

SOUTH LAKE UNION / UPTOWN TRIANGLE

MAY 24, 2011



MOBILITY PLAN

May 24, 2011

Dear City of Seattle and King County leaders:

We are proud to present and endorse the South Lake Union/Uptown Triangle Mobility Plan recommendations that will enhance walking, biking and transit usage. Improved access and mobility are critical elements that will support the economic vitality and livability of these two communities. Moreover, the City and region will benefit from enhanced mobility to and through these Urban Centers.

The Plan is intended to lay out the communities' vision for all transportation modes and to integrate past planning recommendations with new major infrastructure projects. The major benefits of this community-led effort include an integrated transportation system that connects South Lake Union and Uptown neighborhoods, enhanced transit service with minimal cost, a vision depicting two mobility hubs, and leveraging private transportation investments. The recommendations have been grouped into 7 key mobility themes:

- Connect Communities
- Increase Transit Service
- Serve Regional Access & Mobility
- Encourage Walking
- Support Biking
- Leverage Private Transportation Investments
- Create Hubs for Mode Transfers

We look forward to working with the Mayor, City Council, and City departments to recognize and adopt the plan recommendations. This Plan is very timely given the City's current efforts to update the Transit Master Plan, the Citizen's Transportation Advisory Committee III process, plus future updates to the Bicycle and Pedestrian Master Plans. We hope that this Plan can guide implementation actions such as design for key nodes and corridors, and recognition for funding priority, including listing key projects on Capital Improvement Programs.

These transportation improvement recommendations are the result of many hours of participation and endorsed by the South Lake Union Community Council, Uptown Alliance, South Lake Union Chamber of Commerce, and the Greater Queen Anne Chamber of Commerce. We would like to give special thanks to the Mayor's Office, Seattle City Council, King County Metro, Washington State Department of Transportation and Seattle Department of Transportation.

We look forward to partner with our leaders and public agencies to recognize and implement the Mobility Plan recommendations.

Sincerely,

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South Lake Union Community Council

Damien King
South Lake Union Chamber of Commerce

John Coney
Uptown Alliance

Mary Chapman
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EXECUTIVE SUMMARY

The South Lake Union and Uptown neighborhoods will undergo a massive transformation in the next decade as the neighborhoods grow to accommodate more than 12,000 new residents and 24,000 new jobs.

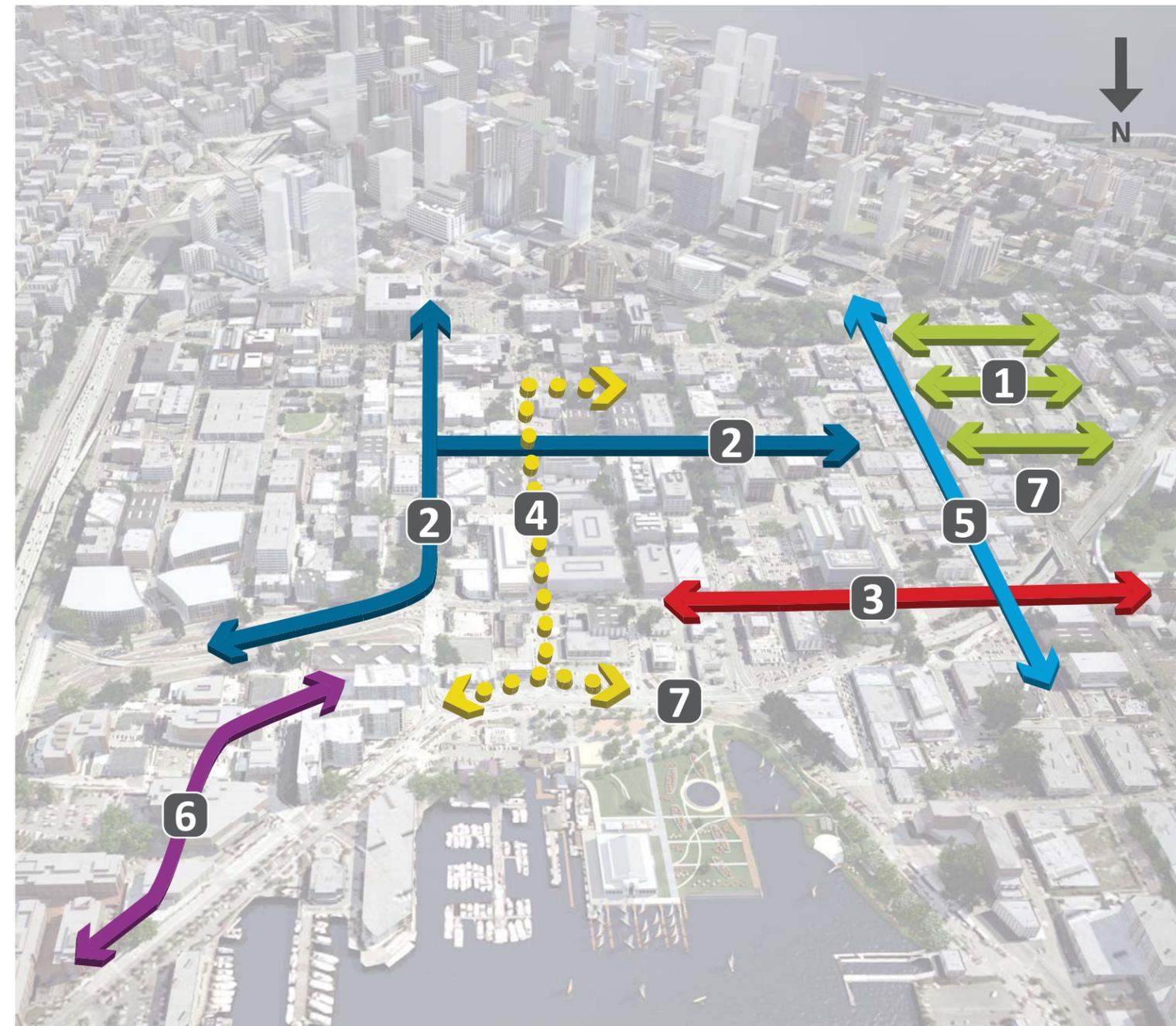
In addition, three major infrastructure projects—the Alaskan Way Viaduct Replacement Project, the Mercer East Project, and the Mercer West Project—will change travel patterns in the area and provide key links between the two neighborhoods for pedestrians, bicycles, and transit.

There have been many independent planning studies performed in the two neighborhoods. This plan seeks to consolidate all of the prior planning efforts and adapt them to account for the major infrastructure projects.

This plan was created with substantial input from neighborhood interest groups, businesses, and various agencies. A detailed analysis and user survey was also performed by the Cascade Bicycle Club as part of this project. All plan recommendations have been vetted through the plan’s advisory committee.

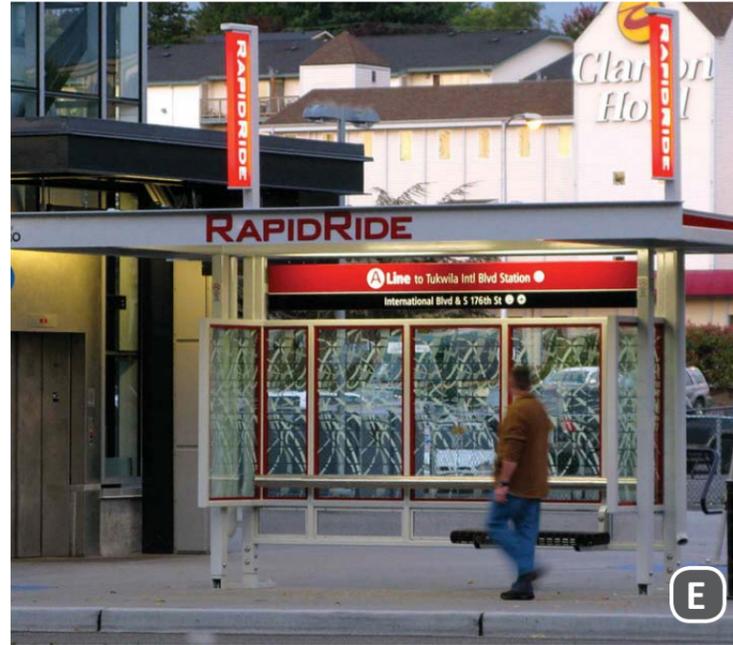
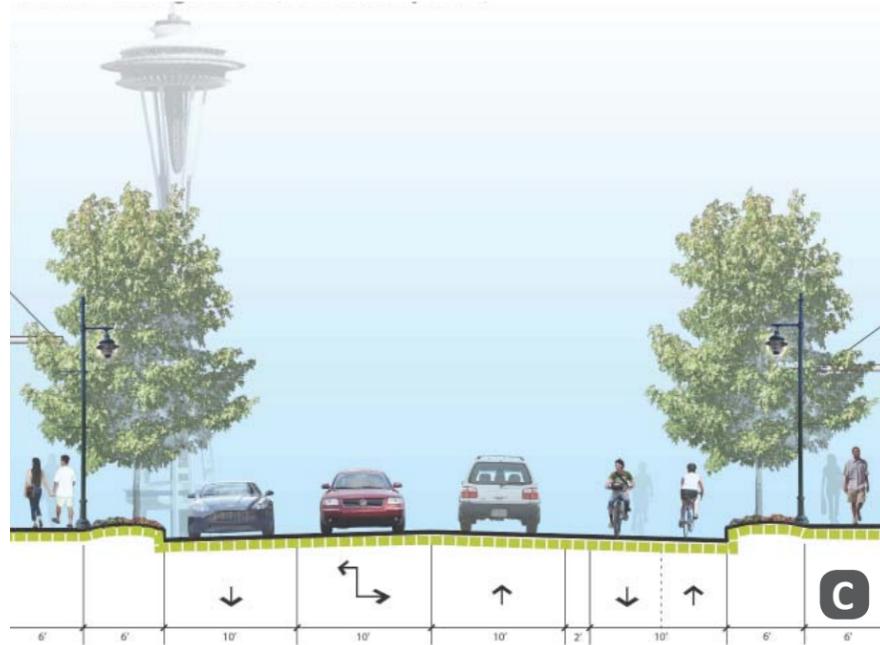
The mobility plan recommendations have been grouped into seven key themes. These themes are further described in subsequent sections and detailed in the matrix at the end of this plan (see page 18):

- 1** **Connect Communities:** Connect South Lake Union, Uptown Triangle, Seattle Center and Uptown by re-establishing the east-west grid across Aurora Avenue at John, Thomas and Harrison Streets with attractive and safe “complete street” designs.
- 2** **Increase Transit Service:** Increase transit service to and through the Urban Centers with rerouted and extended bus routes.
- 3** **Serve Regional Access & Mobility:** Realize all regional and mobility improvements of the Mercer Corridor and North Portal projects for pedestrians, bicycles transit, freight and cars.
- 4** **Encourage Walking:** Create an active and safe pedestrian environment with green streets, active sidewalks, regional trail connections, and clear wayfinding signage.
- 5** **Support Biking:** Provide a safe, clear and convenient network of bike paths, bike lanes, and bicycle support facilities.
- 6** **Leverage Private Transportation Investments:** Partner with private businesses, institutions, and developers to leverage privately-funded operational measures such as private shuttles, transit partnerships with King County Metro, and transportation management plans, as well as infrastructure investments in the street frontage, utility upgrades, and street enhancements.
- 7** **Create Hubs for Mode Transfers:** Create neighborhood transportation hubs—at the Aurora Avenue RapidRide Station and on Valley Street near Lake Union Park—that facilitate transfers between modes of transportation.



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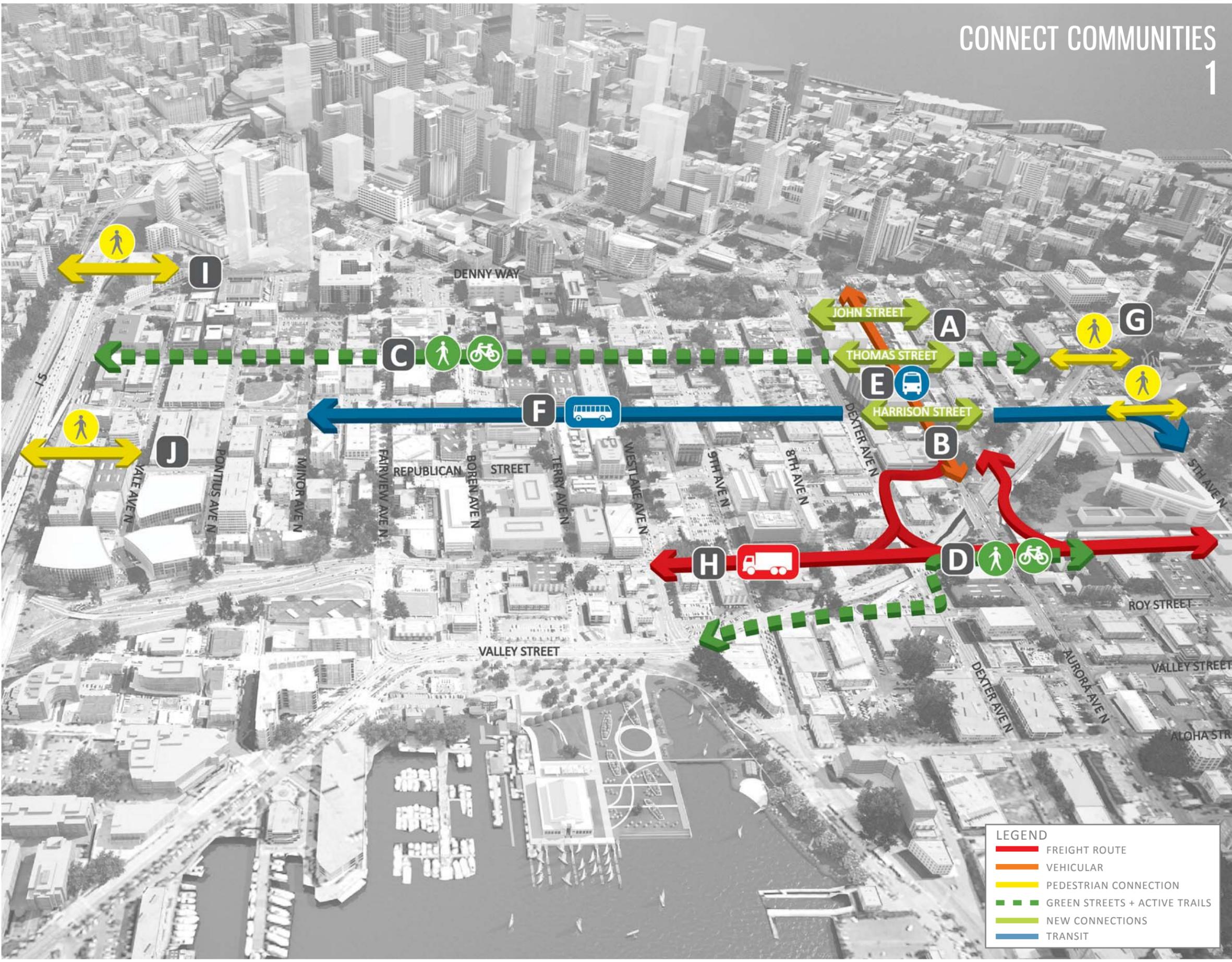
CONNECT COMMUNITIES



Connecting South Lake Union and Uptown across Aurora Avenue is these neighborhoods' top priority. The North Portal of the Alaskan Way Viaduct Replacement project tunnel will be north of Harrison Street, three blocks north of where the Battery Street Tunnel daylights today. This will remove a substantial volume of through traffic from Aurora Avenue N between Harrison Street and Denny Way and allow three existing streets—John Street, Thomas Street, and Harrison Street—to be reconnected across Aurora Avenue N.

These reconnected streets provide new opportunities for east-west transit service, pedestrian connections, and bicycle connections that are not possible today. In addition, the Mercer West project proposes to widen Mercer Street under Aurora Avenue including new facilities for bicycles and pedestrians.

- A** Re-establish the east-west grid across Aurora Avenue at John, Thomas and Harrison Streets with attractive and safe “complete street” designs.
- B** Rename Aurora Avenue N between Harrison and Denny Way to its historic name: 7th Avenue N.
- C** Provide pedestrian and bicycle facilities on Thomas Street consistent with the City’s Street Concept Plan and Green Street designation.
- D** Provide a pedestrian/bicycle trail under Aurora Avenue N on Mercer Street
- E** Create a RapidRide Station on surface Aurora Avenue N (to be renamed 7th Avenue N) between Harrison and Thomas Streets as well as new transit stops on Harrison Street to ease transfers between local and regional bus service.
- F** Design Harrison Street to accommodate future east-west bus service with stops at 7th Avenue N.
- G** Enhance the pedestrian crossings of 5th Avenue N at Thomas Street and Harrison Street with curb bulbs, special pavement, and pedestrian signal improvements.
- H** Provide turning radii for large trucks at key locations where trucks will access Mercer Street and the SR 99 ramps including Mercer Street/5th Avenue (southeast corner), Mercer Street/6th Avenue (southwest corner), and on the Republican Street off-ramp from northbound SR 99.
- I** Widen the Denny Way overpass of I-5 to provide bicycle lanes and a sidewalk on the north side of the overpass
- J** Evaluate other pedestrian connection opportunities between South Lake Union and Capitol Hill north of Denny Way, including improved stairs, trails, and/or a new pedestrian overpass of I-5.

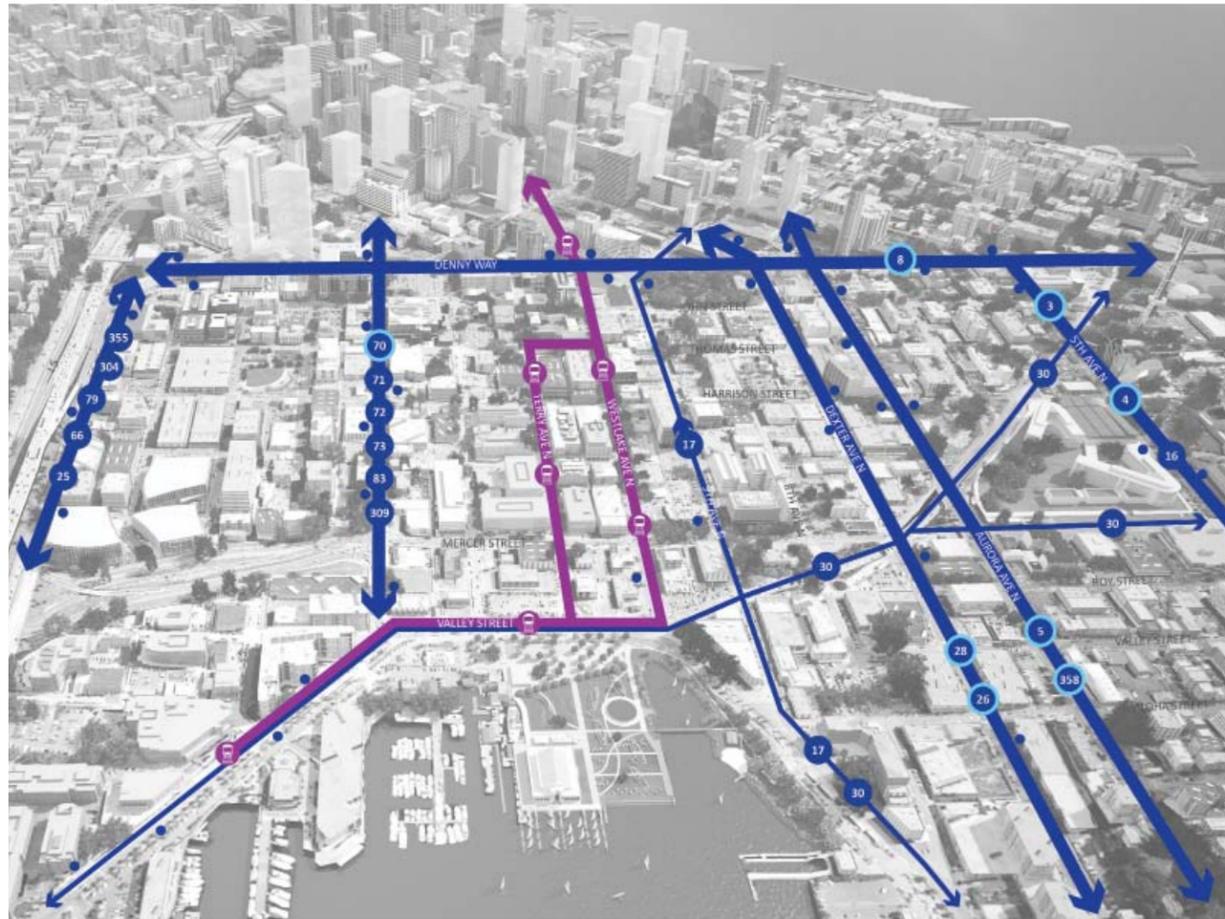


LEGEND	
—	FREIGHT ROUTE
—	VEHICULAR
—	PEDESTRIAN CONNECTION
- - -	GREEN STREETS + ACTIVE TRAILS
—	NEW CONNECTIONS
—	TRANSIT

2

IMPROVE TRANSIT SERVICE

EXISTING TRANSIT SERVICE



- BUS ROUTE
- STREETCAR
- # BUS ROUTE
- # "FREQUENT SERVICE" ROUTE
- 🚊 STREETCAR STOP
- BUS STOP

Existing transit service runs primarily north - south and at the edge of the neighborhoods



J



F



G



H

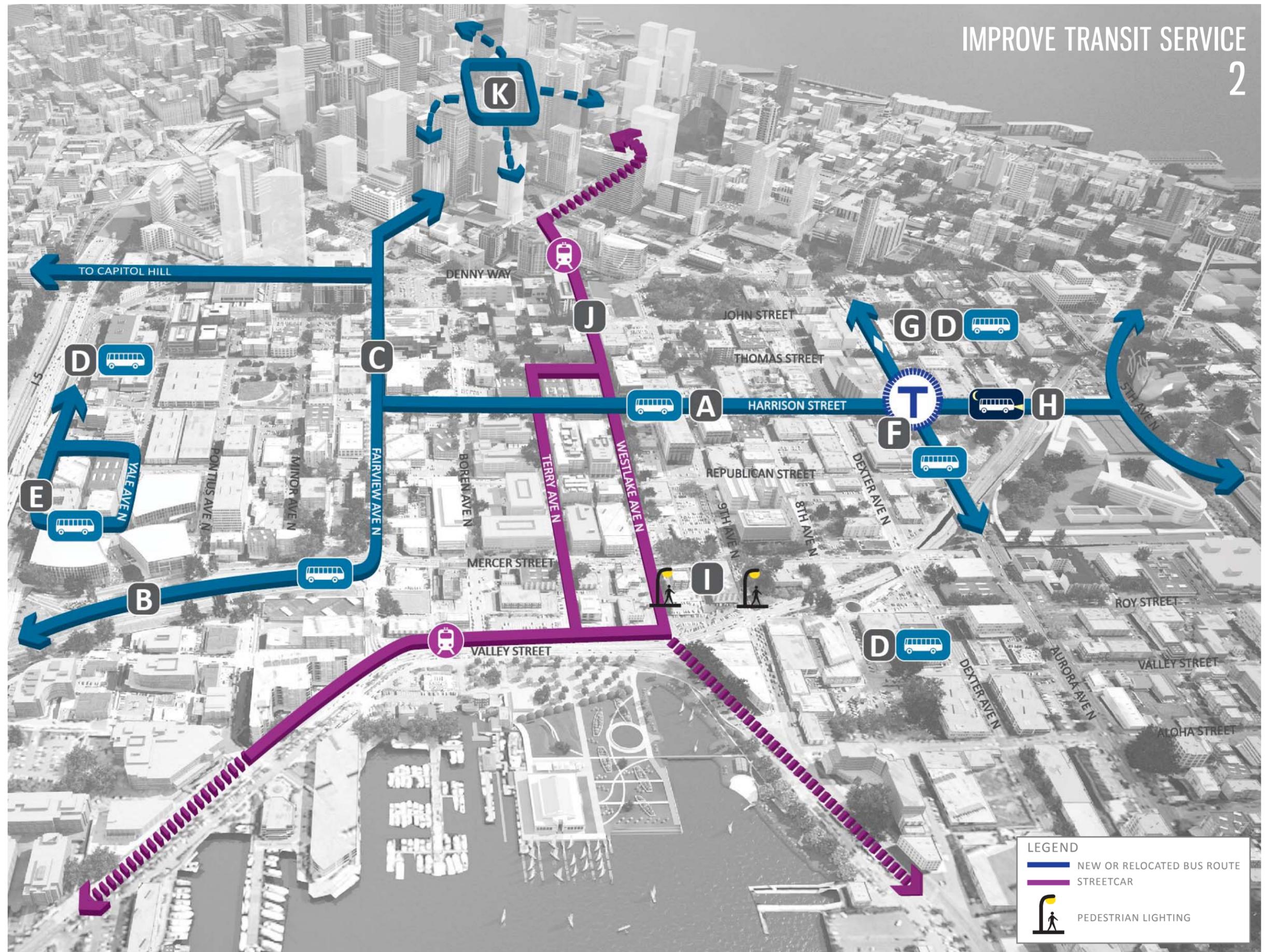
South Lake Union and Queen Anne Uptown are two of the fastest growing neighborhoods in the Pacific Northwest. Accommodating that growth demands a paradigm shift in how people travel—shifting from autos to foot, bike, and transit.

In its recent Seattle Transit Communities report, the Seattle Planning Commission identified both the South Lake Union and Uptown neighborhoods as two of 14 “transit communities with the most urgent near-term planning needs.”

As South Lake Union grows, it will become a major transit destination. Transit service should adapt to treat the neighborhood as an extension of the downtown core rather than a separate neighborhood, and reduce the number of riders who must transfer to reach South Lake Union. However, in these tough economic times, it is unrealistic to expect that transit agencies could create new routes or make substantial changes in its operations. Therefore, this plan recommends several low-cost strategies to increase service to the neighborhood. When funding is available, future opportunities to enhance transit service and integrate transit improvements could be made.

IMPROVE TRANSIT SERVICE 2

- A** Provide east-west transit service connecting Uptown and Capitol Hill through the heart of South Lake Union on Harrison Street when the street grid is connected.
- B** Increase transit service through South Lake Union by rerouting select I-5-to-Downtown routes to the Mercer Street ramps and Fairview Avenue N.
- C** Improve transit reliability and operating conditions on Fairview Avenue N to entice more transit to route through the South Lake Union neighborhood.
- D** Identify acceptable bus layover locations in the two urban centers in exchange for extending bus routes to these neighborhoods.
- E** Work with Sound Transit to have buses that now layover in the SLU neighborhood to make stops in the neighborhood as part of their route.
- F** Concentrate transit service near the future RapidRide Station on Aurora Ave N (to be renamed 7th Ave N), between Harrison and Thomas Streets.
- G** Add transit lanes on 7th Avenue N that connect to the Wall Street/ Battery Street transit lanes.
- H** Increase nighttime and weekend service to better serve events at the Seattle Center and Lake Union Park, as well as the growing resident population in South Lake Union and Uptown Triangle.
- I** Improve pedestrian lighting and amenities such as transit information kiosks at and approaching transit stops and stations.
- J** Support additional Streetcar routes. The highest priority would be to connect the First Hill Streetcar line to South Lake Union and the Seattle Center.
- K** Improve ability to use transit to circulate among the downtown neighborhoods.



3

SERVE REGIONAL ACCESS + MOBILITY

PROPOSED STREET CLASSIFICATIONS



- MAJOR TRUCK STREETS
- PRINCIPAL ARTERIALS
- MINOR AND COLLECTOR ARTERIALS

Future street classifications with Mercer East, Mercer West, and Alaskan Way Viaduct Replacement Projects.



In 2006, the Mercer Corridor Stakeholder Committee presented a package of 28 recommendations to the City of Seattle. Foremost among these was that the City establish a two-way Mercer Street corridor from I-5 to Elliott Avenue, and reconnect the east-west street grid across Aurora Avenue N, which is the key to making the entire system work.

Most of the original recommendations are now under construction as part of the Mercer East project which includes Mercer and Valley Streets east of Dexter Avenue N. The second part of this corridor project, Mercer West, is now in design and would complete the corridor between Dexter Avenue N and Elliott Avenue W. As of February 2011, all of the key elements from the original recommendation are being incorporated into either the Mercer West project or the North Portal of the Alaskan Way Viaduct Replacement project.

Some additional measures should be considered to focus regional and neighborhood through traffic to the Mercer Corridor and to manage traffic during construction.

- A** Complete the Mercer West project, which would widen Mercer Street under Aurora Avenue to three lanes in each direction plus turn lanes, and convert Mercer Street west of 5th Avenue N to two way operations when the street grid is connected.
- B** Convert Roy Street west of 5th Avenue N to two-way operations and add bike lanes. Calm traffic and discourage through traffic on Roy Street.
- C** Improve pedestrian crossings at intersections along Mercer and Roy Streets, and consider special treatments, such as stamped and colored pavement at key intersections in the heart of Uptown (Roy and Mercer Streets at 1st Avenue N and Queen Avenue N) and at the Mercer Street/5th Avenue N intersection.
- D** Calm traffic on Republican Street between Dexter Avenue N and Fairview Avenue N to discourage its use as a high-speed through route. Use signage, signal timing, and other traffic calming measures to encourage through traffic to use Mercer Street.
- E** Provide turning radii for large trucks at key locations where trucks will access Mercer Street and the SR 99 ramps including Mercer Street/5th Avenue (southeast corner), Mercer Street/6th Avenue (southwest corner), and on the Republic Street off-ramp from northbound SR 99.
- F** Provide signage for the future route from westbound Mercer Street to southbound SR 99 that would loop in a clockwise direction from Mercer Street to Taylor Avenue N to Valley Street and SR 99.
- G** Continue to engage community in planning for construction of the major transportation infrastructure projects.



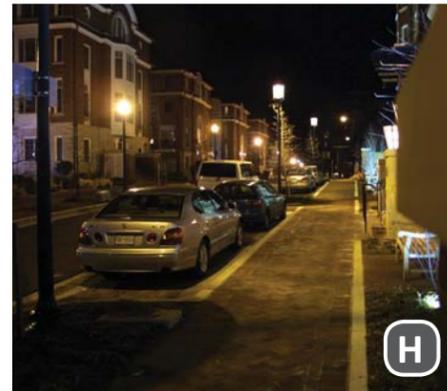
4

ENCOURAGE WALKING

EXISTING PEDESTRIAN FACILITIES



- RECREATIONAL WALKING ROUTE FROM SEATTLE WALKING MAP
- GREEN STREETS
- - - LAKE-TO-BAY LOOP
- CHESHIAHUD LOOP TRAIL
- SIGNALIZED INTERSECTION



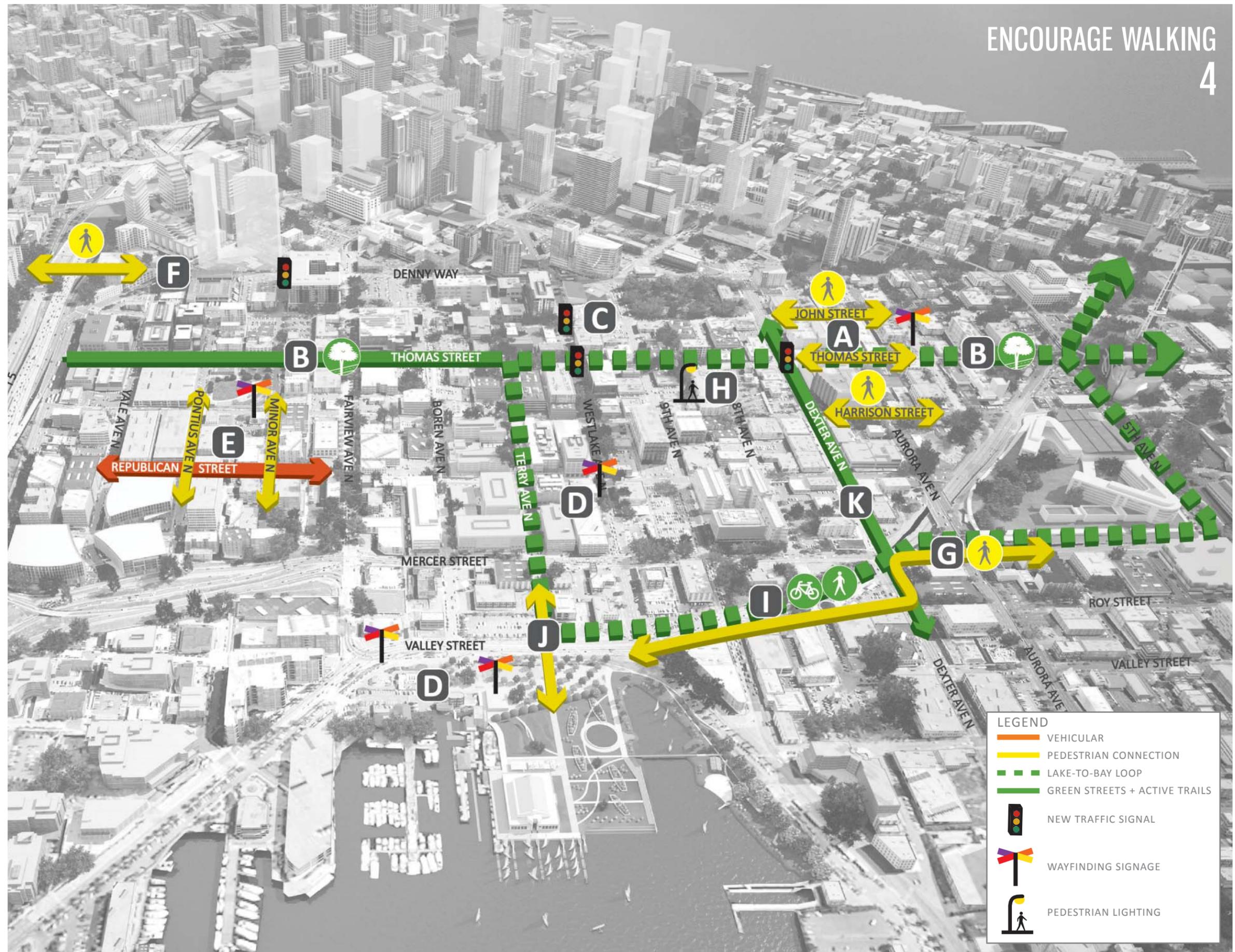
The pedestrian experience in and between neighborhoods **must** be enhanced for these neighborhoods to grow sustainably. The existing pedestrian connection between Uptown and South Lake Union is limited to the very narrow sidewalks along Mercer and Broad Street.

Many have said they now drive between these two neighborhoods because the walk is so forbidding. Poor lighting, unsignalized intersections, narrow sidewalks, and lack of wayfinding are other barriers to pedestrian travel.

All of the major infrastructure projects include pedestrian enhancements such as wider sidewalks and improved crossings. Very wide sidewalks or paths are proposed along Valley Street, along Mercer Street under Aurora Avenue, and along Thomas Street.

ENCOURAGE WALKING 4

- A** Reconnect Harrison, Thomas, and John Streets across Aurora Avenue N.
- B** Implement Green Street improvements along Thomas Street between Eastlake Ave E and 5th Avenue N.
- C** Signalize pedestrian crossings of Westlake Avenue N, particularly at Thomas Street and John Street.
- D** Implement a comprehensive pedestrian wayfinding program using the already-adopted City Wayfinding System standards.
- E** Address vehicular circulation impacts on pedestrian mobility in the Cascade Neighborhood particularly across Republican Street.
- F** Implement pedestrian improvements in the Denny Way Streetscape Concept Plan, including widening the Denny Way Overpass of I-5 to include a sidewalk on the north side, providing a signalized pedestrian crossing of Denny Way at Minor Ave N, and improving crossings at key intersections.
- G** Improve pedestrian facilities along the Mercer Corridor with a wide multi-use trail under Aurora Avenue, improving crossings of Mercer Street near the Seattle Center, and calming traffic at the Roy Street/Queen Anne Avenue intersection.
- H** Improve pedestrian-level lighting throughout neighborhood with priority along routes to major transit facilities.
- I** Complete the Lake-to-Bay Loop trail.
- J** Enhance the Terry Avenue connection to Lake Union Park with enhanced pedestrian crossings of Mercer Street and Valley Street and pedestrian improvements along Terry Avenue north of Mercer Street.
- K** Prepare a Streetscape Concept Plan for Dexter Avenue N from Roy Street to Denny Way.



5

SUPPORT BIKING

EXISTING BIKING FACILITIES



- PAVED REGIONAL PATH
- ON-STREET BIKE LANE
- SHARED ROADWAY



The relatively flat topography and robust grid system make the South Lake Union and Uptown neighborhoods bike friendly. The current barriers that exist for pedestrians—primarily the limited crossings of Aurora—also affect bicyclists.

Once those barriers are removed, the neighborhoods could also support programs such as bike sharing that link key attractions as well as businesses.

SUPPORT BIKING 5

- A** Make bicycle improvements planned for the Mercer Corridor project including a wide multi-use path on Mercer Street under Aurora Avenue and bike lanes on Roy Street.
- B** Provide for bicycles on Thomas Street between 5th Avenue N and Eastlake Avenue E. Install signals at arterial crossings of Dexter Avenue N and Westlake Avenue N.
- C** Improve the Dexter Avenue N bike lanes between Roy Street and Denny Way with treatments similar to those now being implemented north of Roy Street. Provide a southbound right turn lane on Dexter Avenue N at Harrison Street to separate right turns from the bike lane. At the Mercer Street intersection, consider treatments such as bicycle boxes and signal phasing treatments to improve the transitions between Dexter Avenue N and the Mercer Street bike path.
- D** Improve bicyclist safety along 9th Avenue with signal changes at Denny Way and at Harrison Street.
- E** Provide for bicycles on Harrison Street between Fairview Avenue N and 5th Avenue N. Install a signal at Eastlake Avenue E.
- F** Provide for bikes on Fairview Avenue N, including intersection improvements at Denny Way, Valley Street and Mercer Street. Fairview Avenue N is also targeted for transit enhancements. If a Business Access and Transit (BAT) lane is located on Fairview Avenue N, it could be shared with bicyclists.
- G** Evaluate 5th Avenue N as a potential north-south bicycle connection between Belltown/Downtown and Uptown/Lower Queen Anne Avenue.
- H** Locate bike storage facilities near major transit stations.
- I** Create a bike sharing program for Uptown, South Lake Union and Seattle Center. Work with City of Seattle and King County Metro to apply a framework and business model being developed for Seattle.
- J** Consider bike boxes and bike signals along key bike routes, including Roy Street west of Taylor Avenue, and Thomas Street between 5th Avenue N and Eastlake Avenue E, and Dexter Avenue N.



6

LEVERAGE PRIVATE TRANSPORTATION INVESTMENTS



Private transportation investments are being made by existing businesses, institutions, and developers. These include operational measures such as private shuttles, transit partnerships with King County Metro, transportation management plans, as well as infrastructure investments for street frontage, utility upgrades, and street enhancements. The investments are integral to creating a vibrant South Lake Union and Uptown Triangle transportation system. Public agencies can facilitate and leverage these public investments to improve the transportation system.



- A** Support private shuttles with passenger load zones along public streets at appropriate locations.
- B** Support changes to State laws related to private shuttles that would make it easier for private businesses to share shuttle resources.
- C** Incentivize frontage improvements that are beyond City code requirements with Street Design Concept Plans (such as along Thomas Street) and allowing developers to get “credit” for additional improvements against other transportation mitigation requirements.
- D** Entice private transit funding through transit partnerships with matching grants or other funding mechanisms.
- E** Coordinate street and utility work within the right-of-way by implementing strategies such as joint trenching policies, and aligning capital improvement programs between SDOT, SPU, City Light and private utility providers.
- F** Coordinate transportation demand management plans among businesses and institutions.
- G** Manage neighborhood parking resources to share parking among various uses that have different peak demand characteristics.

7

CREATE HUBS FOR MODE TRANSFER

There are two key locations where many transportation modes will intersect, and hubs to facilitate mode transfers could be created:

T1: Thomas/Harrison Mobility Hub -- This hub would be at the future Aurora Avenue RapidRide Station, between Harrison and Thomas Streets, where regional RapidRide service would meet local transit service. This node also connects with the Lake-to-Bay Loop trail, the Thomas Street Green Street and new east-west bike routes.

T2: Valley Street Mobility Hub -- This hub would be on Valley Street near Lake Union Park where the Lake Union Streetcar intersects with the Lake-to-Bay Loop trail and the Cheshiahud Trail. It is also in close proximity to Kenmore Air Harbor and potential Lake Union Ferry service.

Potential features include:

- Adjacent land uses that provide an inviting and safe walking environment
- Small-scale retail and services for transit riders
- Design amenities such as street furniture and artwork that create an identity for each node
- Convenient customer information about transit service
- Wayfinding to and from local attractions such as the Seattle Center, Lake Union Park, MOHAI, Center for Wooden Boats, United Tribes' Canoe Cultural Center, retail districts, Lake Union Water Taxi, Kenmore Air, and patient facilities at the Fred Hutchinson Cancer Research Center
- Good pedestrian connections with wide, well-lit sidewalks and signalized pedestrian crossings of major streets
- Bike storage
- Bike sharing facility



7 CREATE HUBS FOR MODE TRANSFER

T1: THOMAS / HARRISON MOBILITY HUB



T1: Thomas/Harrison Mobility Hub -- This hub would be at the future Aurora Avenue RapidRide Station, between Harrison and Thomas Streets, where regional RapidRide service would meet local transit service. This node also connects with the Lake-to-Bay Loop trail, the Thomas Street Green Street and new east-west bike routes.



INTERIM USE ON WSDOT PROPERTY

Most of the improvements can be implemented ahead of future development; a temporary bike station could be included at the corner to help establish a "Sense of Place"

TRANSIT + TRANSPORTATION

- A1** Enhanced pedestrian/rider amenities at RapidRide and Metro bus stops
- A2** Designated bus lanes and priority signals
- A3** East-west bus service on Harrison Street
- A4** Shuttle bus stop
- A5** Transit and community information kiosk

PEDESTRIAN + BICYCLE

- B1** Activated building edges (cafes, shops, etc)
- B2** Safe pedestrian crossing with special intersection paving and treatments
- B3** Wayfinding signs
- B4** Future transit-oriented development
- B5** Bike station
- B6** Thomas Street concept design & Green Street improvements
- B7** Shared bike/vehicle lane
- B8** Pedestrian lighting

T2: Valley Street Mobility Hub -- This hub would be on Valley Street near Lake Union Park where the Lake Union Streetcar intersects with the Lake-to-Bay Loop trail and the Cheshiahud Loop Trail. It is also in close proximity to Lake Union Ferry service and Kenmore Air Harbor.

T2: VALLEY STREET MOBILITY HUB

TRANSIT + TRANSPORTATION

- A1** South Lake Union Streetcar
- A2** Bus to Ballard, Fremont and Greenlake (Future potential streetcar)
- A3** Private shuttle bus stop
- A4** Transit information kiosk
- A5** Kenmore Air Harbor
- A6** Lake Union Foot Ferry (Potential)

PEDESTRIAN + BICYCLE

- B1** Pedestrian amenities and improvements
- B2** Bike lanes
- B3** Lake-to-Bay Loop Trail
- B4** Cheshiahud Trail
- B5** Bike Station

CIVIC + COMMUNITY

- C1** Lake Union Park
- C2** Center for Wooden Boats Education Center (Future)
- C3** Museum of History and Industry (MOHAI)
- C4** Northwest Native Canoe Center (Future)
- C5** Special event opportunity at surface parking



VIA ARCHITECTURE

8

MOBILITY RECOMMENDATIONS MATRIX

1. Connect Communities	
A. Re-establish the east-west grid across Aurora Avenue at John, Thomas and Harrison Streets with attractive and safe “complete street” designs.	The North Portal of the Alaskan Way Viaduct Replacement project tunnel will remove a substantial volume of through traffic from Aurora Avenue N between Harrison Street and Denny Way and allow three existing streets—John Street, Thomas Street, and Harrison Street—to be reconnected across Aurora Avenue N. These reconnected streets provide new opportunities for east-west transit service, pedestrian connections, and bicycle connections.
B. Rename Aurora Avenue N between Harrison and Denny Way to its historic name: 7 th Avenue N.	The process to rename a street requires input from SDOT, and the Seattle Fire Department among others. It may also require City Council action.
C. Provide pedestrian and bicycle facilities on Thomas Street.	New facilities should be consistent with the City’s Street Concept Plan and Green Street designation.
D. Provide a pedestrian/bicycle trail under Aurora Avenue N on Mercer Street.	This feature is proposed as part of the Mercer West project, which plans to widen Mercer Street under Aurora Avenue.
E. Create a RapidRide Station on surface Aurora Avenue N.	The RapidRide Station would be located on Aurora Avenue (to be renamed 7 th Avenue) between Harrison and Thomas Street. Other transit routes, such as those on Dexter Avenue N and 5 th Avenue N, should be diverted to Aurora Avenue to facilitate transfers. In addition, the station should integrate with other modes such as pedestrian and bicycle facilities on Thomas and Harrison Streets.
F. Design Harrison Street to accommodate future east-west bus service with stops at 7 th Avenue N.	The Alaskan Way Viaduct Replacement Project should incorporate features (such as increased pavement strength and sidewalk widths) for future transit service on Harrison Street between Dexter Avenue N and 5 th Avenue N.
G. Enhance the pedestrian crossings of 5 th Avenue N at Thomas Street and Harrison Street.	Existing traffic patterns—with a dual right turn from Harrison Street to 5th Avenue N—create difficult pedestrian crossing conditions in the vicinity of Seattle Center. The signal cycle is also very long, which delays pedestrian crossings. In the future, the removal of Broad Street and reconnection of the east-west grid of streets across Aurora Avenue will change traffic patterns and eliminate the dual-right turn movements. The North Portal design should address pedestrian crossings at the intersections of 5th Avenue N/Harrison Street and 5th Avenue N/Thomas Street/Broad Street, and consider pedestrian curb bulbs and special pavement treatments. Pedestrian countdown signals should be considered for all new intersections.
H. Provide turning radii for large trucks at key locations where trucks will access Mercer Street and the SR 99 ramps.	The Alaskan Way Viaduct Replacement Project and Mercer West project should include corner radii suitable for large trucks at Mercer Street/5 th Avenue (southeast corner), Mercer Street/6 th Avenue (southwest corner), and on the Republic Street off-ramp from northbound SR 99.
I. Widen the Denny Way overpass of Interstate 5 to provide bicycle lanes and a sidewalk on the north side of the overpass.	This is recommended by the <i>Seattle Bicycle Master Plan</i> to improve the connection to Capitol Hill.
J. Evaluate other pedestrian connection opportunities between South Lake Union and Capitol Hill.	There are limited connection points between the two neighborhoods north of Denny Way. Improvement opportunities could include stairs, trails, and/or a new pedestrian overpass of Interstate 5.
2. Improve Transit Service	
A. Provide east-west transit service on Harrison Street connecting Uptown and Capitol Hill through the heart of South Lake Union.	There is no east-west transit service between Uptown and South Lake Union north of Denny Way. Such service would be viable once the Viaduct Replacement project is complete and the grid of streets is reconnected across Aurora Avenue. New east-west transit should be located on Harrison Street between 5 th Avenue N and Fairview Avenue N to serve the heart of South Lake Union and the Uptown Triangle. This street should have physical features needed to accommodate buses including adequate pavement, wide sidewalks at bus stops, and good pedestrian-level street lighting.

B. Increase transit service through South Lake Union by rerouting select Interstate 5-to-Downtown routes to the new Mercer Street ramps and Fairview Avenue N.	Explore opportunities in conjunction with transit agencies to increase transit service through the South Lake Union neighborhood by rerouting select existing Interstate 5 transit routes to the Mercer Street ramps. Metro, Sound Transit and Community Transit operate many routes from North Seattle, Snohomish County, and the Eastside that use I-5 and exit to downtown at the Stewart Street ramps. The Mercer East project provides the opportunity to divert routes to exit at Mercer Street and then travel on Fairview Avenue to reach the downtown core.
C. Improve transit reliability and operating conditions on Fairview Avenue N to entice more transit to route through the South Lake Union neighborhood.	Faster and more reliable transit travel speeds along Fairview Avenue could make it a more attractive path for transit, and create opportunities for increased service levels described in #2B above. Enhancements could include signal coordination and signal priority as well as transit-only lanes and on-street parking removal/restrictions or queue-jump lanes at key intersections.
D. Identify acceptable bus layover locations in the two urban centers in exchange for extending existing bus route service to these neighborhoods.	A few all-day routes that serve destinations south of downtown Seattle “layover” in the Belltown area between trips. The layover provides a driver rest break and also allows buses to stay on schedule. There are a couple dozen peak commuter routes that could be extended to begin and end in South Lake Union/Uptown if on-street or off-site layover space were provided in the South Lake Union/Uptown neighborhoods. Riders using these buses would no longer need to transfer downtown.
E. Work with Sound Transit to have buses that now layover in the South Lake Union neighborhood to make stops in the neighborhood as part of their route.	There are several Sound Transit routes to and from Pierce County (Route 590, 592, 593, 594, and 595) that layover on the east side of Eastlake Avenue E. These routes use Republican Street to return to Eastlake Avenue E and their first stop on Stewart Street near 9 th Avenue. Service for South Lake Union riders could be improved by creating a stop along Republican Street or Eastlake Avenue E.
F. Concentrate transit service near the future RapidRide Station on Aurora Avenue N between Harrison and Thomas Streets.	Once the Viaduct Replacement Project North Portal is complete, a RapidRide Station for the E-Line would be located on Aurora Avenue (to be renamed 7 th Avenue) south of Harrison Street. The curb lanes in each direction on Aurora Avenue would be dedicated as Business Access & Transit (BAT) lanes that would connect to the transit lanes on Wall Street and Battery Street and link to the Third Avenue transit corridor through downtown. These new features provide an opportunity for other north-south routes in the area (Routes 26 & 28 that use Dexter Avenue and possibly routes on 5 th Avenue) to use Aurora Avenue via Harrison Street to create a transit transfer point. In addition, the community desires new east-west transit service along Harrison Street. This concentration of transit service would enhance transfer options and likely improve passenger safety by increasing the number of people in the area.
G. Add transit lanes on Aurora Avenue N (7 th Avenue N) that connect to the Wall Street/Battery Street transit lanes.	The curb lanes in each direction on Aurora Avenue (7 th Avenue N) should be dedicated as Business Access & Transit (BAT) lanes that would connect to the transit lanes on Wall Street and Battery Street and link to the Third Avenue transit corridor through downtown.
H. Increase nighttime and weekend transit service.	South Lake Union is transitioning and will have up to 12,000 residents in the future. This change from mostly an employment center to a mixed-use neighborhood will require more all-day and weekend transit service. In addition, patrons to Seattle Center and Lake Union Park events could be enticed to use more transit if it was available at the end of evening events and on weekends.
I. Improve pedestrian lighting and amenities at and approaching transit stops and mobility hubs.	Provide wide sidewalks with continuous pedestrian-scale lighting along major walking routes to major bus stops and transit stations. Add weather protection at bus stops. Pedestrian wayfinding signs should include information about major transit stations such as the Aurora RapidRide or Streetcar stations.
J. Support additional Streetcar routes.	Consider extending the South Lake Union Streetcar to other neighborhoods, including downtown, Uptown, Fremont and the University District. The highest priority would be to connect the First Hill Streetcar line to South Lake Union and the Seattle Center, most likely through downtown.
K. Improve ability to use transit to circulate among the downtown neighborhoods.	As residential and employment growth continues in South Lake Union and the Uptown Triangle, there will be increased need to circulate among the downtown neighborhoods at all hours of the day. New transit and/or an extended streetcar may be needed to facilitate this downtown circulation.

3. Serve Regional Access and Mobility	
A. Complete the Mercer West project.	This project proposes to widen Mercer Street under Aurora Avenue to three lanes in each direction plus turn lanes, and convert Mercer Street west of 5 th Avenue N to two way operations.
B. Convert Roy Street west of 5 th Avenue N to two-way operations and add bike lanes.	This is also proposed as part of the Mercer West project. It is intended to calm traffic and discourage through traffic on Roy Street.
C. Improve pedestrian crossings at intersections along Mercer and Roy Streets.	The West Mercer project should improve pedestrian crossings at the Queen Anne Avenue/Roy Street intersection by eliminating the dual left and right turn lanes on westbound Roy Street. Improving pedestrian flow and safety at this intersection is one of Uptown’s highest priorities. In addition, the Mercer West project should provide signalized pedestrian crossing on Mercer Street between 1 st Avenue N and 3 rd Avenue N to improve the pedestrian connections to the Seattle Center. Key pedestrian crossings (Queen Anne Avenue N/Roy Street and Mercer Street/5 th Avenue) should be enhanced with special treatments such as stamped and colored pavement, in-pavement flashers, and other treatments.
D. Discourage through traffic from using Republican Street between Dexter Avenue N and Fairview Avenue N.	The new northbound off-ramp from SR 99 would connect to Republican Street. Although it is classified as an arterial, there are many local driveways and pedestrian crossings along it that would be adversely affected by high through volumes. The neighborhood desires that through traffic be diverted to Mercer Street with the use of signage, signal timing, and other traffic calming measures.
E. Provide turning radii for large trucks at key locations where trucks will access Mercer Street and SR 99.	See 1.H. above.
F. Provide signage for the travel route from westbound Mercer Street to southbound 6 th Avenue and on to the SR 99 southbound on-ramp will not be allowed. One alternative route would loop in a clockwise direction from Mercer Street to Taylor Avenue N to Valley Street and SR 99. This travel route to SR 99 should be signed.	Left turns from westbound Mercer Street to southbound 6 th Avenue and on to the SR 99 southbound on-ramp will not be allowed. One alternative route would loop in a clockwise direction from Mercer Street to Taylor Avenue N to Valley Street and SR 99. This travel route to SR 99 should be signed.
G. Continue to engage community in planning for construction of the major infrastructure projects.	Construction management plans and procedures established for the Mercer East project should be continued and expanded for the Mercer West and North Portal projects. This planning should consider Seattle Center event traffic needs as well as appropriate detours for all modes of travel.
4. Encourage Walking	
A. Reconnect Harrison, Thomas, and John Streets across Aurora Avenue.	See 1.A. above.
B. Implement Green Street improvements along Thomas Street between Eastlake Avenue and 5th Avenue N.	Thomas Street is currently designated as a “Green Street” between Fairview Avenue N and Eastlake Avenue E, and could be extended west through the study area to 5 th Avenue N. In collaboration with neighborhood groups, property owners and individuals, the City of Seattle is developing a streetscape concept plan for Thomas Street from Eastlake Avenue E to Elliott Avenue W. A streetscape concept plan is an urban design plan to help guide future streetscape and public realm improvements that can be implemented over time either through frontage improvements by private development or through capital projects. The Thomas Street Streetscape Concept Plan incorporates the major changes that are part of the design for the north portal of the Alaskan Way Viaduct Replacement project, which will reconnect the street grid across Aurora Avenue N. The plan also accommodates the Lake-to-Bay Loop that will use a portion of Thomas Street via an extra-wide sidewalk on the north side of the street. Designated east-west bicycle facilities are desired on Thomas Street between 5th Avenue N and Eastlake Avenue E and should be incorporated into the streetscape concept plan.
C. Signalize pedestrian crossings of Westlake Avenue N at Thomas Street and John Street.	A signal is currently being installed at Westlake Avenue N/Thomas Street intersection, and will facilitate crossings of this two-way arterial. Future signalization of Westlake Avenue N/John Street intersection is also desired. Traffic signal warrants (minimum traffic and pedestrian volumes) would need to be met before SDOT would install this signal.
D. Implement a comprehensive pedestrian wayfinding program using the already-adopted City Wayfinding System standards.	Wayfinding signs will be needed along the area’s proposed Loop Trails, and should also be provided for key neighborhood destinations such as retail nodes and parks. Hard-to-find destinations, such as the Fred Hutchinson Cancer Research Center, could also be signed. Seattle’s Wayfinding System, which includes sign design standard, should be extended to the South Lake Union neighborhood. Key locations where signs should be installed include: <ul style="list-style-type: none"> • Lake Union Park • Aurora RapidRide Station

	<ul style="list-style-type: none"> • Seattle Center – at base of Monorail • On Westlake Avenue at Streetcar stations • Along the Lake-to-Bay Loop Trail • Along routes to Fred Hutchinson
E. Address vehicular circulation impacts on pedestrian mobility in the Cascade Neighborhood.	Several improvements are recommended to reduce vehicle-pedestrian conflicts in the Cascade neighborhood. <ol style="list-style-type: none"> 1. Evaluate vehicle traffic control throughout neighborhood – There is a mix of two-way and all-way stop-controlled intersections in the Cascade Neighborhood that can be confusing to motorists and pedestrians alike. The existing traffic control measures should be reviewed given the substantial growth and change in traffic patterns that have occurred in recent years. Intersections that remain two-way stop-controlled (stop signs on just the side street) could be enhanced with repainted stop bars. All-way stops may be warranted at other locations. 2. Implement traffic calming techniques on non-arterial streets with cut-through traffic – Republican Street is the only designated arterial that passes through the Cascade Neighborhood. The other east-west streets—Harrison Street, Thomas Street, and John Street—are local streets. Traffic calming measures and special pedestrian crossing treatments, such as raised crosswalks and curb bulbs, could be considered to reduce traffic speeds and cut-through traffic between Eastlake Avenue E and Fairview Avenue E. 3. Consider all-way stop or traffic signal at Republican Street/Pontius Avenue E to improve pedestrian crossings and provide for local circulation to the arterial street. This treatment would require that warrants for a traffic signal or all-way stop be met.
F. Implement pedestrian improvements in the Denny Way Streetscape Concept Plan.	This includes widening the Denny Way Overpass of Interstate 5 to include a sidewalk on the north side, providing a signalized pedestrian crossing of Denny Way at Minor Avenue N, and improving crossings at key intersections. A new signal at Denny Way/Minor Avenue N would need to meet signal warrants and be approved by SDOT.
G. Improve pedestrian facilities along the Mercer Corridor.	There are many opportunities to improve pedestrian and bicycle mobility in the corridor. Key areas include: <ol style="list-style-type: none"> 1. Provide wide pedestrian/bicycle path on Mercer Street under Aurora Avenue – This feature is included in West Mercer project. 2. Improve pedestrian crossings at the Queen Anne Avenue/Roy Street intersection – See 3.C. above. 3. Provide signalized pedestrian crossing on Mercer Street between 1st Avenue N and 3rd Avenue N – See 3.C. above.
H. Improve pedestrian-level lighting.	The priority for improved lighting should be key pedestrian streets and routes to major transit facilities.
I. Complete the Lake-to-Bay Loop trail.	Originally imagined as the Potlatch Trail, this 3.2-mile, pedestrian route between Lake Union and Elliott Bay would link several parks—Lake Union Park, Seattle Center, the Olympic Sculpture Park and Myrtle Edwards Park. After Mercer Street is widened under Aurora Avenue N, there would be a wide, multi-use path on the north side of that street that would provide the initial link among destinations. The loop would be complete once the Alaskan Way Viaduct Replacement project is completed and the grid of streets is reconnected across Aurora Avenue N. A wide sidewalk is proposed on Thomas Street along the north side to complete the loop route. A new pedestrian bridge across the BNSF mainline railroad tracks at Thomas Street will link the loop to the Elliott Bay shoreline. The loop would use a combination of sidewalks and separated trail along with wayfinding signs and maps to guide users along the route.
J. Enhance the Terry Avenue connection to Lake Union Park.	Terry Avenue is the main access to Lake Union Park. South of Mercer Street, Terry Street is being improved with streetscape improvements. The segment between Mercer Street and Valley Street should be improved with enhanced pedestrian crossings and sidewalk enhancement.
K. Prepare a Streetscape Concept Plan for Dexter Avenue N within South Lake Union.	Dexter Avenue N between Mercer Street and Denny Way has a very wide (106-foot) right-of-way. A Streetscape Concept Plan should be developed to guide extensive pedestrian, bicycle and landscape enhancements that could be made in this right-of-way.
5. Support Biking	
A. Make bicycle improvements proposed for the Mercer West project.	There are many opportunities to improve pedestrian and bicycle mobility in the Mercer Corridor west of Dexter Avenue N. Key elements include: <ol style="list-style-type: none"> 1. Provide wide pedestrian/bicycle path on Mercer Street under Aurora Avenue – This feature is included in the project to widen Mercer Street under Aurora. 2. Provide bike lanes on Roy Street – The West Mercer project proposes to convert Roy Street to two-way operation and locate bike lanes on both sides of the street.

	3. Provide trail connection through Lower Kinneer Park – A trail that meanders through Lower Kinneer Park proposed to link Roy Street, Mercer Street, and Prospect Street at Elliott Avenue. This would provide a non-motorized connection between Uptown and Elliott Bay Park via the pedestrian bridge that crosses the railroad tracks at Prospect Street.
B. Provide for bicycles on Thomas Street between 5th Avenue N and Eastlake Avenue E.	Several east-west streets will be reconnected across Aurora Avenue N once the North Portal is complete: John Street, Thomas Street and Harrison Street. Thomas Street is also proposed to be a Green Street, and will likely have the lowest vehicular traffic. Bicycle facilities should be incorporated into the Street Concept Plan.
C. Improve the Dexter Avenue N bike lanes between Roy Street and Denny Way.	SDOT is currently improving the north segment of the Dexter Avenue N between Roy Street and the Fremont Bridge. This project includes many features to improve the bike lane, including a buffer between the bike lane and the travel lane. Some of these treatments could be extended to the segment of Dexter Avenue between Roy Street and Denny Way. One improvement that should be considered as part of the Dexter Avenue N bike lane is to add a right-turn pocket to the right side of the bike lane on southbound Dexter Avenue N at Harrison Street to reduce conflicts with right-turning vehicles destined to SR 99 via Harrison Street. A green bike lane at this location could also be considered. At the Mercer Street intersection, consider treatments such as bicycle boxes and signal phasing to improve the transitions between Dexter Avenue N and the Mercer Street bike path.
D. Improve bicyclist safety along 9 th Avenue with signal changes at Denny Way and at Harrison Street.	Three improvements are recommended to enhance mobility along and across 9 th Avenue: 1. Improve street lighting – stakeholders report that existing lighting is dim. 2. Operate the traffic signal at 9th Avenue/Harrison Street at all times – This signal sometimes operates as a signal, and sometimes in a flashing mode where the side street traffic on Harrison Street must stop. Both pedestrians and motorists are confused about who has the right of way. 3. Provide a separate southbound left turn phase at the 9th Avenue/Denny Way/Bell Street intersection – 9 th Avenue and Bell Street do not align across Denny Way, but operate on the same signal phase. Southbound left turn traffic is supposed to yield to oncoming northbound through traffic on Bell Street; however, bicyclists report that motorists often turn in front of them. Providing a separate left turn phase would improve this condition.
E. Provide for bicycles on Harrison Street between Fairview Avenue N and 5 th Avenue N. Install a signal at Eastlake Avenue N.	These projects are from the <i>Seattle Bicycle Master Plan</i> .
F. Provide for bikes on Fairview Avenue N between Valley Street and Denny Way.	The <i>Seattle Bicycle Master Plan</i> calls for improvements along Fairview Avenue N, including intersection improvements at Denny Way, Valley Street and Mercer Street. Fairview Avenue N is also targeted by the South Lake Union Mobility Plan for transit enhancements. If a Business Access and Transit (BAT) lane is located on Fairview Avenue N, it could be shared with bicyclists. Special treatments would be needed on northbound Fairview Avenue N approaching Mercer Street because of the dual right-turn lane in this location.
G. Evaluate 5 th Avenue N as a potential north-south bicycle connection.	Depending on right-of-way availability a two-way cycle track may be an appropriate facility type for 5 th Avenue N.
H. Locate bike storage near major transit stations.	Bicycles can link transit to areas that might be beyond a comfortable walking distance. Secure bicycle storage at major transit stations that support this mode change.
I. Create a bike sharing program for Uptown, South Lake Union and Seattle Center.	The two Urban Centers of Uptown and South Lake Union are an ideal location for a Bike Share program. The neighborhoods are relatively flat, have (or will have) a robust grid for bicycling, and have major attractions that could be linked by bike. Successful bike share programs provide closely-spaced locations where users can access bicycles. Bike share facilities could be located at the major attractions, including Seattle Center, Lake Union Park, the Aurora Transit Station, and Denny Park, as well as at other locations such as near retail districts, major employment centers, and community facilities. The neighborhoods

	should work with the City of Seattle and King County Metro to develop a framework and business model.
J. Consider bike boxes and bike signals along key bike routes	For signalized intersections that require side-street detection of vehicles or pedestrians, provide in-pavement or video detection for bicycles. Key locations could include Roy Street west of Taylor Avenue, Thomas Street between 5 th Avenue N and Eastlake Avenue N, and Dexter Avenue N.
6. Leverage Private Transportation Investments	
A. Support private shuttles with passenger load zones along public streets at appropriate locations.	There are many companies and institutions that use private shuttles to transport employees and patients to sites in South Lake Union. They are not able to use public transit stops for loading and unloading. Several entities have worked with the City of Seattle to locate passenger load zones adjacent to transit stops, which makes it easier for shuttles to maneuver to and from the curb. The City should work with the neighborhoods to identify appropriate load zone locations and curb lengths. A new type of load zone—one that can only be used by authorized shuttles—should also be considered.
B. Support changes to State laws related to private shuttles that allow for private businesses to share resources.	State laws restrict operations for businesses operating private shuttles so that they do not compete with public transit. This can limit the ability for entities to share private shuttle services.
C. Incentivize frontage improvements.	Many desired frontage improvements are beyond City code requirements. This could include more extensive improvements than are typically required in order to comply with Street Design Concept Plans (such as along Thomas Street or Denny Way). Developers should be encouraged to enhance their frontages through credits against other transportation mitigation requirements or through other bonus programs.
D. Entice private transit funding through transit partnerships with matching grants or other funding mechanisms.	Businesses and institutions in South Lake Union have helped to fund past transit improvements through King County Metro’s transit partnership program. That program or others should be continued and/or expanded.
E. Coordinate street and utility work within the right-of-way.	Construction disruptions related to street and utility upgrades should be minimized by implementing strategies such as joint trenching policies, and aligning capital improvement programs between SDOT, SPU, City Light and private utility providers.
F. Coordinate transportation demand management plans among businesses and institutions.	Businesses and institutions may be able to enhance travel demand management by coordinating plans and services including shared carpool or vanpool matching, coordinated private shuttle service (see 6.B. above), and leveraging key transit improvements that would serve multiple site needs.
G. Manage neighborhood parking resources to share parking among various.	Consider a program to manage parking resources to serve uses that have different peak demand characteristics. This could include sharing office parking that is needed on workdays with events that need parking in the evening or on weekends.
7. Create Hubs for Mode Transfers	
A. Create hub around the Aurora Avenue Rapid Ride Station.	There are two key locations where many transportation modes will intersect. One hub would be at the future Aurora Avenue RapidRide Station, between Harrison and Thomas Streets, where regional RapidRide service would meet local transit service. This node also connects with the Lake-to-Bay Loop trail, the Thomas Street Green Street and new east-west bike routes.
B. Create hub on Valley Street near Lake Union Park.	This hub would connect the South Lake Union Streetcar with the Lake-to-Bay Loop Trail, Cheshiahud Trail, and Valley Street bike paths. It would also be in close proximity to Kenmore Air Harbor and the proposed Lake Union Foot Ferry.

A REFERENCES

American Architectural Foundation, Turning the Uptown Triangle into a Sustainable Urban Community, May 2010.

City of Seattle, 2010-2015 Adopted Capital Improvement Program, No Date.

City of Seattle, Bicycle Master Plan, 2007.

City of Seattle, Queen Anne Approval and Adoption Matrix, March 12, 1999.

City of Seattle, Seattle Pedestrian Master Plan, September 2009.

City of Seattle, South Lake Union Approval and Adoption Matrix, June 24, 1999.

City of Seattle City Planning, Thomas Street Green Street, Background Presentation and Discussion, March 2010.

City of Seattle City Planning, Bumgartner Architecture Interiors Planning, Denny Way Streetscape Concept Plan, Draft Report, January 2009.

City of Seattle Department of Planning and Development, South Lake Union Design Guidelines, May 26, 2005.

City of Seattle, Seattle Parks Foundation, Cheshiahud Lake Union Loop (map), No Date.

City of Seattle, Washington State Department of Transportation, Alaskan Way Viaduct & Seawall Replacement Program, Urban Design Guidelines and Tunnel Operations Building Briefing (PowerPoint), March 16, 2010.

City of Seattle, Weber Thompson, South Lake Union Urban Design Framework - Workshop Summary, October 28, 2009.

City Planning (Seattle), South Lake Union Urban Center Neighborhood Plan, September 2007.

Cushing Terrell, Seattle's Lake to Bay Loop (map), No Date.

Heffron Transportation, Inc., Seattle Transit Network Strategy, Executive Briefing, March 5, 2008.

King County Metro, Transit Now, November 2006.

Leavengood Architects, Center for Wooden Boats Concept Plan, August 2009.

No Author Listed, South Lake Union Neighborhood Plan - Transportation Element, December 5, 1998.

Parsons Brinckerhoff, South Lake Union Transportation Study, Final Report, July 2004.

Seattle Center, Seattle Center Century 21 Master Plan, Campus Redevelopment Plan, May 18, 2010.

Seattle Department of Transportation, Mercer Corridor Improvement Plans, September 2009.

Seattle Department of Transportation, Seattle Streetcar Network Development Report, May 2008.

Seattle Department of Transportation, Seattle Urban Mobility Plan, January 2008.

Seattle Department of Transportation, Seattle Urban Mobility Plan, Best Practices in Freight Movement, January 2008.

Seattle Department of Transportation, Seattle Urban Mobility Plan, Best Practices in Transportation, January 2008.

Seattle Department of Transportation, Seattle Urban Mobility Plan, Bicycle and Pedestrian Travel, January 2008.

Seattle Department of Transportation, Seattle Urban Mobility Plan, What Do We Know About the Future, January 2008.

Seattle Department of Transportation, South Lake Union Transportation Demand Management Program, Report to Seattle City Council, December 2005.

Seattle Department of Transportation with Seattle Department of Planning and Development, Weinstein A/U, Gustafson Guthrie Nichol Ltd, SvR Designs, EnviroIssues, Terry Avenue North Street Design Guidelines, March 2005.

Seattle Department of Transportation, King County, Otak, DKS Associates, Heartland, DSV International, North Downtown Seattle Bus Layover Project - Phase II, Final Implementation Report, June 25, 2009.

Seattle Department of Transportation, Nelson Nygaard Associates, Inc., URS Corporation, SvR Design, DKS Associates, Underhill Company, Seattle Transit Master Plan, Briefing Book, December 2010.

Seattle Department of Transportation, Perteet, LMN Architects, GVA Kidder Matthews, Westlake Transportation Hub Strategy, No Date.

Seattle Municipal Code (SMC) 23.47A.005, Street Level Uses, Principal Pedestrian Streets, July 2005.

Seattle Parks Foundation, Bands of Green, June 29, 2005.

Seattle Planning Commission, Seattle Transit Communities, Integrating Neighborhoods with Transit, November 2010.

Seattle Right-of-Way Manual, Neighborhood Green Street Locations in North Seattle (map), September 2005.

Seattle Times, Seattle Times, "Sound Transit will add more bike parking to deal with shortage", August 18, 2010.

The Uptown and South Lake Union Visioning Charette Stakeholder Group, Recommendations Package for a Joint Vision for the Uptown and South Lake Union Urban Center, No Date.

VIA Architecture, HBB Landscape Architecture, FolkPark, Lower Kinneer Park Enhancement Plan, Various Maps, No Date.