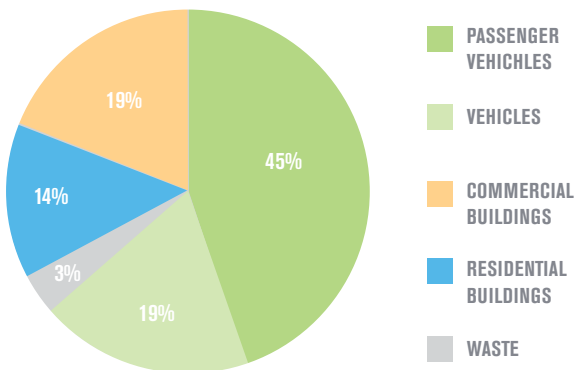


Climate Change

Doing our part to protect the climate

CLIMATE CHANGE IS THE ENVIRONMENTAL challenge of our time and it's imperative that Seattle do its part to protect the climate. Thanks to our clean electricity, green buildings, complete neighborhoods, and waste reduction programs, Seattle already has a lower footprint than our suburban neighbors, but we have more work to do to achieve our goal of carbon neutrality.

SEATTLE'S 2012 CORE GREENHOUSE GAS EMISSIONS*



* Seattle's core emissions are those the City can most directly affect - Transportation, Building Energy, and Waste.

2050 OVERALL GOAL:

The goals and strategies called out in the previous six sections of this document all support our bold goal of carbon neutrality, as defined as zero net emissions. The 2013 Climate Action Plan lays out a comprehensive strategy to dramatically reduce the footprint of our transportation system, buildings, and waste.

1 GOAL **SEATTLE IS CARBON NEUTRAL BY 2050.**

2030 TARGET:

58% REDUCTION IN TOTAL CORE EMISSIONS BY 2030 (2008 baseline)

From 2008 to 2012: Total emissions **increased 1%** but per person emissions **decreased 6%**.

Seattle's core emissions are **6 metric tons** per person – that's about half the U.S. average.

SECTOR SPECIFIC 2030 EMISSIONS TARGETS:

PASSENGER VEHICLES

82% REDUCTION FROM 2008 LEVELS

Total emissions increased: 6%
Per person emissions decreased: 1%

BUILDING ENERGY

39% REDUCTION FROM 2008 LEVELS

Total emissions decreased: 10%
Per person emissions decreased: 15%

SOLID WASTE

58% REDUCTION FROM 2008 LEVELS

Total emissions decreased: 17%
Per person emissions decreased: 23%

Preparing for a Changing Climate

Addressing climate change is not just a matter of reducing greenhouse gas emissions. We also must prepare for a changing climate. While flooding, heat waves, and extreme high tides are not new challenges in Seattle, climate change will shift the frequency, intensity, and timing of these events.

Projected Pacific NW Climate Impacts



SEA LEVEL RISE

Increase in sea level will lead to greater flooding and likely resulting in property damage and other economic losses.



MORE EXTREME PRECIPITATION

Wetter winters and more extreme precipitation events are expected and could stress our drainage system.



REDUCED MOUNTAIN SNOWPACK

Reductions in snowpack and changes in stream flows will affect how we operate Seattle's water and hydropower generation systems.



INCREASED TEMPERATURES

Increase in average temperatures and extreme heat events will increase the frequency and severity of heat stress, respiratory disease and energy demand for cooling.

2015 Preparedness

2 DEVELOP CITYWIDE CLIMATE PREPAREDNESS STRATEGY BY 2015 GOAL

Work is underway and the City is on track to produce a climate preparedness strategy in 2015 that will identify actions to increase Seattle's resilience to a changing climate, with a specific focus on minimizing disproportionate impacts on vulnerable populations, enhancing ecosystem services, and maximizing cost effectiveness and economic viability.

The Climate Preparedness Strategy will include actions to prepare Seattle's:



Natural Systems



Utility Systems



Built Environment



Community & Vulnerable Populations

Seattle's Climate Preparedness Toolbox



Sea Level Rise maps identify what parts of the City are most vulnerable under different sea level rise scenarios.



WindWatch provides short-term forecasts of high winds to help prepare for storm-related electrical outages.



Stream flow forecasts inform water reservoir management and help protect salmon.



RainWatch provides short-term forecasts and rain accumulation totals to help better prepare for and respond to incidents of extreme precipitation and urban flooding.

Our Goal	Our Progress	Quick Status	Goal Source	17
BUILDINGS & ENERGY				
1 105,200 Megawatt hours of electricity saved annually	121,290 Megawatt hours saved in 2013	ACHIEVED TARGET	I-937 (2006)	
2 Reduce home energy use by 20% and commercial energy use by 10% by 2030 (2008 baseline)	3% reduction in home energy use; 2% reduction in commercial energy use between 2008 and 2012	MAKING PROGRESS	Climate Action Plan (2013)	
3 20% energy savings in City facilities by 2020 (2008 baseline)	4% savings since 2008	MAKING PROGRESS	Resource Conservation Management Plan (2013)	
4 Increase the number & level of green certified buildings	179% increase in LEED and 40% increase in Built Green buildings (with a greater percentage certified at higher levels) between 2008 and 2013.	MAKING PROGRESS	MOU for City Green Building (2008)	
5 Acquire 15% of electricity from new renewable sources by 2020	Almost 5% of new renewable energy sources acquired in 2012	MAKING PROGRESS	I-937 (2006)	
6 Increase solar energy production in the community	38% increase in solar capacity since 2008	MAKING PROGRESS	Department priority	
TRANSPORTATION & LAND USE				
1 Only 25% of commuters drive alone by 2035	49% of commuters drove alone in 2012, down from 53% in 2011.	MAKING PROGRESS	State of the City (2014)	
2 Increase transit boardings by 37% by 2040 (2012 baseline)	12% increase in transit boardings between 2010 & 2012	MAKING PROGRESS	SDOT Action Agenda (2012) & PSRC Transportation 2040	
3 Increase the number of bicyclist and pedestrians	59% increase in bicyclists and 27% increase in pedestrians between 2011 and 2013 from counts at 50 locations citywide	MAKING PROGRESS	SDOT Action Agenda (2012)	
4 45% of homes located within urban villages by 2030	42% of homes are located within urban villages (as of 2013)	ALMOST THERE	Comprehensive Plan (2005)	
5 85% of jobs located within urban villages by 2030	84% of jobs are located within urban villages (as of 2012)	ALMOST THERE	Comprehensive Plan (2005)	
6 Enhance neighborhood walkability	Seattle is the 8th most walkable large city	NEED DATA	Comprehensive Plan (2005)	
7 Eliminate serious & fatal crashes by 2030	20% reduction in serious & fatal crashes between 2008 & 2013	MAKING PROGRESS	SDOT Action Agenda (2012)	
FOOD				
1 Increase healthy food access	45% increase in Seattle early learning centers purchasing healthy food from local farmers More than 70% increase in Fresh Bucks use at farmers markets between 2012 and 2013	MAKING PROGRESS	Food Action Plan (2013)	
2 Increase urban food production	104% increase in publically accessible land for growing food from 1990 to 2013 33% increase in P-Patch gardeners from between 2010 and 2013	MAKING PROGRESS	Food Action Plan (2013)	
3 Increase local food consumption	\$1 million increase in farmers market sales between 2010 & 2012	MAKING PROGRESS	Food Action Plan (2013)	
WASTE				
1 Increase products where waste is managed by manufacturers	3 waste products now managed by manufacturers: electronics, mercury-containing lights, and medicines.	MAKING PROGRESS	Solid Waste Management Plan (2013)	

Our Goal	Our Progress	Quick Status	Goal Source 18
<div>2</div> <div>Ban or discourage problem materials</div> <div>3</div> <div>Reduce waste sent to land fill</div> <div>4</div> <div>Recycle 70% by 2022</div>	<div>3 product discouragement/bans in place: phone book opt out, expanded polystyrene ban, and plastic bag ban.</div> <div>27% reduction in waste sent to the landfill over the last 7 years</div> <div>56% recycling rate in 2012, up 2% from 2011</div>	<div>MAKING PROGRESS</div> <div>MAKING PROGRESS</div> <div>MAKING PROGRESS</div>	<div>Solid Waste Management Plan (2013)</div> <div>Solid Waste Management Plan (2013)</div> <div>Solid Waste Management Plan (2013)</div>
<div>WATER</div> <div>1</div> <div>Use less than 105 million gallons of water per day</div> <div>2</div> <div>Manage 700 million gallons of runoff by 2025 with green infrastructure</div> <div>3</div> <div>Increase pollutant removal from roadways</div> <div>4</div> <div>Reduce sewer backups to less than 4 per 100 pipe miles by 2025</div> <div>5</div> <div>Reduced sewer overflows to one outflow per year by 2025</div> <div>6</div> <div>Decommission 236 miles of logging roads in Cedar River watershed by 2020</div>	<div>93 million gallons per day used in 2013</div> <div>Manage about 100 million gallons with green infrastructure currently</div> <div>50% increase in pollutant removal between 2011 and 2013</div> <div>Approximately 3 sewer backups per 100 pipe miles in 2013</div> <div>52 out of 87 outfalls are controlled</div> <div>152 miles decommissioned to date</div>	<div>ACHIEVED TARGET</div> <div>MAKING PROGRESS</div> <div>MAKING PROGRESS</div> <div>ACHIEVED TARGET</div> <div>NEEDS WORK</div> <div>MAKING PROGRESS</div>	<div>Saving Water Partnership Stated Goal (2013)</div> <div>GSI Executive Order (2013)</div> <div>Department priority</div> <div>SPU Consent decree (2013)</div> <div>SPU Consent decree (2013)</div> <div>SPU Habitat Conservation Plan (2000)</div>
<div>TREES & GREEN SPACE</div> <div>1</div> <div>1 acre of open space per 100 residents</div> <div>2</div> <div>All residents live within 1/4 mile of a park</div> <div>3</div> <div>100% level of service for care of Seattle's green spaces</div> <div>4</div> <div>30% tree canopy cover by 2037</div> <div>5</div> <div>2,500 acres of forested parkland restored by 2025</div> <div>6</div> <div>Increase volunteers caring for natural areas and trees</div> <div>7</div> <div>Plant 1,800 trees in neighborhoods annually through community partnerships.</div>	<div>.75 acres of parkland per 100 residents (2012 data)</div> <div>83% of residents live within 1/4 mile of a park (as of 2010)</div> <div>58% level of service for green spaces in 2013</div> <div>23% canopy cover as of 2007</div> <div>1,000 acres of forested parkland in restoration</div> <div>17% increase in Parks volunteers between 2011 and 2013</div> <div>1,811 City-funded trees were planted in yards or planting strips in 2013.</div>	<div>MAKING PROGRESS</div> <div>MAKING PROGRESS</div> <div>NEEDS WORK</div> <div>NEEDS DATA</div> <div>MAKING PROGRESS</div> <div>MAKING PROGRESS</div> <div>ACHIEVED TARGET</div>	<div>Comprehensive Plan (2005) and Parks & Recreation Development Plan (2006)</div> <div>Comprehensive Plan (2005) and Parks & Recreation Development Plan (2006)</div> <div>Draft Parks Legacy Plan (2014)</div> <div>Urban Forest Stewardship Plan (2013)</div> <div>Green Seattle Partnership 20 Year Strategic Plan (2005)</div> <div>Department priority</div> <div>Urban Forest Stewardship Plan (2013)</div>
<div>CLIMATE</div> <div>1</div> <div>Seattle is carbon neutral by 2050</div> <div>2</div> <div>Develop citywide climate preparedness strategy</div>	<div>1% increase in total core emissions; a 6% decrease in per person emissions</div> <div>In development</div>	<div>NEEDS WORK</div> <div>MAKING PROGRESS</div>	<div>Climate Action Plan (2013)</div> <div>Climate Action Plan (2013)</div>

MOVING the NEEDLE

SEATTLE'S ENVIRONMENTAL PROGRESS REPORT

— 2014 —

PREPARED BY:



SEATTLE OFFICE OF
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