The Seattle Department of Transportation

Seattle Center City Connector Transit Study

Locally Preferred Alternative (LPA) Report Appendix A

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Seattle Center City Connector Transit Study

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APPENDIX A STATEMENT OF PURPOSE AND NEED FOR THE SEATTLE CENTER CITY CONNECTOR PROJECT

Project Purpose

A top priority identified in the Seattle Transit Master Plan (TMP) is to improve Center City transit services—increasing transit capacity, enhancing transit service quality and reliability, and improving transit options for residents, workers, and visitors traveling between and within Center City neighborhoods and attractions. The purpose of the Seattle Center City Transit Connector project is to serve the growing demand for Center City circulation trips,[1] with a mode and alignment that is highly legible, easy-to-use for a variety of trip purposes, and that provides continuity of travel between the downtown commercial core and adjacent Center City neighborhoods served by the South Lake Union Streetcar and the First Hill Streetcar. Figure A-1 illustrates potential Center City Connector street alignment options that were identified as part of the TMP.

Project Need

The need for the Center City Connector project is based on:

- **Significant existing population and employment and projected growth in the Seattle Center City**. Seattle's Center City neighborhoods have a significant concentration of households and employment, and are forecast to see employment growth of 60% and residential population growth of 97% by 2030.
- **Growth in demand for Center City circulation trips.** Recent analysis found high demand for trips between Center City neighborhoods and for accommodating "last mile" connections for trips using existing and planned local and regional transit services.
- **Constraints on expansion of Center City transportation capacity.** There is a limited number of north-south through streets available for transit and existing and planned transit will utilize much of the available capacity.

[1] For the purposes of this study, Center City circulation trips include (1) trips between and/or within Center City neighborhoods, (2) trips connecting major attractions and destinations in the Center City, and (3) last-mile connections from other local and regional transit services to jobs, human/social service centers, etc.

- **Special mobility needs of tourists, visitors, and casual users in the Center City.** Approximately nine million annual tourists visit Seattle each year and many rely on transparent and easily understood transit connections.
- **Affordable transportation access to key social and human services located in the Center City.** A large concentration of social service agencies in the Center City relies on good transit connections.
- **Connections for low-income workers who live in the Center City to jobs in the Center City.** There is a growing concentration of affordable housing and low- and moderate-income jobs in the Center City.
- **Reduction in greenhouse gas (GhG) emissions from private vehicle travel and traffic congestion.** Seattle's Climate Action Plan to reduce GhG emissions relies on providing higher-capacity transit to support dense mixed-use neighborhoods in the Center City.

Figure A-1 Center City Connector Transit Corridor Alignment Options (based on the Seattle Transit Master Plan)

Source: Map adapted from Seattle Transit Master Plan Summary Report, 2012, Figure 3-16

Introduction

The Seattle Center City Connector Transit Study will evaluate a range of transit improvements in Seattle's Center City. It specifically focuses on connecting north and south downtown and the existing South Lake Union Streetcar and planned First Hill Streetcar (currently under construction). This document describes the purpose and need for the project. The study, formally known as an alternatives analysis (AA), is planned to take approximately 14 months and will result in the recommendation and selection of a locally preferred alternative (LPA). The process will include extensive input from the public, stakeholders, and local, regional, state, and federal agencies. Public input on the proposed statement of purpose and need provided in this document was gathered at the first public open house in February 2013. This input was incorporated into the project purpose and need and will inform the evaluation criteria used in the analysis of corridor alternatives.

Study Corridor Description

Seattle's Center City area encompasses 10 neighborhoods – Uptown, South Lake Union, Capitol Hill, Belltown, Denny Triangle, Pike/Pine, Downtown Commercial Core, First Hill, Pioneer Square, and the Chinatown/International District. Figure A-2 provides an overview map of the Center City, including the study area. The core of Seattle's Center City resembles an hourglass where a limited set of north-south arterial corridors carry people and goods through the downtown core, the narrow neck of the hourglass. There is limited ability to enhance surface street capacity through the downtown core. Several of the north-south arterials (2nd, 3rd, 4th, and 5th Avenues), and the Downtown Seattle Transit Tunnel (DSTT) carry transit through downtown, but high utilization, limited expansion capacity, and increased future demand limit the ability of existing transit modes to provide access between key employment centers, retail, attractions, and residential populations.

The Center City Connector Transit Study will evaluate potential north-south transit alignments west of I-5 between the Lower Queen Anne, Uptown, and South Lake Union neighborhoods to the north, and the Chinatown/International District and South Downtown area including the King Street Station Multimodal Hub to the south. As mentioned above, the study will focus on leveraging existing City and regional partner investment in Center City streetcar lines by connecting existing termini at the north and south ends of downtown. The study may also identify transit opportunities or investments supporting future implementation of the Transit Master Plan or the Seattle Streetcar Network, which may be phased in through this project or as a part of future projects.

Figure A-2 Center City Area Map

Policy Background and Framework

High quality, high capacity connections between the downtown commercial core and other Center City neighborhoods are essential for Seattle to maintain a high quality of life for all of its citizens and visitors, succeed in a highly competitive global economy, and encourage development that supports the human and environmental health of the region. A strong Center City represents smart growth at its best, building a sustainable economy and vibrant, walkable urban neighborhoods. A strong multimodal transportation system is critical for economic growth and vitality in downtown Seattle and the region.

As described above, the transportation system in Seattle's Center City faces some of the most challenging geography and access constraints of any city of its size in North America. To address these constraints and allow for Center City growth, Seattle has developed a series of transportation planning documents that help support sustained growth in the Center City. These plans include:

- **Seattle Comprehensive Plan**. The Seattle Comprehensive Plan (2005) identifies an Urban Village Strategy to promote job and housing growth in concentrated centers that can be efficiently accessed and connected by a multimodal transportation system, including high-quality, frequent transit. A major update to the Seattle Comprehensive Plan is underway and elements of the Plan will be updated incrementally through 2015. A new "Transit Communities" subsection of the plan calls for the City to "leverage local and regional transit investments by aligning and coordinating land use policies and public investment to foster the development of strong residential and business communities oriented around transit."
- **Transit Master Plan (2012) and Seattle Transit Plan (2005).** The Transit Master Plan (TMP) recommended high-capacity transit and bus priority corridors citywide and for the Center City. The TMP identified the Center City Connector project as one of the top priorities for transit investment. The 2012 TMP supplanted the 2005 Seattle Transit Plan, which was developed to support the creation of transit connections between urban villages. This concept, referred to as the Urban Village Transit Network (UVTN), stated that high quality transit service and future development should be concentrated along travel corridors that meet criteria including high ridership and productivity potential.
- **Action Agenda.** SDOT's 2012 Action Agenda outlines policies and actions oriented around five core principles: (1) Keeping it Safe, (2) Focusing on the Basics, (3) Building Healthy Communities, (4) Supporting a Thriving Economy, and (5) Providing Great Service. Of particular relevance to the Center City Connector Transit Study, the Action Agenda includes policies to:
    - Maximize the environmental benefits of the transportation system
    - Increase mobility and access for everyone

- Make transit the efficient, affordable choice for a variety of trips
- Increase efficient and affordable access to jobs and education
- Support Center City and neighborhood business district access

- **Seattle Center City Circulation Study.** The Center City Circulation Study, completed in 2003, considered several independent transportation projects that affect the Center City, including light rail, bus, monorail, streetcar, ferry terminal, Alaskan Way Viaduct and Seawall (AWVS) Replacement, and bicycle and pedestrian projects. A central recommendation of the study was to create a fast, frequent, reliable and legible transit network that connects the city's Urban Centers and Urban Villages to each other and the Center City, as well as upgraded connections that facilitate connectivity and circulation within the Center City itself.
- **Seattle Center City Access Strategy:** The Center City Access Strategy, initiated in 2004, promotes recommendations of the Center City Circulation Study. Its goals include: creating a livable and walkable Center City; integrate and simplify the transit system; and accommodate anticipated growth. It identified 23 critical projects to improve access to downtown by expanding rail and bus networks; developing parking and demand management strategies; and enhancing the bicycle and pedestrian environment.
- **Streetcar Network Plan.** The Seattle Streetcar Network Development Report (2008) evaluated route options for the most promising potential streetcar corridors and routes in the Seattle Streetcar Network Concept that was approved by the City Council in February 2008.[2] The report evaluated potential corridors with respect to considerations including funding opportunities, cost and construction issues, travel time, connectivity and operating efficiency benefits, ridership potential, and development potential. The City Council subsequently adopted a resolution supporting a streetcar network in Seattle and prioritizing the four lines shown in the map in Figure A-3, including the Central Line (blue).[3]

[2] City of Seattle, City Council Resolution Number 31042, http://bit.ly/UHLdGQ

[3] City of Seattle, City Council Resolution Number 31091, http://bit.ly/13gVyh8

Figure A-3 Seattle Streetcar Network Concept Map

The Streetcar Network Plan includes the Central Line along First Avenue, shown in blue.

Source: Seattle Streetcar Network Development Report

- **Urban Mobility Plan/Alaskan Way Viaduct.** The Urban Mobility Plan (UMP) (2008) defined a "systems" solution for replacing the Alaskan Way Viaduct (AWV), including enhanced transit service; surface street and highway improvements; and other transportation programs and policies. This solution was analyzed as part of the Central Waterfront Partnership Process, which included the City of Seattle, King County, and the Washington State Department of Transportation (WSDOT) in a collaborative effort to select an AWV replacement approach. The final UMP report is based on the I-5/Surface/Transit Hybrid scenario developed as part of the Partnership Process. Among a variety of Center City streetcar connections analyzed, the hybrid scenario included a streetcar line along First Avenue connecting Pioneer Square, Seattle Center, and Uptown/Queen Anne.

Source: http://www.seattle.gov/transportation/docs/awvFinal_BoredTunnel_folio_Jan09.pdf, p. 3

- **Central Waterfront.** The Central Waterfront Project extends along the Elliott Bay waterfront from the Stadium District and Pioneer Square to Olympic Sculpture Park. A Waterfront Concept Plan was completed in 2006, anticipating future replacement of the AWV and Elliott Bay Seawall. An effort currently underway to develop more detailed design concepts has resulted in a Concept Design and Framework Plan (July 2012) for the central waterfront. The plan's transit framework includes a proposed streetcar or trolley bus on First Avenue, depending on the alignment selected in the Center City Connector Transit Study.
- **Economic Development**. The Seattle Jobs Plan for 2012 has four organizing themes: Innovate, Educate, Build, and Partner. Of particular relevance to the Center City Connector Transit Study, the plan calls for connecting "Seattle's neighborhoods with

high capacity transit, including rail, to provide residents and businesses with an affordable, reliable way to get around (the) city."[4]

- **Climate Action Plan.** Seattle's 2012 Climate Action Plan develops a Carbon Neutral Scenario for the city, consisting of strategies that would reduce greenhouse has (GhG) emissions by 90% by 2050 relative to 2008 levels. Within the transportation sector, this scenario assumes a 30% reduction in travel by light-duty vehicles (cars and light trucks)[5] travel by 2030 and a 40% reduction by 2050. It targets expansion of transit infrastructure and service sufficient to increase transit's share of passenger miles from 8% today to 25% by 2050 (a level achieved in cities such as San Francisco). The plan also notes that denser urban development can help facilitate achievement of travel reduction strategies and the carbon neutral goal.

Existing and Planned/Funded Transit in the Center City

Figure A-4 provides an overview of existing and funded transit services and facilities in the Seattle Center City. Transit services include bus services operated by King County Metro, Sound Transit, and other regional providers, which carry the majority of local and regional transit trips. Two Seattle RapidRide[6] lines began operating in 2012 with service to downtown Seattle. Link light rail, Sounder commuter rail, the Seattle Center monorail, water taxis, ferries, and the South Lake Union streetcar are other transit modes that serve the Center City. The City of Seattle owns the monorail and the streetcar; a private entity, Seattle Monorail Services, operates the monorail and the City and King County Metro operate the Streetcar.

Key downtown transit infrastructure includes the 3rd Avenue transit way and the Downtown Seattle Transit Tunnel (DSTT) and major multimodal hubs at Westlake Center, King Street, and Colman Dock. Planned transit services currently under construction include the First Hill Streetcar and expansion of Link light rail to Capitol Hill, the University District, and Northgate. The City of Seattle has secured funding for planning and design of the proposed Broadway Streetcar extension of the First Hill Streetcar, north of the First Hill line's planned terminus at Denny Way.

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[4] Seattle Jobs Plan, 2012, p. 6. http://www.seattle.gov/mayor/jobsplan/

[5] As defined by the National Highway Traffic Safety Administration, light-duty vehicles include minivans, sport utility vehicles, and trucks with gross vehicle weight less than 8,500 pounds.

[6] RapidRide is King County Metro Transit's BRT service. RapidRide operates primarily in shared traffic lanes, but does have exclusive (Business Access Transit) lanes for segments of the corridor, uses intersection signal priority treatments, and has enhanced station features and livery.

Figure A-4 Existing and Planned Transit Services and Facilities

Project Need Background

The need for the Seattle Center City Connector project is based on:

Significant Population and Employment and Projected Growth in the Seattle Center City

The 10 neighborhoods within Seattle's Center City currently contain over 158,000 workers and 24,500 residents. Center City neighborhoods – including Uptown, South Lake Union, Belltown, the Denny Triangle, the Commercial Core, Pioneer Square, and the Chinatown/International District – have the highest employment and population density citywide. By 2030, growth targeted for the area is expected to result in a 60% increase in jobs and a 97% increase in residents, with an estimated total population of over 300,000 people living or working in the Center City. Between 2004 and 2010, development in the South Lake Union neighborhood exceeded projections developed for the City in 2002, with over 13,000 jobs added (74% of the City's 2024 comprehensive plan goal for South Lake Union) despite the impact of the economic downturn.[7]

The Center City is projected to account for over 44% of overall population growth and 63% of overall job growth within the City of Seattle between 2008 and 2030. Figure A-5 illustrates projected population and employment growth in Urban Centers and Villages over this time period. The Denny Triangle, Downtown Commercial Core, and South Lake Union are targeted for substantial employment growth. Significant residential growth is planned in Belltown, Denny Triangle, First Hill, and South Lake Union. Belltown – a neighborhood at the center of the Center City Connector study corridor – is expected to experience the highest projected population growth of any city neighborhood between 2008 and 2030.

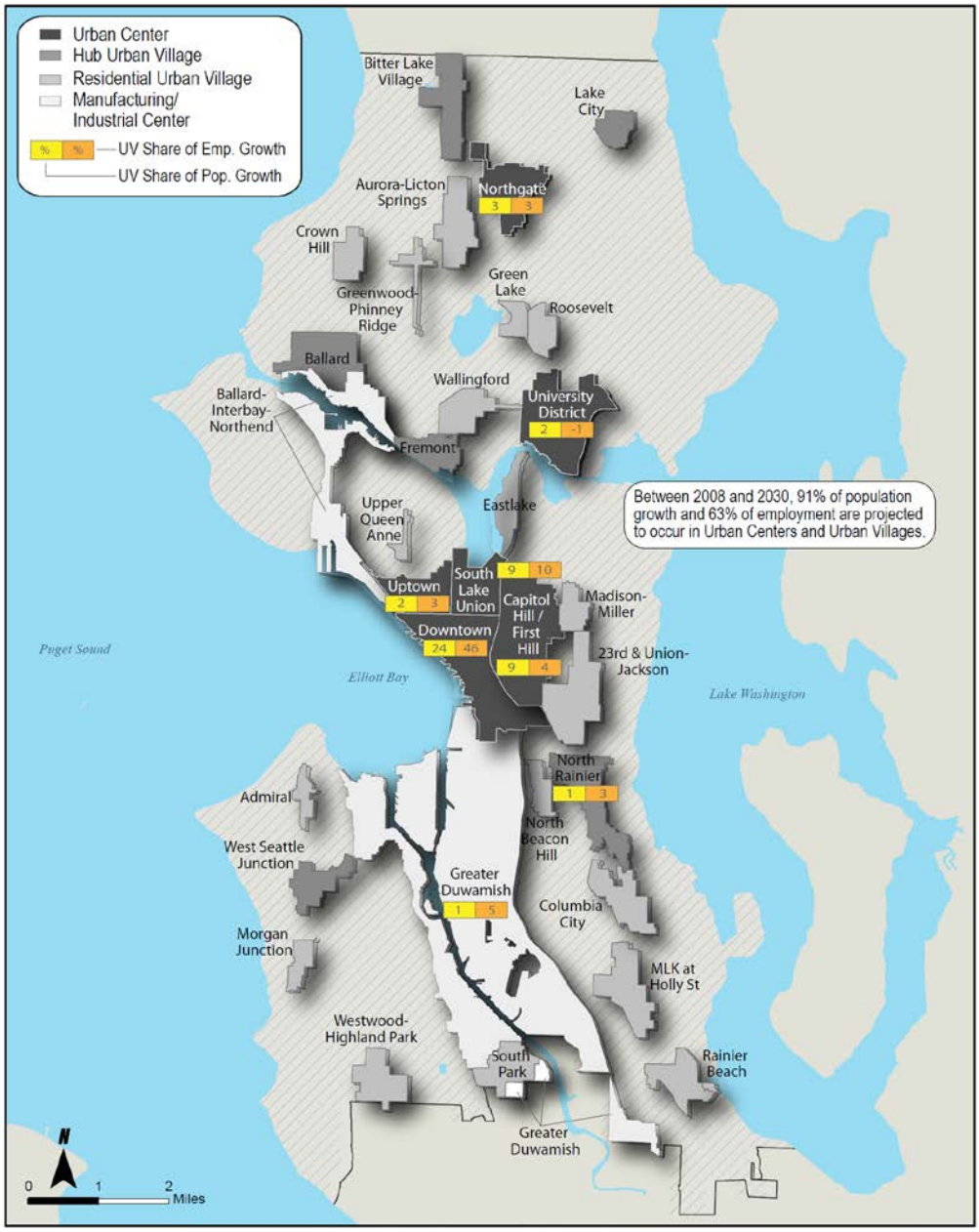
Recent upzoning amendments to the Seattle Comprehensive Plan will further encourage high-density residential housing in areas outside the main office core and greater office development in the downtown core. An example of this investment is the Daniels/Nitze-Stagen development that broke ground in 2011 on the Century-Link Field North parking lot adjacent to King Street Station at the south end of the Center City Connector study corridor. This development adds 668 residential units, 35,000 square feet of retail, and 420,000 square feet of commercial space in the first phase of the development. In addition, Amazon.com announced plans to develop three office towers – nearly 3.3 million square feet of office space and 66,000 square feet of shop and restaurant space – on three blocks in the Denny Triangle.

The upzoning regulations are also projected to promote affordable housing over the next 20 years. In South Lake Union, an over 11,000 additional housing units are targeted by 2031 under the upzoning regulations, beyond the number of units that were either completed or

[7] South Lake Union Development Update, 2004-2010. http://www.seattle.gov/economicdevelopment/pdf_files/SLU%20Development%20Update%20FINAL%205-25.pdf

received a building permit in 2012. Over 4,000 of these new units are targeted to be affordable units, i.e., by households earning 0-80% of the area median income (AMI).[8]

Figure A-5 Projected Growth in Urban Centers and Villages, 2008-2030



Source: PSRC and City of Seattle projections; Seattle TMP Summary Report, Figure 1-2

[8] Housing: South Lake Union 2012 Update.
http://www.seattle.gov/dpd/cms/groups/pan/@pan/@plan/@proj/documents/web_informational/dpdp022279.pdf

Growth in Demand for Center City Circulation Trips

The Center City Connector corridor is characterized by strong market demand for short trips between the 10 neighborhoods that comprise the Seattle Center City and the many destinations, employment sites and services in the area. Recent analysis conducted for the TMP found high demand for trips between downtown, the International District, Lower Queen Anne, South Lake Union, and Denny Triangle, First Hill, Capitol Hill and other neighborhoods. Figure A-6 shows all daily tripmaking in the Center City, including home-based work and all other trips. A significant number of trips are made throughout the day between all market areas in the central part of the city. Most of these trips are relatively short distance, but are longer than the distance many people will choose to walk and often include challenging grades. Frequent and reliable transit service between these activity centers has the potential to attract many of these trips in the future. Planned development and projected growth in Center City population and employment is likely to only intensify the strong demand for Center City circulation trips, and the need for transit to help serve this increased demand.

Stakeholders interviewed as part of this project included over 40 individual stakeholders and stakeholder groups representing a range of interests and geographies for which a new Center City transit line could improve access or connectivity.[9] Stakeholders consistently indicated a strong desire for enhanced transit connections between existing and funded investments in bus and rail service, such as the existing South Lake Union streetcar, the planned and funded First Hill Streetcar, and RapidRide. In particular, stakeholders felt a connection between the South Lake Union and First Hill streetcar lines would greatly enhance connectivity between key Center City destinations.[10]

There is also increased demand for last-mile transit service from the developing regional rail system that includes Link light rail and Sounder commuter rail, and for connections to/from/between major transit hubs, such as Westlake, Colman Dock, and King Street. Despite a high intensity of bus service in and through the Center City Connector corridor, few routes are directly oriented to Center City travel markets or last-mile connections from regional transit hubs. Moreover, King County Metro bus service was re-routed from 1st Avenue to the 3rd Avenue transit way in 2011, leaving First Avenue without continuous transit service through downtown.

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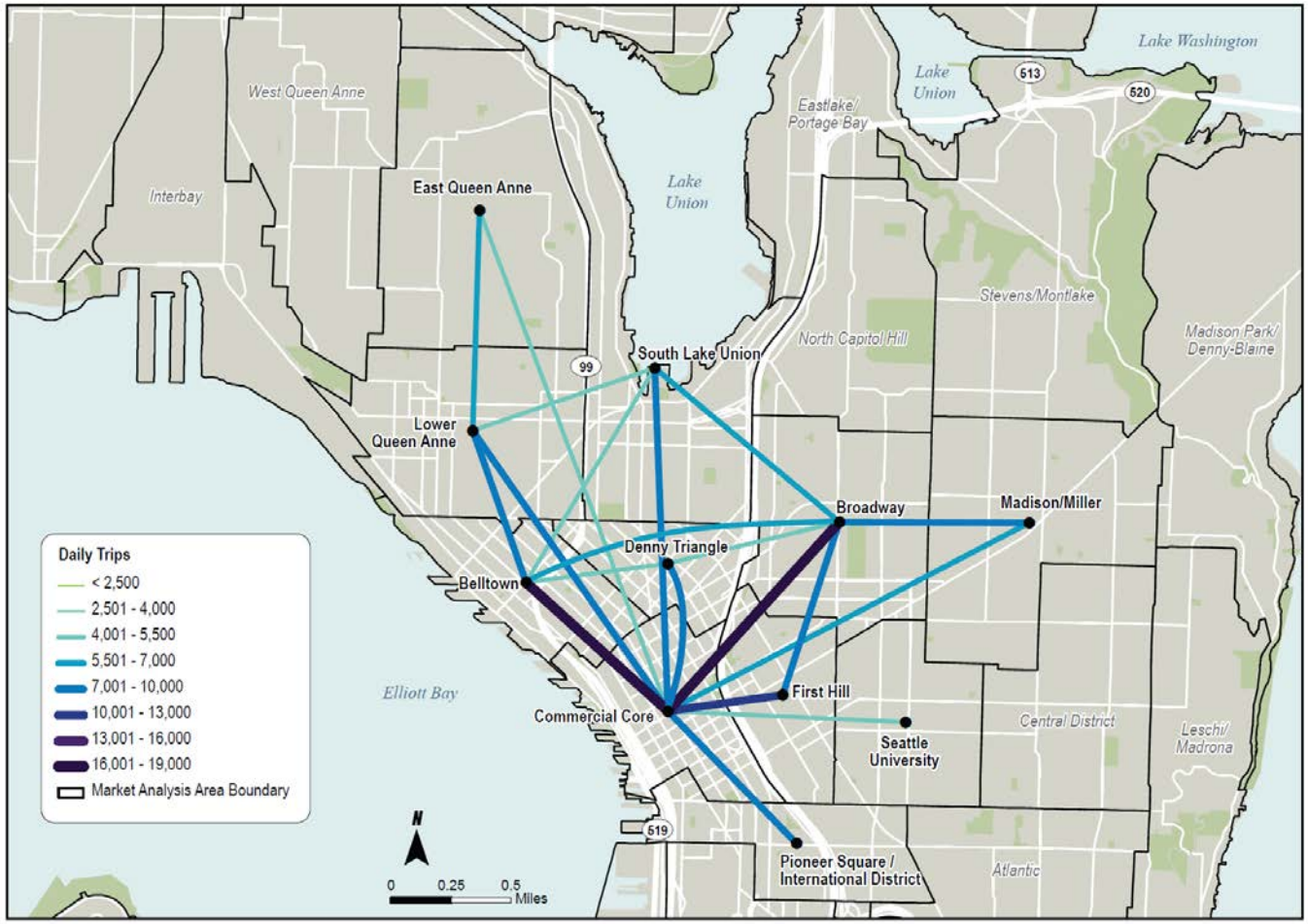
[9] A complete list of stakeholders is provided in the Stakeholder Interviews Findings memorandum.

[10] Stakeholders were asked about the value of potential alignment options as shown in Figure A-1. Almost universally stakeholders indicated that the 1st Avenue alignment was the preferred option due to its ability to connect major civic and activity centers, several major retail and cultural districts, and provide north-south circulator for visitors to the Central Waterfront.

Figure A-6 Center City Travel Demand



Note: This map illustrates major origin-destination travel pairs for all trips and modes in the Seattle Center City.

Source: City of Seattle Travel Demand Model; Seattle TMP Briefing Book, Figure 2-26

Constraints on Expansion of Center City Transportation Capacity

Transportation capacity is already constrained in the Center City, including (1) inadequate commuter access capacity, (2) limited capacity on the 3rd Avenue transit way, and (3) high passenger utilization on existing transit routes serving downtown and the surrounding neighborhoods.

1. **Inadequate commuter access capacity in a mature transportation system with no new rights of way, a discontinuous street system, and reduced freeway portals (due to removal of the Alaskan Way Viaduct)**

   Over half of the surface street capacity in Center City is lost due to street grid discontinuities. Of the nine north-south downtown street corridors (Alaskan Way through 8th Avenue S), only four are continuous through the Center City. The 28 north-south street corridors between Elliott Bay and Lake Washington are funneled to four local bridges that cross the Lake Washington Ship Canal. Altogether, about 70% of Center City streets are dead ends, limiting their usefulness for traffic capacity and limiting solutions to extend and strengthen the street grid. The location of I-5 in downtown exacerbates Center City transportation capacity constraints. There are a limited number of freeway ramps leading in and out of downtown, focusing high volumes of peak-hour traffic on a relatively small number of access points.

   The lack of capacity through the Center City is made more acute by the replacement of the Alaskan Way Viaduct, a limited access facility on Seattle's waterfront, which currently has access ramps into the center of Seattle's downtown. These ramps are currently used by a number of local and regional bus routes. Upon replacement of the Viaduct, these ramps will be eliminated and bus service on the Viaduct will be moved to surface streets.

2. **Limited capacity of, and increased future demand on, the 3rd Avenue transit way and other transit-carrying surface streets**

   Third Avenue is a major north-south transit corridor through downtown and carries many local and regional bus route services. The Third Avenue transit way is approaching peak period transit vehicle capacity and is likely to reach capacity in the near future given projected transit demands and planned projects. Metro's three planned RapidRide BRT-style lines focus their downtown operations on Third Avenue. In addition, the extension of Link light rail to the north (to Capitol Hill, the University District, and Northgate) will force the remaining bus routes currently in the Downtown Seattle Transit Tunnel (DSTT) onto the surface streets by approximately 2020 (and potentially sooner, depending on rail and bus volumes in the tunnel and actual operational experience).

   Furthermore, bus service along the Third Avenue is not designed to serve local circulation trips. While it does provide this function, it is secondary to serving the mobility needs of citywide and regional customers accessing and leaving the Center

City. Local bus circulation is also more difficult with the elimination of the Ride Free Area in Downtown, and the requirement that riders now pay upon entering buses, which slows boarding times. Stop spacing for most routes is every four blocks, which is longer than is optimal for local circulation. And, it can be difficult, particularly for visitors or infrequent transit riders, to determine what extent of the transit way is served by any given bus line, since some routes do not run the full length of the transit way.

In addition, the Bicycle Master Plan is expected to identify locations of downtown cycle tracks, which could impact north-south traffic-carrying capacity through downtown.

3. **High passenger utilization on existing transit services serving connections between Center City neighborhoods**

   Currently, routes traveling through the Commercial Core from Lower Queen Anne to the Chinatown/International District frequently run at 110% of seated capacity during peak periods. Increased capacity (e.g., higher frequency and/or higher capacity vehicles) is needed to ensure transit remains a comfortable, reliable, and convenient travel mode for passengers making local trips within the Center City and between the Center City and adjacent neighborhoods. Figure A-7 illustrates passenger loads along transit corridors in the Center City.

Figure A-7 Downtown Passenger Load

Source: Seattle TMP Briefing Book, Figure 4-18. Data from King County and City of Seattle

Special Mobility Needs of Tourists, Visitors, and Casual Users in the Center City

Downtown Seattle is home to numerous regional activity centers. As the core of the region, it is the established cultural and civic center, attracting local visitors from adjacent and surrounding communities. Approximately nine million visitors spend $5 billion in Seattle and King County annually, including nearly $500 million on local transportation. Tourism revenue supports jobs for more than 49,000 people in the region.

Transit supports Seattle's tourism economy, helping to make the city an attractive destination for regional, national, and international visitors. Over half of these visitors arrive

in Seattle by air, train, or means other than a private car. A highly transparent, visible, and legible circulation system for visitors, tourists, and casual users is needed to connect key attractions in the Center City.

Connections between retail districts are needed to support a vital local economy (e.g., Pioneer Square, Pike Place Market, Chinatown/International District, Belltown, and the commercial core). Downtown transit service must also meet the increased demand for access to Seattle's entertainment and cultural centers, such as the Waterfront, Seattle Center, and the Olympic Sculpture Park. This includes local transit connections to these destinations from the regional network. Figure A-8 provides an overview of major cultural assets and visitor destinations in the Center City.

Figure A-8 Major Center City Cultural Assets and Visitor Destinations

Cultural	Institutional/ Educational	Recreational/ Tourism	Shopping/Dining
▪ Seattle Art Museum (SAM) ▪ Seattle Asian Art Museum ▪ SAM Waterfront Sculpture Park ▪ Seattle Aquarium ▪ Seattle Children's Museum ▪ Pacific Science Center ▪ Experience Music Project ▪ Seattle Center Attractions (Various)	▪ Seattle and King County Administrative Offices ▪ Seattle City Hall ▪ King County Government Services ▪ Sound Transit Offices ▪ Seattle, King County, and Federal Courthouses ▪ Seattle Central Library ▪ Seattle Central Community College ▪ Seattle University ▪ First Hill Hospitals and Medical Offices	▪ CenturyLink Field ▪ CenturyLink Event Center ▪ Safeco Field ▪ Key Arena ▪ Memorial Stadium ▪ Convention Center ▪ Bell Harbor Conference Center ▪ Central Waterfront Attractions ▪ Elliott Bay Waterborne Attractions	▪ Pike Place Market ▪ Downtown Retail Core/Westlake Shopping and Hotel District ▪ Pioneer Square Historic District ▪ Chinatown/International District ▪ Belltown Retail District ▪ South Lake Union Commercial Businesses

Affordable Transportation Access to Key Social and Human Services Located in the Center City

Seattle's Center City has the highest concentration of services for homeless and vulnerable populations in the Puget Sound region. These services include the Downtown Emergency Service Center (DESC), Orion Center, the Pike Place Market Foundation, and the Downtown Food Bank. There are over 9,000 affordable housing units, i.e., income-restricted to 0-80% of the AMI, located throughout the Center City, of which nearly 54% are restricted to those earning up to 30% of the AMI and 88% are restricted to those earning up to 60% of the AMI.[11] A large concentration of affordable housing is at Yesler Terrace at the corner of E Yesler Way and 12th Avenue. This site will be the location of a planned 5,000-unit Housing and Urban Development (HUD)-funded mixed-income development, being developed by the Seattle Housing Authority. Over 1,800 of these units will be for people earning below the AMI for Seattle.[12]

Connections for Low-Income Workers who Live in the Center City to Jobs in the Center City

Concentrations of low- and moderate-income workers both reside and work in and around the Center City and need affordable and reliable transportation access. Figure A-9 illustrates concentrations of home locations for low- and moderate-income workers who both live and work in the Center City in relation to the potential alignments, based on U.S. Census Bureau Longitudinal Employer- Household Dynamics (LEHD) data for 2010, categorizing workers who earn under $1,250 per month and between $1,251 and $3,333 per month.

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[11] Analysis of data provided by the Seattle Office of Housing for affordable and/or subsidized rental housing, 2009 (initial inventory) and 2011 (update).

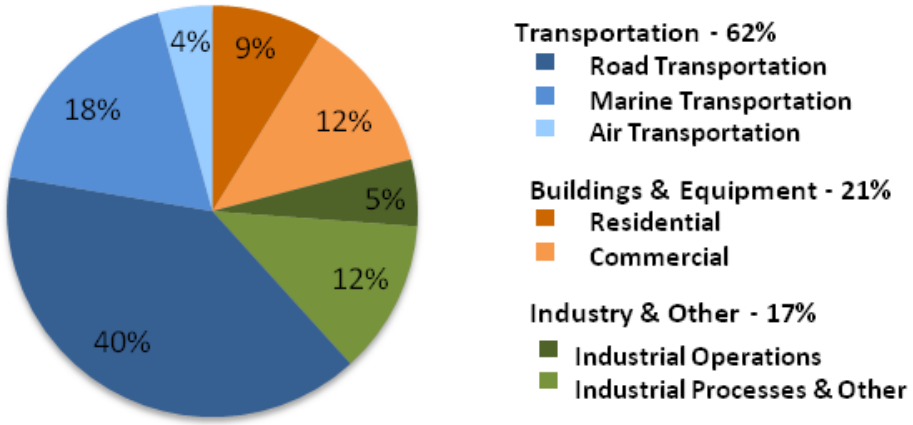
[12] The planned housing mix at the new Yesler Terrace includes 661 units for people with incomes below 30% Average Median Income (AMI), 290 additional units for people from 30-60% AMI, 850 workforce housing units for people with incomes below 80% AMI, and 1,200-3,200 market-rate units. (Source: http://www.seattlehousing.org/redevelopment/yesler-terrace/overview/index.html#newhousing)

Figure A-9 Home Locations of Low/Moderate-Income Workers who Live and Work in the Center City

Reduce Greenhouse Gas (GhG) Emissions from Private Vehicle Travel and Traffic Congestion

To meet its goals for GhG reduction, the City of Seattle needs to create an environment that will promote long-term sustainable growth, with development patterns that are less automobile-oriented and more supportive of its environmental goals. Seattle is in the process of updating its Climate Action Plan with a goal of achieving zero net greenhouse gas emission by 2050. The City of Seattle also signed on to the 2005 U.S. Mayor's Climate Protection Agreement, which adopted the goal of the Kyoto Protocol to reduce citywide GhG emissions by 7% below 1990 levels. To achieve these aggressive goals, Seattle will need to invest in an efficient public transportation system that connects key residential and employment areas to encourage residents and visitors to travel by transit. As of 2008, approximately 40% of Seattle's greenhouse gas emissions came from road-related transportation sources, as shown in Figure A-10. Transportation is the only sector in Seattle for which GhG emissions have increased, now roughly 7% above 1990 levels. Specific transportation actions recommended in the draft Climate Action Plan – developed through a Transportation Advisory Group and Green Ribbon Committee process – include providing higher capacity transit to support dense mixed use neighborhoods in the Center City.

Figure A-10 Seattle Emissions by Sector, 2008



Source: City of Seattle Climate Action Plan

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