

PROJECT SUMMARY and CONTACT INFORMATION



Project Information

Mercer Corridor Project

Transit, Highway, Port project

Seattle, WA, King County

Seattle-Tacoma-Everett Urbanized Area (UZA)

WA 1st & 7th Congressional District

Mercer Street - Fairview Avenue N to Dexter Avenue N

Valley Street - Fairview Avenue N to Dexter Avenue N

DUNS: 009483561 **EIN#** 91-6001275 **CCR Cage #:** 383R1

REQUESTED TIGER GRANT: \$50 million

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Project Summary

The “Mercer Mess” has long been a major bottleneck in the Seattle area, hindering access to Seattle’s fastest growing neighborhood, South Lake Union. The existing Mercer Street and Valley Street couplet were implemented in the late 1950s as a temporary solution to traffic problems at the time. They cut through the South Lake Union neighborhood, dividing neighborhoods and hindering economic development. The existing design creates congestion in the corridor which backs up onto Interstate 5 through the heart of Seattle, impacting the entire regional highway system, including Interstate 90 and State Routes 520 and 99.

The Mercer Corridor Project supports Seattle's Center City Strategy, creating a livable and vibrant neighborhood with easy access to the downtown core. Seattle’s Center City is the economic engine of the Pacific Northwest. Areas served by the project are home to 245,000 existing jobs, and 50,000 new jobs are expected by 2024. The project provides a main street for the growing biotechnology hub in South Lake Union, connects a number of urban centers to Interstate 5 and carries over 80,000 vehicles each day. It is critical for the movement of freight to the Port of Seattle and provides access to the Port’s facilities on the north side of Elliott Bay, the International Cruise Terminal, Fisherman’s Terminal, shipping facilities and other industrial uses.

The Mercer Corridor Project is shovel-ready. Seattle has secured \$140 million, including \$31.4 million through private contributions. This funding request for \$50 million is the last piece of the puzzle and will build multi-modal improvements along Mercer and Valley streets including widening Mercer to create a two-way boulevard, reconstructing Valley Street as a local access street, providing new and wider sidewalks, improving connections to transit and adding bicycle lanes. The project replaces major utility infrastructure and integrates many environmentally friendly and sustainable design features. It supports the Alaskan Way Viaduct Replacement Project (SR 99) and rebuilds the street grid in South Lake Union.

MERCERcorridorPROJECT



GRANT CRITERIA

✓	National and Regional Significance.....	4
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Primary Criteria

Long-Term Outcomes

✓	State of Good Repair.....	8
➤	Rebuilds and improves all public infrastructure in the corridor fixing streets in "Very Poor" condition	
➤	Reconstructs utilities that are up to 115 years old	

Quantified Benefits: \$15.4 Million

✓	Economic Competitiveness.....	9
➤	"Main Street" for South Lake Union, future home to 22,000 new jobs and 10,000 new households	
➤	'Road to Global Health' improves access to a growing bio-technology sector	
➤	Gateway to Asia and North Pacific providing critical links to the Port of Seattle	

Quantified Benefits: \$15.5 Billion

✓	Livability.....	11
➤	Improves mobility by reducing congestion and increasing transportation options	
➤	Provides accessibility for economically disadvantaged populations, senior citizens and persons with disabilities linking them to jobs, housing, shopping, services and recreation	

Quantified Benefits: \$26.3 Million

✓	Sustainability.....	13
➤	Reduces energy use and greenhouse gas emissions by creating a vibrant, walkable mixed-use urban community	
➤	Reduces environmental impacts and increases habitat	

Quantified Benefits: \$84.3 Million

✓	Safety.....	15
➤	Eliminates six high accident locations	
➤	Improves pedestrian safety by expanding sidewalk network	

Quantified Benefits: \$193.2 Million



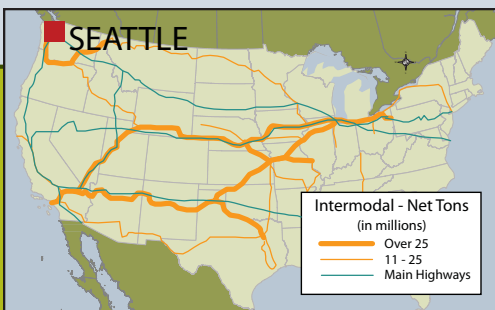
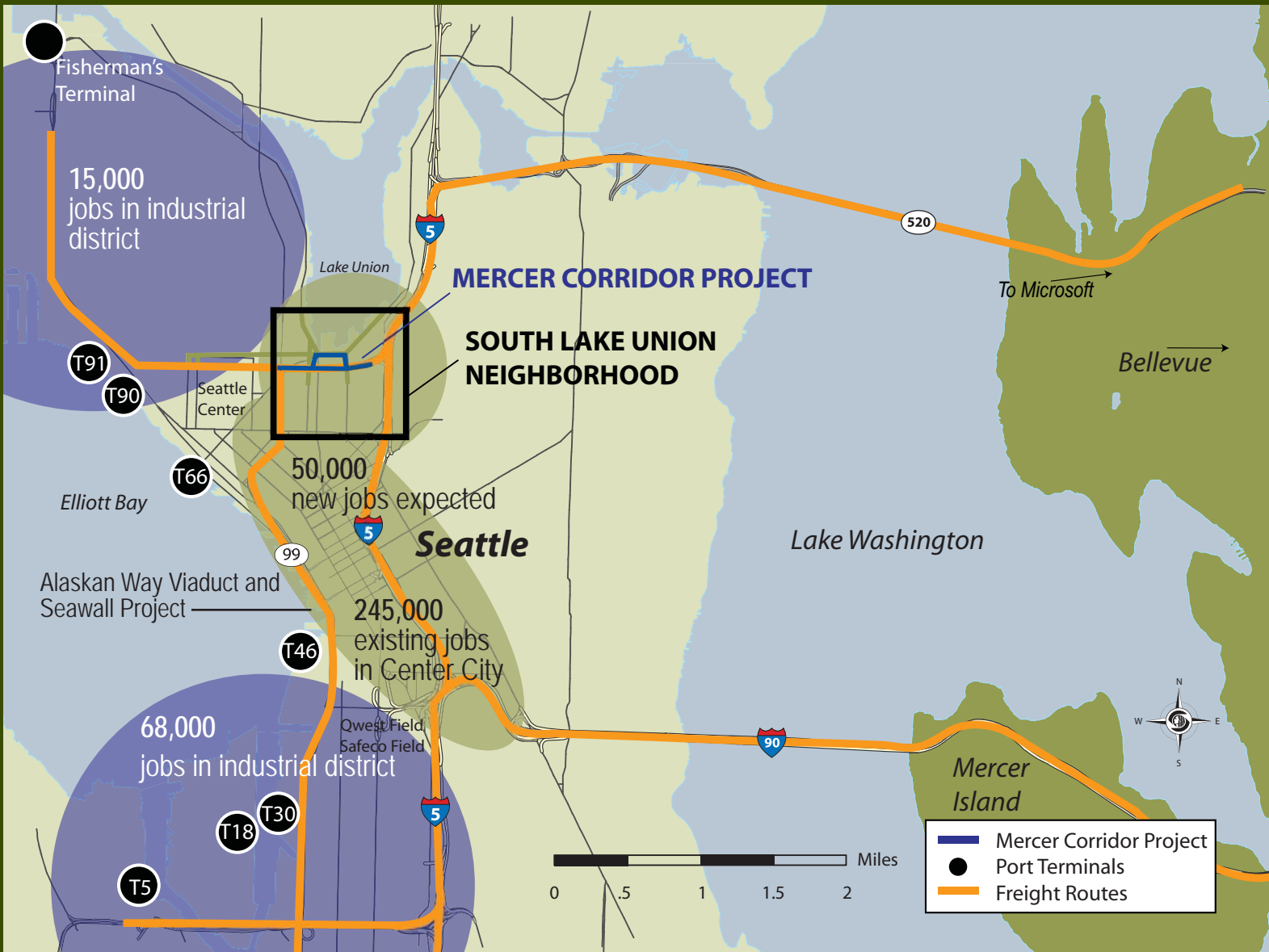
GRANT CRITERIA

- ✓ **Job Creation and Economic Stimulus..... 18**
 - Project is “ready-to-go” and creates 1,200 direct construction jobs
 - Creates opportunities for low-income workers and small and disadvantaged businesses
 - **Environmental Approvals**
 - NEPA Environmental Assessment Approved 12/23/08
 - SEPA Process Completed 02/19/09
 - Finding of No Significant Impact (FONSI) Issued 5/12/09
 - **Right-of-Way Certification**
Submitted to WSDOT for Final Approval 09/2009
 - **100% Bid-Ready Design Completed**
9/2009
 - **City Legislative Approvals**
 - Ordinance 122953
Mayor - 04/15/09
Council - 04/16/09
 - **State & Local Planning Completed**
 - Statewide Transportation Improvement Program (STIP) 8/1995
 - Metropolitan Transportation Plan (MTP) 5/2001
 - **Shovel Ready**
9/2009
- ✓ **Financial Feasibility..... 21**
 - Commitment for Public/Private Funding Partnerships 9/2009

Secondary Criteria

- ✓ **Innovation..... 23**
 - Incorporates innovative planning, design, financing, contracting and construction features
 - Integrates innovative and “green” design features
- ✓ **Partnerships..... 24**
 - Includes over \$31 million in private sector contributions and leverages \$1.5 billion in private sector investment
 - Part of a program of improvements recommended by the Governor, King County Executive and Mayor to replace the aging Alaskan Way viaduct

thinking **NATIONALLY...**



Seattle is an international gateway for United States trade. The city sits at the crossroads of two interstate freeways: Interstate 5, connecting through Seattle to Canada and Mexico, and Interstate 90, linking eastern markets. It is also a crossroads for the nation's rail network, serving the BNSF and UP railroads.

The Port of Seattle hosts the nation's fifth largest container port, the base of the North Pacific fishing fleet and a major international cruise terminal. Seattle's

roadway network provides the critical first and last mile where high-value cargo moves between Port of Seattle terminals and freeways or rail yards. The Mercer Corridor is currently very congested, impacting freight movement along the corridor and on Interstate 5.

The Mercer Corridor project improves a strategic intermodal connector carrying our nation's freight. The Mercer Corridor project is part of a multi-billion dollar set of transportation investments, including the Alaskan Way Viaduct, the Spokane Street Viaduct, State Route 519 and the East Marginal Way Grade Separation that will improve linkages to the Port of Seattle, Seattle's industrial centers and the nation's transportation network. The completion of the Mercer Corridor project will reduce congestion in the I-5 corridor as off-ramp traffic backs on to I-5 through-lanes daily. The project provides benefits to the nation, region and metropolitan area and merits federal investment.

acting LOCALLY: SOUTH LAKE UNION

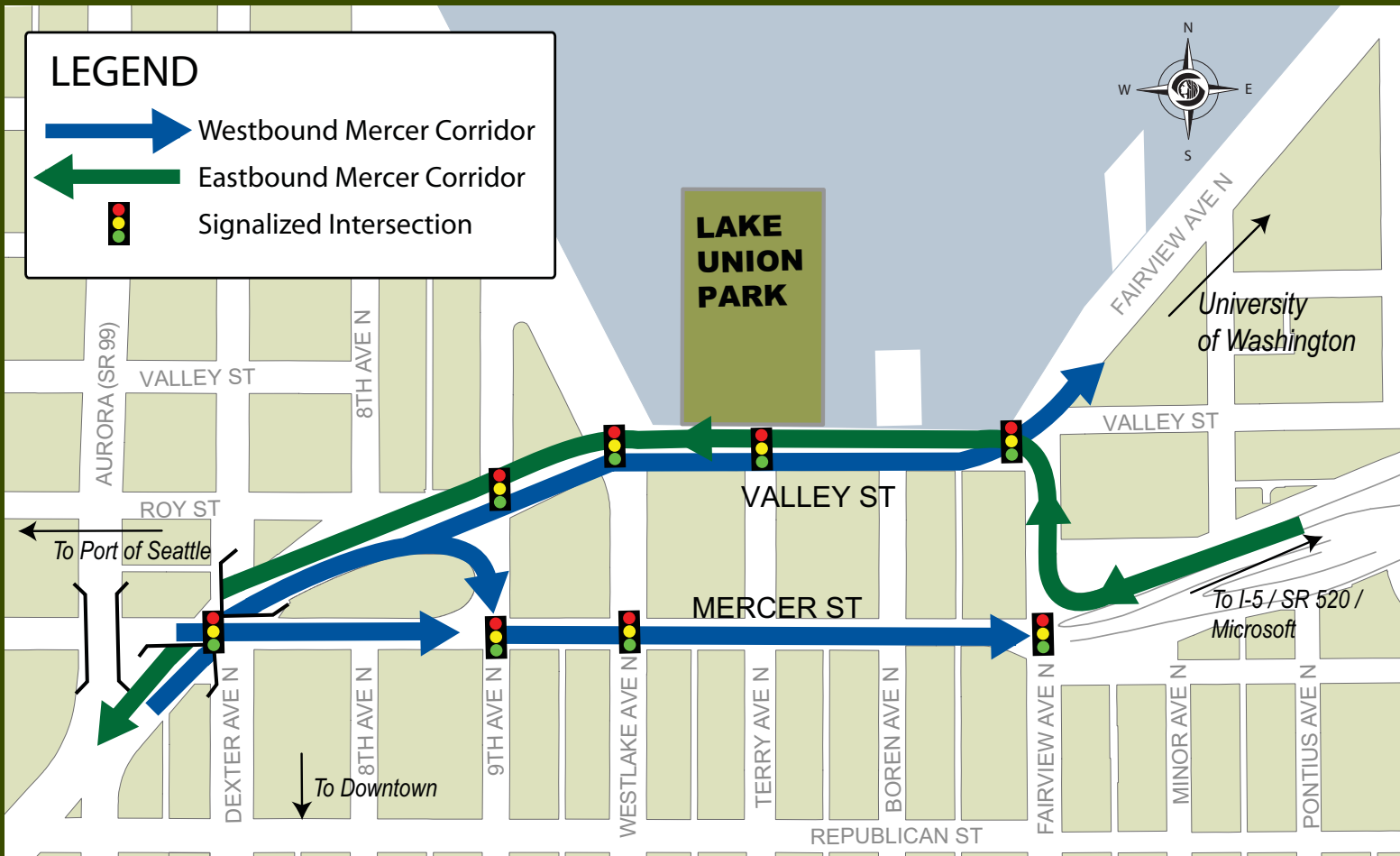


- Seattle's Center City is the economic engine of the Pacific Northwest and the Puget Sound region, with 245,000 existing jobs
- The Center City is expected to grow by 50,000 new jobs by 2024 and add over 22,000 new households
- South Lake Union is Seattle's fastest growing mixed-use urban neighborhood
 - Will host 22,000 of the Center City's new jobs and 10,000 of the new households
 - 3,700 jobs contingent upon development of Mercer Corridor Project
- South Lake Union is home to the growing information technology and biotechnology sectors - "The Road to Global Health"

<ul style="list-style-type: none"> • Amazon.com • Fred Hutchison Cancer Research Center • Seattle Times • University of Washington Medical Center • Seattle Cancer Care Alliance • PATH (A Catalyst for Global Health) 	<ul style="list-style-type: none"> • Pemco Insurance • School Employees Credit Union of Washington • Group Health • NBBJ • Microsoft • REI 	<ul style="list-style-type: none"> • Tommy Bahama • Seattle Biotechnical Research Institute • Webber Thompson Architects • Zymogenetics • Bill and Melinda Gates Foundation • King Broadcasting Company
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- South Lake Union is also the center of a growing regional arts and cultural community, with the Mercer Corridor as its "Main Street" with over \$300 million in public investments:

<ul style="list-style-type: none"> • Lake Union Park: <ul style="list-style-type: none"> • Museum of History and Industry • The Center for Wooden Boats • Tribal Canoe Center 	<ul style="list-style-type: none"> • Seattle Center: <ul style="list-style-type: none"> • Space Needle • McCaw Hall Opera House • Key Arena 	<ul style="list-style-type: none"> • Olympic Sculpture Park • International Cruise Terminal
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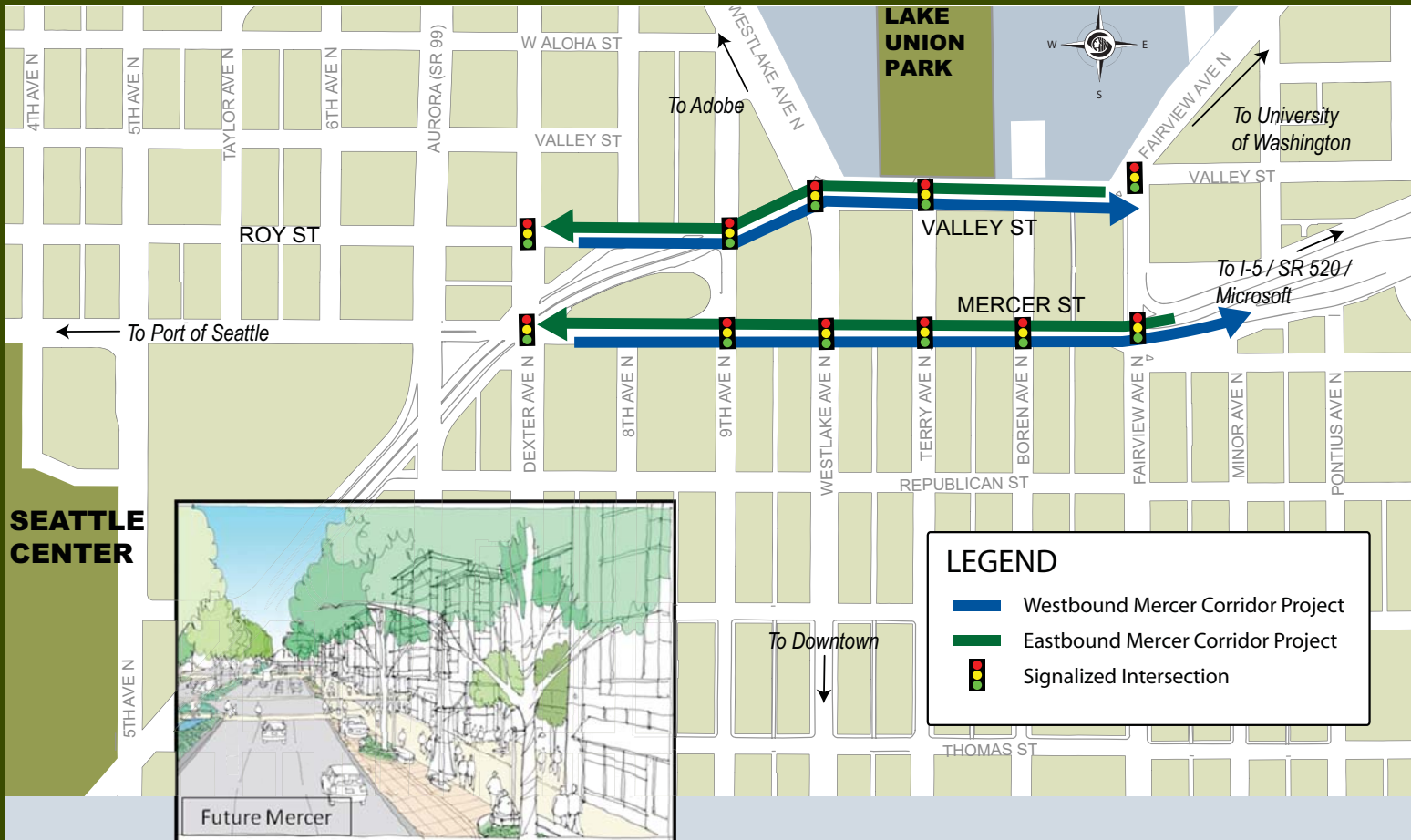
PROBLEM: the “MERCER MESS”



- The “Mercer Mess” has been a regional problem for over 40 years
 - Circuitous one-way routing slows traffic and makes system complicated
 - Over 200 collisions each year with six high collision locations
 - Backups on to I-5 north and south through lanes
- Corridor cannot handle the 80,000 vehicles (100,000 people) each day that use it
 - Congestion backs up onto I-5 and impacts the entire regional transportation system
 - Limits access to jobs, reduces opportunities for economic growth and slows down trade
 - Vehicle-based design creates barrier and inhibits the use of transit, walking and bicycling
 - Reduces accessibility for persons with disabilities, senior citizens and those who do not drive
- Public infrastructure in the Mercer Corridor is obsolete and in poor condition
 - Utilities are 80 to 115-years old
 - Pavement, sidewalks and signals are in poor and very poor condition



SOLUTION: the MERCER CORRIDOR



- Improves mobility for over 100,000 people each day
 - Improves traffic flow on I-5 and regional network
- Creates economic opportunity and access to jobs and businesses
 - Creates 1,200 direct construction jobs
 - Supports 22,000 new jobs in South Lake Union
 - Improves links to Port facilities, industry and research/development uses
- Integrates with land-use, creates jobs and housing balance
- Fixes obsolete public infrastructure up to 115-years old
- Supports Alaskan Way Viaduct and Seawall Replacement Project
- Improves the environment
 - Reduces energy use
 - Reduces greenhouse gas emissions
 - Improves water quality and tree canopy
- Supports walking, biking, transit and freight
- Improves safety, fixing six high accident locations
- **READY TO GO**

LONG-TERM CRITERIA



State of Good Repair

Mercer and Valley streets are among the roughest arterial roadways in Seattle. SDOT's pavement system shows that the main sections of Mercer and Valley streets (Westlake to Fairview) are rated in "Poor" and "Very Poor" condition. The corridor has reached a state of repair where both streets must be completely reconstructed. These streets are among Seattle's highest paving priorities, carrying over 80,000 vehicles per day.

In the Mercer Corridor, however, not only is the roadway surface in a state of disrepair, so is other needed public infrastructure. Sidewalks either don't exist or are in disrepair, signal equipment is obsolete, drainage facilities are inadequate, and utility infrastructure is old and at risk.

The Mercer Corridor Project will bring all infrastructure facilities to current standards or above.

The project design includes the most sustainable features possible to insure a lasting benefit to the South Lake Union neighborhood and the region as a whole. This will reduce the overall cost of maintaining and operating the infrastructure in the corridor – reducing total long-range costs.

Pavement materials vary throughout the project area and have been selected based on life-cycle cost data developed from expected use and subsurface conditions, among other items [see [Life Cycle Cost Analysis](#)]. Sidewalk materials vary from solid concrete to permeable pavers, depending on location.

SDOT's design includes a total reconstruction of the pavement within the project area, providing a perfect opportunity to upgrade utility infrastructure now in order to avoid damaging new pavement and/or sidewalks to repair or replace utilities in the future. The project includes upgrades and/or replacements to major utility infrastructure including water, sewer, drainage, and electrical distribution and transmission lines to meet

growing demands of South Lake Union and adjacent Seattle neighborhoods. Many of these utilities are 80- to 115-years old, undersized, and long overdue for replacement.

The electrical undergrounding network is designed to provide reliable service to health and biotechnology institutions in the area and accommodate future expansion to support growth in South Lake Union and surrounding neighborhoods. Undergrounding the existing overhead utilities and taking advantage of cost savings and consolidation opportunities with other planned projects in this dense urban center serves to mitigate the impacts of these projects on residents and businesses.



The project includes environmental features that provide for cost-effective maintenance. Natural drainage features, such as rain gardens and "wet medians", are used to naturally store and treat stormwater as an innovative alternative to traditional management systems. The design includes 269 shade trees, which reduce the ongoing cost of pavement maintenance.

Current Conditions

Paving condition ratings: Poor and Very Poor

Utilities: 80- to 115-years old

Demand: 80,000 vehicles a day

Quantified Benefits – State of Good Repair \$ 15.4 million

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Economic Competitiveness

The Mercer Corridor Project will be a major contributor to the economic competitiveness of the United States over the medium- and long-term. Today, the Mercer Corridor is congested, obsolete and in a poor state of repair. Congestion along the Mercer Corridor spreads its impacts onto Interstate 5 through the heart of Seattle and onto the rest of the regional highway system. Fixing the Mercer Corridor will reduce this congestion and improve mobility on Interstate 5.

The Mercer Corridor is a critical link in the nation's freight network, connecting the Port of Seattle, the nation's fifth largest container port and the base of the North Pacific fishing fleet, to Interstate 5 and 90, and to markets throughout the nation.

Improved access to the Ballard-Interbay Northend Manufacturing Center (BINMIC) is provided by new westbound lanes on Mercer Street. BINMIC is home to 14,520 employees and 654 businesses and is the heart of Seattle's maritime industry. This area is slated

to add over 2,000 jobs by 2024, each with an average wage of \$70,700 annually, creating an economic benefit of over \$141 million in annual wages. Port facilities include Terminal 86, the grain terminal, and Terminals 90 and 91, home to the North Pacific fishing fleet, seen in the picture above. The Port of Seattle's new International Cruise Terminal is also located at Terminals 90 and 91. Over 750,000 passengers board at the Port's cruise terminals annually.

Within BINMIC, the Port of Seattle owns one of the largest undeveloped industrial pieces of property in Seattle, a 90-acre parcel just north of Terminals 90 and 91. The Mercer Corridor Project will serve as an incentive for developing this parcel with industrial uses.

Seattle's burgeoning information technology, biotechnology and global health industries are centered on the

Development in South Lake Union
represents 22,000 jobs in space
completed, under construction, or
in the permitting pipeline.

serve future growth.



Mercer Corridor, in South Lake Union. In 2004, the city completed the 10-year update of its comprehensive plan, designating South Lake Union as a regional urban center slated for high-density growth. Since 2004, South Lake Union has become Seattle's fastest growing urban center. SDOT completed the South Lake Union Transportation Study in 2004. The study identified the Mercer Corridor project as a top priority project to

Over 6.3 million square feet of biotechnology, global health and general office space has been completed, is under construction, or is in the permitting pipeline, since 2004 in South Lake Union. This development will house 22,000 jobs when complete. The assessed value of this development is almost \$1.5 billion, and over a 20 year period this economic development is estimated to create about \$500 million in tax revenue to the State of

LONG-TERM CRITERIA

Washington (see [Sommer's report](#)). Construction of this research and office space employs over 700 people each year, creating additional high paying jobs.

When the Mercer Corridor Project is complete, there will be over 300,000 square feet of developable property available for retail, office and biotechnology uses. Development of this property is contingent upon the completion of the Mercer Corridor project. Using current zoning, this property can be developed with over 1,200,000 million square feet of retail, office and biotechnology. At an employee density of 3.29 employees per 1,000 square feet this translates into over 3,700 new jobs.

Organizations locating in South Lake Union and the Mercer Corridor are a “Who’s Who” of the life sciences and information technology industries. The presence of world leaders in these sectors has created momentum, encouraging top flight organizations to locate in South Lake Union to share ideas. The Mercer Corridor project builds strong linkages between them.



For example, the Bill and Melinda Gates Foundation, the world’s largest charitable organization, is building its 900,000 square foot international headquarters along the Mercer Corridor and is expected to employ over 700 people. PATH (Program for Appropriate Technology in Health), winner of the prestigious Conrad N. Hilton Humanitarian award, is moving its international headquarters and 300 employees to the Mercer Corridor next year. Fred Hutchinson Cancer Research Center (shown below) already employs nearly

3,000 people in South Lake Union, and its long-term plan is to add up to seven new buildings with more than 1 million square feet for lab, research and office space.

The University of Washington (UW) receives more federal research funding than any other American public university, a ranking held since 1974. In 2008, UW received over \$580 million in federal research dollars for the life sciences. The UW Medical Center research facilities are located along the Mercer Corridor and employ 900 people. UW plans to add another 420,000 square feet of research space, which will employ about 500 people.



The Seattle Cancer Care Alliance, Group Health, Zymogenetics, Novo Nordisk, Gilead Science, and the Seattle Biomedical Research Institute are also located in South Lake Union. Amgen, a top biotechnology firm, is located at the west end of the corridor. There are an estimated 6,300 life sciences jobs in South Lake Union. With an average annual wage of \$76,700, these jobs create an annual economic impact of over \$483 million. The Mercer Corridor is rapidly becoming the “[Road to Global Health](#).”

The Mercer Corridor is also home to a number of top information technology firms. Amazon.com, the world’s largest internet retailer, is building its new six-block headquarters on the corridor. When complete it will include 1.6 million square feet of office space and almost double its number of workers. Microsoft, Classmates.com, F5 Networks, Adobe and RealNetworks are several of the other technology companies relying on the Mercer Corridor for employee and customer access.

Quantified Benefits – Economic Competitiveness \$15.5 billion

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Livability

The Mercer Corridor Project will provide transportation infrastructure necessary to make South Lake Union a healthy and desirable place to live, work, shop, and play. It is a critical part of Seattle's Center City strategy to create vibrant, livable, walkable mixed-use communities, like South Lake Union, within easy access to the downtown core. This project will provide and support more convenient transportation options, manage congestion, and improve accessibility for those who are unable to or choose not to drive. The project was developed as the result of a coordinated and inclusive planning process with residents, businesses and property owners and other stakeholders who use the corridor.

Livability improvements

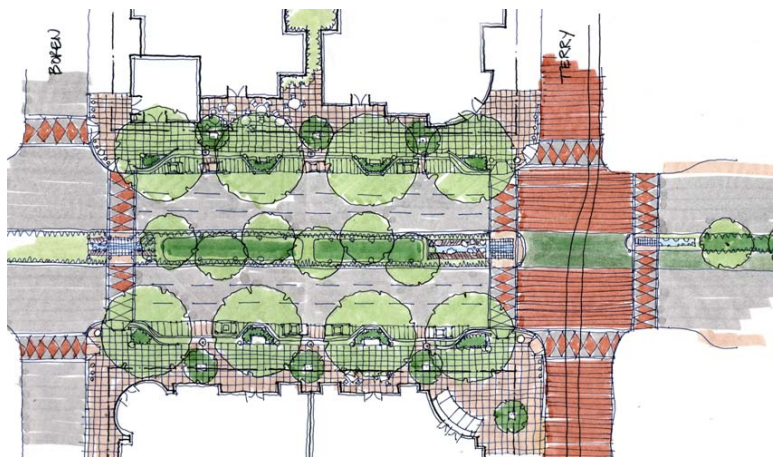
- *Improves 32 sidewalk block faces and constructs 21 curb bulbs*
- *Improves pedestrian crossings at 12 intersections*
- *Includes one mile of new bike lane*
- *Builds six blocks of multi-use trail to fill gap in system*

South Lake Union contains about 20,000 existing jobs and around 1,500 residents. By 2024 these figures are expected to grow to 42,000 jobs and about 13,000 residents. Over 100,000 people travel each day along the Mercer Corridor.

Improving the transportation network for pedestrians and bicycles in South Lake Union and removing the barriers created by high traffic volumes exiting Interstate 5 and

winding through the existing street network will create convenient travel options for residents and employees. Residents from throughout the area will have safe and convenient options to walk to destinations along Mercer and Valley streets, including Lake Union Park.

The Mercer Corridor project includes one mile of new bike lanes, six blocks of multi-use trail, 21 curb bulbs, 32 block faces of improved and widened sidewalks, improved pedestrian crossings at 12 intersections and medians and landscaping that contribute to a sense of place and enhance safety. Enhancements are consistent with Seattle's [Bicycle](#) and [Pedestrian](#) Master Plans. These improvements connect several multi-use trails in Seattle's regional bicycle network. The project will provide a part of the [Cheshiahud Loop Trail](#) that circles Lake Union. They also provide better connections to the Burke-Gilman Trail which connects the Puget Sound with Redmond, the site of Microsoft's main campus. Improving the pedestrian and bicycle network will reconnect residents to jobs, shops, and recreation. The bike trail improvements provide a quantified health benefit of \$6.6 million.



The project also makes transit a more viable option. The project is integrated with the South Lake Union Streetcar, connecting South Lake Union to downtown Seattle. Pedestrian and bicycle improvements fill gaps in the network and increase access to the streetcar and other existing transit service in South Lake Union, which carry almost 12 million riders annually.

LONG-TERM CRITERIA

Improvements to the intersection of Mercer Street and Fairview Avenue N at the Interstate 5 ramps will reduce delays and enhance reliability for buses connecting the neighborhood to downtown Seattle to the south and the University of Washington to the north. Finally, the improvements to the corridor allow a new transit route along Mercer connecting South Lake Union to Capitol Hill, consistent with the [Seattle Transit Plan](#).

Safe and convenient alternatives to driving will help residents meet their travel needs without a car. As mentioned above, the non-motorized and transit improvements increase accessibility for those who are unable to or choose not to drive. Groups served include a range of income levels. King County has been identified by the State of Washington as an [economically distressed county](#). Two out of three census tracts that cover the project area have poverty levels higher than the citywide level. In one census tract within this urban center, 40 percent of the population is below the poverty level, compared to 12 percent citywide. Of the housing units open or under construction in South Lake Union in 2004, 30 percent are affordable or subsidized and 70 percent are market rate compared to the rest of the City at seven percent.



Travel Time Benefits

Converting Mercer Street from one-way travel to two-way will result in an overall reduction in delays to traffic traveling through the corridor by providing a direct westbound connection from Interstate 5 and eliminating conflicts associated with the current indirect routing. Travel time benefits for specific routes vary from general improvements for westbound traffic to slight increases in travel time for some eastbound routes. The net travel time benefits summarized here account for the decrease in travel time (as well as any increases in travel time) for east-west travel through the corridor. Travel time benefits were applied to the total traffic demand projected through the corridor using USDOT recommended hourly values of time in year 2000, adjusted to 2009 using the recommended adjustment factors.

- Average annual travel time benefits \$1,095,000
- Total benefits from year of opening (2012) to design year (2030) **\$19,710,000**

The Mercer Corridor project is the result of a coordinated planning process that incorporated involvement of a variety of community stakeholders. As a result of public and stakeholder comments, technical analysis and guidance from the Seattle City Council, the Two-Way Mercer Alternative was identified as the City’s preferred alternative. During the environmental process, which met both state and federal requirements, an independent [Mercer Corridor Stakeholder Committee](#) comprised of 42 individuals met 15 times and reached consensus on a package of recommendations for the Mercer Corridor. More information on the involvement process is available on the [Mercer Corridor web site](#).

Quantified Benefits – Livability \$ 26.3 million

LONG-TERM CRITERIA



Sustainability

The City of Seattle is a national leader in sustainability and climate protection. Seattle's goal is to create a sustainable community that captures our citizens' core values: community, environmental stewardship, economic opportunity and security, and social equity. [Seattle's Comprehensive Plan](#) identifies 38 urban centers

— areas that support increased density. By concentrating growth in these urban centers, Seattle can develop pedestrian-friendly mixed-use neighborhoods that are connected to employment centers and each other by a convenient, efficient transit system. This reduces energy use and greenhouse gas emissions and improves the environment. Of these locally

South Lake Union is expected to be Seattle's second most dense neighborhood, rivaling Downtown, with 33 housing units per acre and 135 jobs per acre.

designated urban centers, six have been designated by the Puget Sound Regional Council (PSRC) as regional growth centers, including South Lake Union.

South Lake Union is Seattle's fastest growing urban center. By 2024, it will be the home to 42,000 jobs and 10,000 housing units and is expected to be Seattle's second most dense neighborhood, rivaling downtown Seattle, with 33 housing units/acre and 135 jobs/acre. Because the South Lake Union neighborhood is within Seattle's Center City and adjacent to downtown Seattle, residents and employees are located within a short walk, bicycle ride or transit trip of everything Seattle has to offer – reducing the need to drive. The Mercer Corridor project is key to making South Lake Union a livable, walkable community that implements the Comprehensive Plan.

South Lake Union is being built with sustainability as a top priority. The U.S. Green Building Council has selected South Lake Union as one of their Leadership in Energy and Environmental Design (LEED) for [Neighborhood Development \(LEED-ND\) pilot projects](#). After more than a year of deliberations and analysis South Lake Union is on track to achieve a LEED-Silver, and possibly a LEED-Gold rating this fall. The Amazon.com headquarters complex is an example of sustainable design, with all six phases being built to meet the LEED Gold certification standard.

The Mercer Corridor will create a transportation network scaled for an urban area, encouraging residents, employees and visitors to walk, bike or use transit. As mentioned in the Livability section, the project provides one mile of new bike lanes and six blocks of multi-use trail. These will connect multi-use trails in Seattle's [regional bicycle network](#), providing better links to the Burke-Gilman Trail, bringing together the Puget Sound with Redmond, the site of Microsoft's main campus.



LONG-TERM CRITERIA



The project builds 21 curb bulbs, 32 block faces of improved and widened sidewalks, and adds safe pedestrian crossings at twelve intersections. These improvements will allow residents and employees to walk conveniently for short trips within the urban center or to adjacent centers.

Improving pedestrian facilities in the neighborhood provides better connections to transit in South Lake Union, including the South Lake Union Streetcar—the primary connection to Sound Transit’s new regional light rail system, the Seattle Center Monorail and King County Metro bus service. It is estimated that there are approximately 12,000,000 annual transit trips made within and through the South Lake Union neighborhood.

SDOT estimates that, by 2024, multi-modal transportation improvements along the Mercer Corridor will result in 80,000 more trips per day walking, biking or taking the bus, rather than driving an automobile. This will result in a reduction in energy use of 10 million gallons of gasoline and a reduction of over 85,000 tons of CO₂ emissions annually.

The project’s design incorporates many energy-saving and emissions-reducing technologies, like high-efficiency lighting, intelligent transportation systems (ITS), and solar-powered parking pay stations. The project will also reduce environmental impacts to the air, water and habitat. The design, which includes a landscaped median and planting strips along newly widened sidewalks, will reduce the amount of impervious surface area by 0.7 acre. The project replaces water, sewer, drainage, and electrical utilities that are 80- to 115-years old. New utility systems are designed to accommodate growth, minimizing future construction impacts. [Natural drainage systems](#) will be used to store and treat stormwater, improving the environment, increasing biodiversity, reducing pollution and runoff, and increasing urban habitat along the interface with Lake Union Park.

Seattle’s commitment to sustainable practices extends beyond the design of the Mercer Corridor project to its contracting and construction management efforts. Project specifications for construction encourage the salvage and reuse of onsite and offsite materials. As an example, SDOT will remove reusable building materials from eight buildings being demolished for reuse. Specifications encourage many other “green” construction practices as part of [Seattle’s Green Purchasing program](#).

Sustainability improvements

- *Plants 269 trees*
- *Adds 2.8 acres of landscaping*
- *Reduces impervious surface area by 0.7 acre*
- *Incorporates natural drainage systems*

Quantified Benefits – Sustainability \$ 84.3 million

LONG-TERM CRITERIA



Safety

The Mercer Corridor is eligible for federal highway safety funding as a high-collision area. The project will improve safety at six high collision intersections, reducing the number of collisions in the corridor.

Overall vehicle and pedestrian safety in the corridor will improve with the proposed direct route to and from Interstate 5 via Mercer Street. Elimination of the multiple turning maneuvers currently required to access westbound Valley Street from Interstate 5 will reduce driver confusion. It will also reduce conflicts between high-volume turning movements and pedestrians. Access control, in the form of raised, landscaped medians and curbs will reduce turning movements from adjacent land-uses, further reducing collisions.

Traffic control devices (signs, signals and markings) in the Mercer Corridor will be replaced. As part of the project ITS elements will be installed, which will be linked to Seattle's state of the art traffic management center. These improvements will reduce congestion, increase safety and allow SDOT to more rapidly respond to incidents.

Pedestrian safety is particularly important, as at least one pedestrian-motorist collision has been reported over each of the last three years at most intersections in the Mercer Corridor. While the project creates a wider Mercer Street for pedestrians to cross, it reduces motorized vehicle turn movements at the intersections of Fairview Avenue/Mercer Street and Fairview Avenue/Valley Street, and therefore reduces conflicts with pedestrian crossings. Traffic signals will be timed to allow pedestrians to cross the entire street in one phase, and the median will provide a safe refuge for any pedestrians that might leave the curb late or not make it across the full street width for other reasons. New curb bulbs will further enhance pedestrian and vehicular safety by enhancing visibility and reducing crossing distances.

The two-lane design of Valley Street will create safer conditions along the corridor and in the vicinity of the Lake Union Park, the South Lake Union Streetcar station, and the multi-purpose trail. Decreased traffic volumes and lower speeds are expected to result in fewer collisions. Continuous sidewalks and more controlled crossings will improve pedestrian safety. Pedestrian improvements reflect recommendations in Seattle's Pedestrian Master Plan.

Mercer Corridor Collision Summary (Three Year Period)

Type of Collision	Total Number of Collisions/Injuries	Average Annual Collisions	Cost of Collisions	Total Benefit of Improvements
Property Damage Only	387	127	\$6,700	\$5,672,666
Injury	224	75	\$375,000	\$187,500,000
Fatality	0	0	\$5,900,000	\$0

Over 600 collisions occurred during the three-year period from 2004 to 2006 in the Mercer Corridor. Using the methodology of [Washington State's Transportation Improvement Board](#), these collisions are estimated to have an annual cost of almost \$29 million. Elimination of one-third of these collisions will lead to more than \$193 million in collision cost savings over 20 years.

Quantified Benefits – Safety \$193.2 million

LONG-TERM CRITERIA



Total Quantified Benefits

SDOT has developed an estimate of the Mercer Corridor Project's expected benefits in the five long-term outcomes identified in TIGER Notice of Funding Availability. The table below summarizes these benefits. Additional detail and assumptions for the quantification of benefits for each criteria may be found on the city's Mercer Corridor web site at: http://www.seattle.gov/transportation/ppmp_mercer.htm.

Long-Term Criteria	Total Benefits
State of Good Repair	
Pavement O& M	\$300,000
Water	\$1,870,000
Sewer	\$1,700,000
Electrical Utilities	\$200,000
Coordinating Utility Reconstruction	\$11,300,000
Subtotal Quantified Benefits State of Good Repair	\$15,370,000
Economic Competitiveness	
Estimated Property Tax Revenues Related to Development	\$500,000,000
Estimated Total Wages – new Biotechnology jobs	\$14,991,000,000
Subtotal Quantified Benefits Economic Competitiveness	\$15,491,000,000
Livability	
Travel Time Savings	\$19,710,000
Health Benefits	\$6,615,000
Subtotal Quantified Benefits Livability	\$26,325,000
Sustainability	
Energy Reduction	\$28,200,000
GHG Reduction	\$56,100,000
Subtotal Quantified Benefits Sustainability	\$84,300,000
Safety	
Accident Reduction	\$193,173,000
Subtotal Quantified Benefits Safety	\$193,173,000
Total Quantified Benefits Mercer Corridor Project	\$15,810,168,000

In addition to these quantified benefits, there are numerous areas of qualitative benefits that have been outlined in the sections of this application pertaining to each of the long-term criteria. Some of these include:

- State of Good Repair – reduced maintenance of traffic control devices, user savings from fixing rough roads
- Livability – Health benefits of improved pedestrian network, bike lanes and shared bike streets
- Sustainability – Benefits of habitat restoration and stormwater quality improvements
- Safety – reduction in damage and injury claims



Evaluation of Project Performance

SDOT will collect traffic data on a biannual basis to evaluate project performance. This will include average daily traffic volumes on Mercer Street and observation of queue lengths on the Interstate 5 off-ramp. Freight movement data will also be collected. Pedestrian counts will be collected at key intersections within the corridor every year. Bicycle counts along Valley Street and across the corridor will be collected every two years. This data will be analyzed at regular intervals and used to revise signal timing and traffic operations. Collision data would also be analyzed on an annual basis. The ITS elements that are part of the Mercer Corridor project will be part of the citywide ITS network and will be linked into Seattle's Traffic Management Center (TMC), which is in turn, linked to WSDOT's TMC. This will allow real-time monitoring of traffic conditions in the corridor.

As part of its pavement management program, SDOT inspects arterial streets on a three-year cycle. The inspections follow the Pavement Condition Index (PCI) procedure, developed by the United States Army Corps of Engineers. The PCI method measures the occurrence of several pavement distress types and assigns a pavement condition index based upon the density (area affected) and severity of the observed distress. The pavement management data is used to develop paving priorities, model pavement deterioration and forecast future pavement condition, and estimate the impact of different funding scenarios on the condition of the street network. The performance of the new Mercer Corridor pavements will be tracked over time using Seattle's asset management methodology.

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

The Seattle Department of Planning and Development will track growth in housing and employment in the South Lake Union Urban Center, as well as other urban growth areas that will benefit from improved access under the Mercer Corridor Project. Monitoring of housing and employment is done to track progress in meeting the City's and the region's growth management targets.

Benefits evaluated annually:

- *Daily traffic volumes*
- *Pedestrian counts at key intersections*
- *Freight movement data*
- *Employee mode choice*
- *Housing and employment growth*
- *Collision data*

Every two years:

- *Bicycle counts on Valley Street*

Every three years:

- *Pavement inspections*



Short-Term Job Creation & Retention

Direct Job Creation

The Mercer Corridor Project is shovel-ready, with design, environmental and right-of-way acquisition complete. This TIGER grant is the final piece of the Mercer Corridor funding package. Award of the TIGER grant will immediately create over 1,200 direct construction jobs and over 2,000 jobs overall, using the President's Council of Economic Advisors methodology to estimate the economic impact of government investment. Jobs will last for over two years while the project is completed.



Job Retention

In addition to creating direct construction jobs, the Mercer Corridor Project is critical to the retention of jobs in South Lake Union and Seattle's downtown, maritime and industrial areas. Seattle's two regional urban centers directly adjacent to the Mercer Corridor Project, South Lake Union and Uptown, contain over 35,000 existing jobs. Seattle's Center City, which includes South Lake Union and Uptown, as well as First Hill, Capitol Hill, and downtown Seattle, contains another 210,000 existing jobs, making it the Pacific Northwest's largest employment center.

This project will improve access to maritime and manufacturing jobs in Seattle's Duwamish and Ballard-Interbay Manufacturing and Industrial centers – the largest concentration of industrial jobs in the state of Washington. Together these centers currently contain over 80,000 jobs. Many of these jobs are in the high-paying maritime sector, where the average wage is over \$70,000 a year. In total, the Mercer Corridor project will help Seattle retain over 325,000 jobs.

Supported Job Creation

The Puget Sound region's award-winning plan for urban growth, Vision 2040, calls for population and employment growth to occur in dense regional urban centers. South Lake Union is one of these centers, and the Mercer Corridor Project is critical to meeting the region's growth targets. Over 22,000 new jobs are tied directly to growth related to the Mercer Corridor project in South Lake Union. Many of these jobs are in the life sciences sector, which has an average salary in Seattle of \$76,700 per year. As mentioned previously, the Mercer Corridor Project also provides improved access to other growth centers, supporting the creation of 50,000 new jobs in Seattle's Center City (includes the 22,000 jobs in South Lake Union) and 12,000 new jobs in the industrial centers mentioned above.



Equal Opportunity

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.

Seattle will enforce both federal and state prevailing wages and fringe benefits (see [agency 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 certain minority groups and women is a primary objective of this program.

Funding for this project is provided in part by FHWA, through WSDOT. WSDOT has a [federally approved plan for the utilization of disadvantaged business enterprises \(DBE\)](#). As required by law, Seattle will submit its engineer's estimate to WSDOT prior to advertising. WSDOT will establish a goal for DBE utilization for the Mercer Corridor Project based on an analysis of the availability of ready and eligible firms. The goal will become a condition of contract award.

SDOT will work with the Urban League's Contractor Development & Competitiveness Center (CDCC) prior to and during bidding to empower minority, women, disadvantaged and small construction firms to become more competitive by developing or improving their business operations and by providing access to contracts with private and public owners, developers, and prime contractors.



Readiness to Proceed

As mentioned before, the Mercer Corridor project is "shovel ready". Advertisement will start as soon as this TIGER grant is awarded. Design was completed early this year. SDOT has a detailed plan for construction of the project, and a construction management firm is already on board (see Technical Feasibility section). A package of bid-ready documentation was recently completed. State and national environmental documentation was completed in February 2009 with federal approval of the [Finding of No Significant Impacts \(FONSI\)](#) in May 2009.

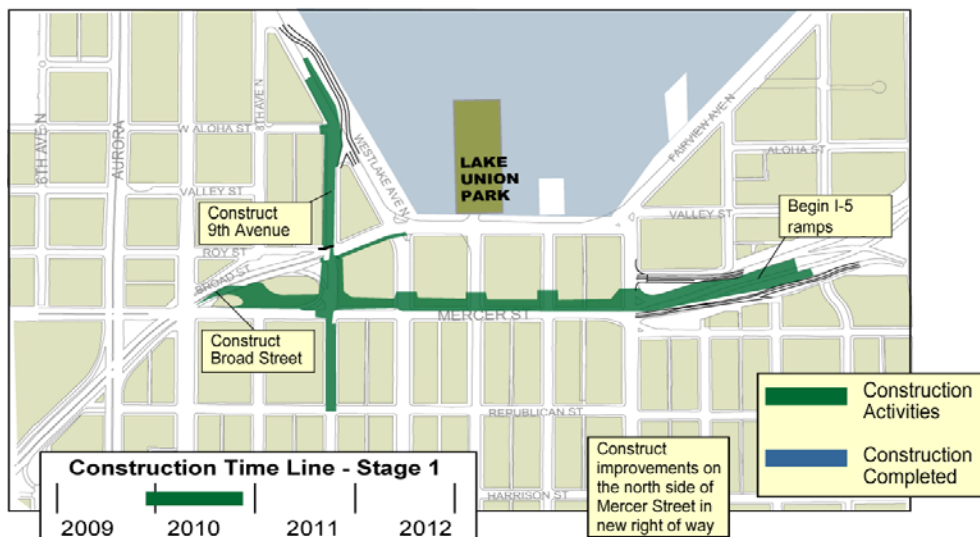
Legislative approvals are in place. The City Council has voted numerous times to continue to advance the Mercer Corridor Project and has approved SDOT's financing plan (see Financial Feasibility section below). The most recent ordinance adopted by Council was [Ordinance 122953](#), approved unanimously on April 16, 2009.

The Mercer Corridor project was developed as part of a very inclusive and extensive public planning process. The project is included in the [South Lake Union Neighborhood Plan](#) and the Puget Sound Regional Council's (PSRC) Metropolitan Transportation Plan (MTP), [Destination 2030](#), as well as the State Transportation Improvement Plan (STIP).

✓ Technical Feasibility

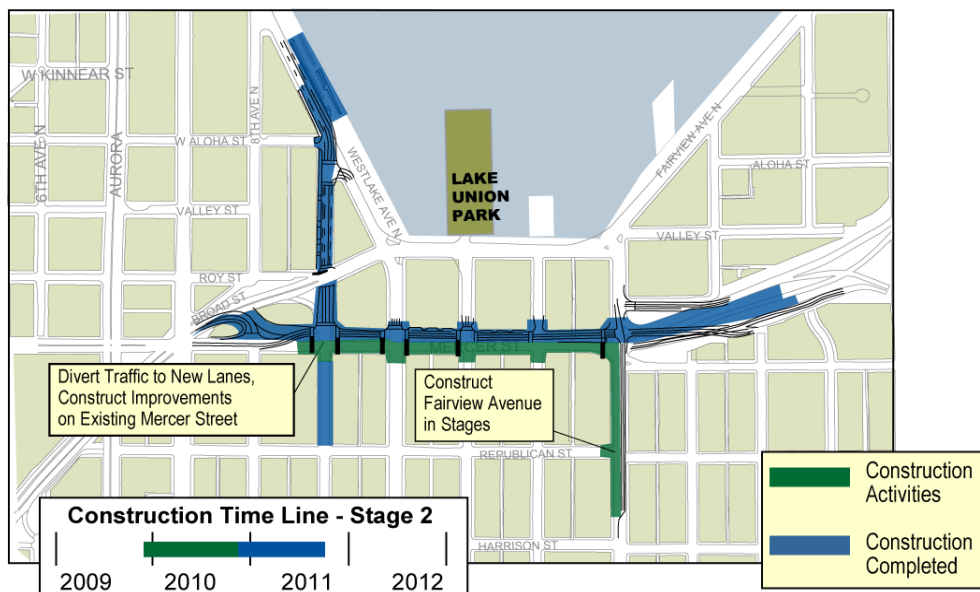
The Mercer Corridor Project is “shovel ready”. Design is 100 percent complete and ready to advertise for construction bids as soon as final funding is approved. The city plans to provide an eight-week period for contractors to put together their bid packages. By moving forward with the project as soon as possible, Seattle expects competitive bids in the current economic climate. A construction management firm is already under contract. Due to the magnitude and complexity of this project, as well as the volume of traffic that will be managed during construction, the city has prepared detailed construction staging plans in order to ensure consistent bids and help support public outreach planning efforts. This staged construction approach minimizes impacts to users of the corridor and keeps people and goods moving.

CONSTRUCTION STAGE 1



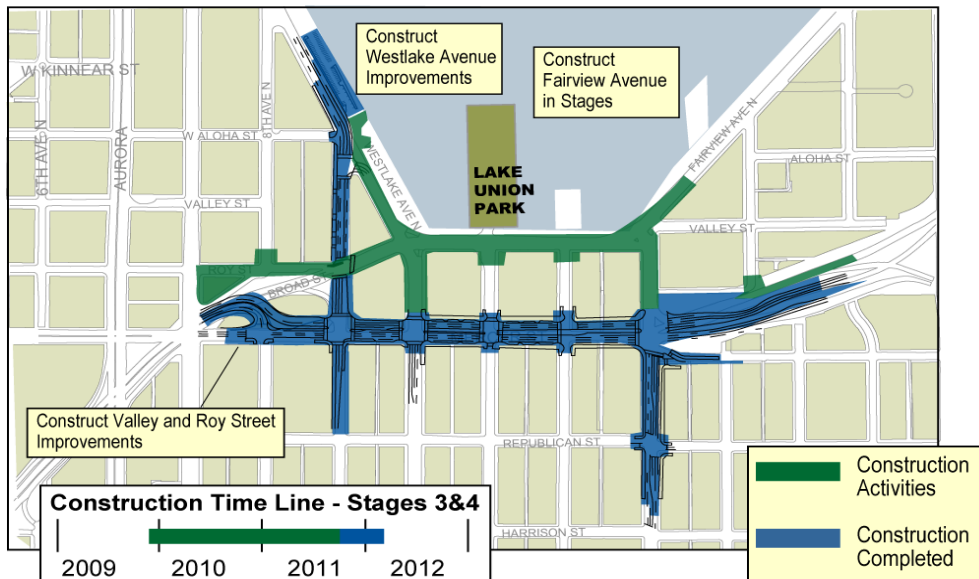
In **Stage 1**, the Seattle Department of Transportation (SDOT) will construct new westbound lanes along the north side of existing Mercer Street.

CONSTRUCTION STAGE 2



During **Stage 2**, the new lanes will serve existing eastbound traffic, while eastbound Mercer Street is rebuilt in its new location. Major east/west flow will be minimally interrupted.

CONSTRUCTION STAGES 3&4



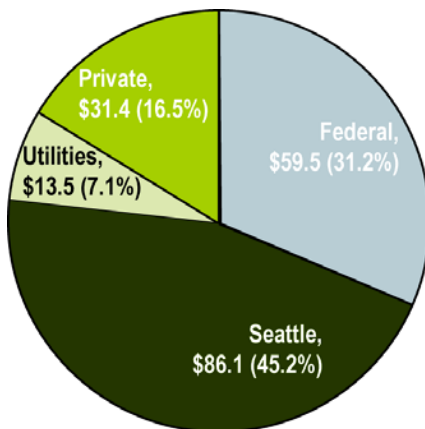
Following completion of Mercer Street construction, all through travel lanes operate on Mercer while Valley Street improvements are constructed.

Schedule

	2008	2009	2010	2011	2012
Environmental					
Design					
ROW					
Construction					



Financial Feasibility



This \$50 million TIGER grant request represents the final piece of the puzzle in moving the Mercer Corridor project to completion. TIGER funds will allow the city to fully fund the project. All TIGER funds will be used on the construction phase of the project. Funds will be obligated within 30 days of award, and bidding will commence immediately following obligation. This means an early start to this major capital project, employing hundreds of workers. The TIGER grant leverages \$140.5 million in secured funding, which represents over 70 percent of the funding needed for the Mercer Corridor Project. Over 90 percent of the secured funding is from local and private sources.

Seattle funds make up over 50 percent of the cost of the Mercer Corridor Project, \$99.6 million. These funds are included in the City's adopted

JOB CREATION and ECONOMIC STIMULUS

Capital Improvement Program (CIP). A portion of these funds will come from Seattle's public utilities. Most of Seattle's funds will come from municipal bonds and will be repaid using proceeds of the city's commercial parking tax which was implemented as part of the *Bridging the Gap* transportation funding package, approved by City Council and Seattle's voters in 2006. Parking tax revenues have been steadily growing, despite the economic downturn, and are a very stable source of revenue.

Private parties have committed to significant contributions in funding the Mercer Corridor project. These contributions include direct cash contributions of \$16.2 million, contributions of temporary construction easements valued at \$8.8 million, and environmental mitigation fees totaling \$6.4 million.

Seattle has secured \$9.5 million in regional competitive Surface Transportation Program (STP) funds from the PSRC for this major regional transportation improvement. The Mercer Corridor project was the highest ranked roadway improvement project in the Puget Sound region in PSRC's 2009 STP/CMAQ competition. None of Washington's allocation of American Recovery & Reinvestment Act (ARRA) funds were programmed to this project, so that the State could focus these funds on projects on the state highway system.

Mercer Corridor Project Budget (by phase)

(in \$ millions)	Phase			
	Design	ROW	Construction	Total
ARRA TIGER grant program	\$0.0	\$0.0	\$50.0	\$50.0
PSRC – STP	\$0.5	\$0.0	\$9.0	\$9.5
Seattle	\$14.1	\$52.5	\$19.5	\$86.1
Utilities	\$0.0	\$0.0	\$13.5	\$13.5
Private	\$0.0	\$8.8	\$22.6	\$31.4
Total Cost	\$14.6	\$61.3	\$114.6	\$190.5

Replacing or upgrading infrastructure in very poor condition in the corridor will reduce long-term operations and maintenance costs. These savings will offset the cost of new infrastructure provided in the corridor, such as ITS components. Finally, Seattle's *Bridging the Gap* transportation funding package provides a long-term, stable source of funding for maintenance of Seattle's transportation infrastructure.

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 directly designed and constructed a number of large capital projects, including the West Seattle Bridge (\$226 million) and Spokane Street Viaduct project (\$181 million). Seattle has also served as CA for smaller agencies and non-profits, assisting them to deliver projects. As a recipient of ARRA funding from a number of federal agencies, Seattle has put together a citywide accountability and reporting structure overseen by the Mayor of Seattle and City Council to assure the proper use of these federal funds.

SECONDARY CRITERIA



Innovation

The Mercer Corridor Project integrates many innovative design and construction-related features. It also incorporates private contributions through a voluntary mitigation program.

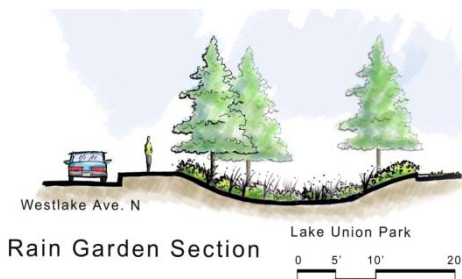
Congestion Management/Smart Growth: The Mercer Corridor project is part of Seattle's Center City Strategy, a different way of thinking about downtown Seattle and its nine adjacent neighborhoods. The strategy recognizes the need to develop transportation solutions for coming generations, creating a multimodal system that allows Seattle to grow without paving more of the city for automobiles. The Mercer Corridor Project is focused on building a livable, walkable, 24/7 community, with excellent access to the rest of the metropolitan area. As mentioned in the Sustainability section, South Lake Union is on track to receive [LEED-ND status](#).

Project Development: The Mercer Corridor project was developed in an inclusive manner, incorporating a variety of community stakeholders. Input was gathered in a number of ways, including public meetings, interviews, committees, even a truck rodeo. The result is a project with wide support.

Intelligent Transportation Systems (ITS): The project includes [ITS investments to support active traffic management](#). It will install variable message signs, closed circuit television (CCTV) equipment, signal detection, and new pedestrian countdown signals at every intersection. ITS elements will be connected to Seattle's state-of-the-art Traffic Management Center.

Energy-saving technologies: Low-energy street lighting meeting the Dark Skies Initiative is incorporated in the project. Pedestrian countdown signals will be equipped with LED lights instead of incandescent bulbs, and solar-powered parking pay stations are longer lasting, more cost effective equipment. The project includes LED sidewalk pavers and LED street lighting elements to enhance safety with an artistic flair. Several large art installations were designed with innovation, sustainability and safety in mind.

Natural drainage and sustainability features: The project will construct rain gardens and "wet medians" that naturally store and treat stormwater. This solution improves biodiversity, reduces pollution and runoff, and improves urban habitats along Lake Union Park. Structural soils and root barriers will be used to increase tree sustainability and to protect pavements and sidewalks. An irrigation system with an evapo-transmitter will minimize water usage. Contract specifications encourage the salvage and reuse of onsite materials and use of offsite recycled materials. "Green" construction vehicle use and contractor parking restrictions will help minimize greenhouse gas emissions during construction.



Mitigation Fee Payments: In October 2005 the City's Department of Planning and Development started a [voluntary transportation mitigation program](#) in the South Lake Union neighborhood. Instead of conducting their own transportation impact analysis as part of development review, developers can opt to pay a per square foot mitigation payment. As a result, \$6.4 million has been or will be contributed from private and not-for-profit parties for the Mercer Corridor Project.

SECONDARY CRITERIA



Partnerships

The Mercer Corridor Project is the result of a strong collaboration among a broad range of participants and integration with other public infrastructure agencies. SDOT's project partners, including both private and public sector institutions, are assisting to fund the project.

Jurisdictional and Stakeholder Collaboration

The Mercer Corridor Project has been developed using a collaborative approach with a range of stakeholders, including non-profit community groups. The process started with a planning study analyzing alternatives. As a result of public and stakeholder comments, technical analysis, and guidance from the Seattle City Council, the Two-Way Mercer Alternative was identified as the city's preferred alternative. SDOT then conducted environmental review of the project, conducting a federal NEPA Environmental Assessment process.

During the EA process, a Mercer Corridor Stakeholder Committee was created by a diverse mix of stakeholders in the South Lake Union and Queen Anne neighborhoods independently from the project. The Committee, comprised of 42 individuals, met 15 times throughout 2006, reaching consensus on a package of recommendations for the Mercer Corridor. Regional jurisdictions, through the local Metropolitan Planning Organization (MPO), PSRC, have agreed that the Mercer Corridor is a high priority in the region and awarded it \$9 million in competitive STP funding in 2009. The Mercer Corridor project has received [letters of support](#) from 55 individuals, businesses, agencies and non-profits.

In January 2009, the Governor of the State of Washington, the King County Executive, and the Mayor of Seattle announced their recommendation to replace the State Route 99 Alaskan Way Viaduct with a system of transportation improvements, including two-way Mercer Street.

In addition, private parties have agreed to contribute \$31.4 million to completing the project, over 16 percent of the cost. Property owners that have contributed include Vulcan Development, the Gates

Foundation, and the University of Washington.

Partnerships

- *Private parties are contributing \$31.4 million to the Mercer Corridor project*



Disciplinary Integration

As mentioned above, the Mercer Corridor Project is supported by a wide range of public and private entities. The design has been carefully coordinated with Seattle City Light, Seattle Public Utilities, the Seattle Parks and Recreation Department, WSDOT, the Department of Planning and Development, King County Metro, the Port of Seattle, University of Washington, the Museum of History and Industry and other public agencies.

The project retrofits and improves public utility infrastructure in the corridor. The public utilities that have infrastructure in the corridor have agreed to contribute revenues from utility rates to pay for improvements that are part of the project. Utility infrastructure improvements that are part of the Mercer Corridor project include

SECONDARY CRITERIA

water, sewer, drainage, and electrical distribution and transmission.

The Mercer Corridor Project also integrates with and provides connections to cultural and educational resources. The Mercer Corridor provides access to the Seattle Center, Lake Union Park, the Olympic Sculpture Park, Seattle Pacific University, the future site of the Museum of History and Industry and other important facilities. The corridor is adjacent to Lake Union Park, and the north side of Valley Street will integrate seamlessly with the park.

Project Parties

[Washington State Dept of Transportation \(WSDOT\)](#)
[Puget Sound Regional Council \(PSRC\)](#)
[Seattle Department of Transportation \(SDOT\)](#)
[Seattle Public Utilities \(SPU\)](#)
[Seattle City Light \(SCL\)](#)
[Vulcan Inc.](#)

[Gates Foundation](#)
[University of Washington \(UW\)](#)
[Seattle Parks Department/Seattle Parks Foundation](#)
[Seattle Center](#)
[Port of Seattle](#)

SUMMARY OF PROJECT BENEFITS

It's called the Mercer Mess for good reason. For more than 40 years, the Mercer Corridor has been one of Seattle's most significant transportation challenges. It divides neighborhoods, isolates destinations from nearby residents, clogs city streets, and stalls traffic on Interstate 5 and SR 99. Every day the "Mercer Mess" makes it difficult for over 100,000 people - pedestrians, bicyclists, transit users, truckers and motorists - to connect to the places where they live, work and socialize.

Improving this vital east/west corridor is critical to keeping people, goods and services moving in Seattle and throughout the Puget Sound region. The Mercer Corridor project provides a context-sensitive, sustainable solution. With broad-based community collaboration, Seattle has identified a number of improvements that will both increase capacity and improve mobility for all users throughout the Mercer Corridor.

Benefits from the Mercer Corridor project are:

- ✓ Improves mobility for over 100,000 persons each day - improves flow on Interstate 5 and regional network
- ✓ Creates 1,200 direct construction jobs
- ✓ Supports 22,000 new jobs in South Lake Union
- ✓ Improves links to Port facilities, industry and research/development uses
- ✓ Integrates with land-use, creates jobs/housing balance and supports walking, biking, transit and freight
- ✓ Fixes obsolete public infrastructure up to 115 years old
- ✓ Reduces energy use and greenhouse gas emissions - improves water quality and increases the tree canopy
- ✓ Improves safety, fixing six high accident locations

This TIGER grant request for \$50 million is the final piece of the puzzle. The Mercer Corridor project is "shovel ready" with secured funding, design complete, all environmental approvals and agreements for right-of-way and private contributions.