ROOSEVELT TO DOWNTOWN
HIGH-CAPACITY TRANSIT STUDY

# OPEN HOUSE MEETING AGENDA

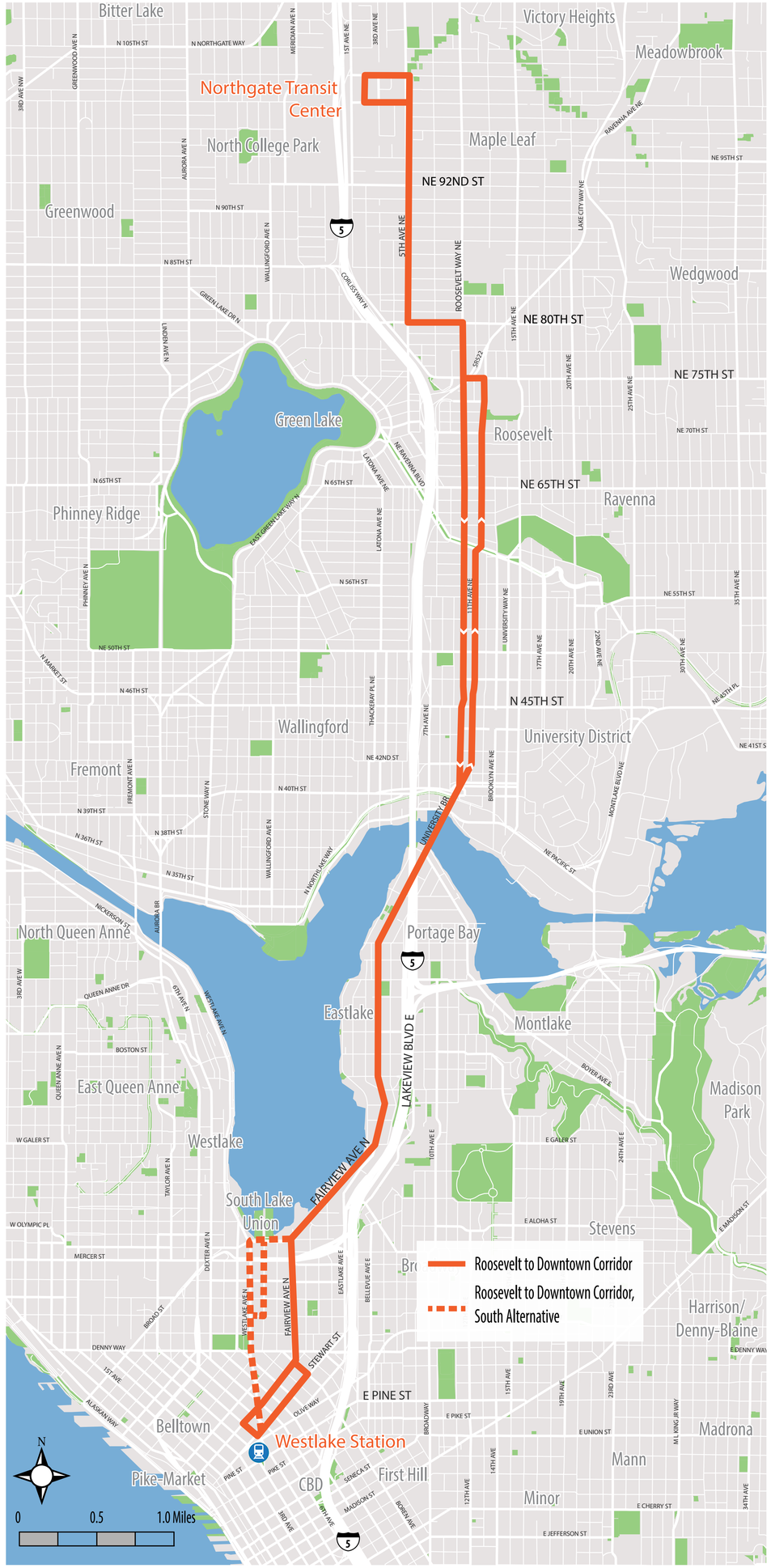
| | |
|---|---|
| 6:00 PM | WELCOME/CHECK-IN |
| 6:15 PM | SLIDESHOW PRESENTATION |
| 6:30 PM – 8:00 PM | VISIT STATIONS<br>PROVIDE FEEDBACK |
| 8:00 PM | OPEN HOUSE ENDS |

**STAY INVOLVED!**
VISIT OUR WEBSITE OR SEND US AN EMAIL:
**seattle.gov/transportation/roosevelthct.htm**
**RooseveltToDowntown@seattle.gov**

SDOT
*Seattle Department of Transportation*

# PROJECT SUMMARY

- **Corridor identified as a top priority in the 2012 Seattle *Transit Master Plan***
- **Exploring options for *High-Capacity Transit***
- **Use *Move Seattle* approach to accommodate all modes**
- **Goal of this study is to identify a *Locally Preferred Alternative***




SDOT
*Seattle Department of Transportation*

ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE

# PROJECT TIMELINE

**November 2014–
May 2015**

Identify existing conditions in the corridor and conduct mode analysis

**May 2015–
October 2015**

Develop and analyze alternatives

**November 2015–
February 2016**

Conceptual design of locally preferred alternative

Nov 2014

May 2015

Oct 2015

Nov 2015

Feb 2016

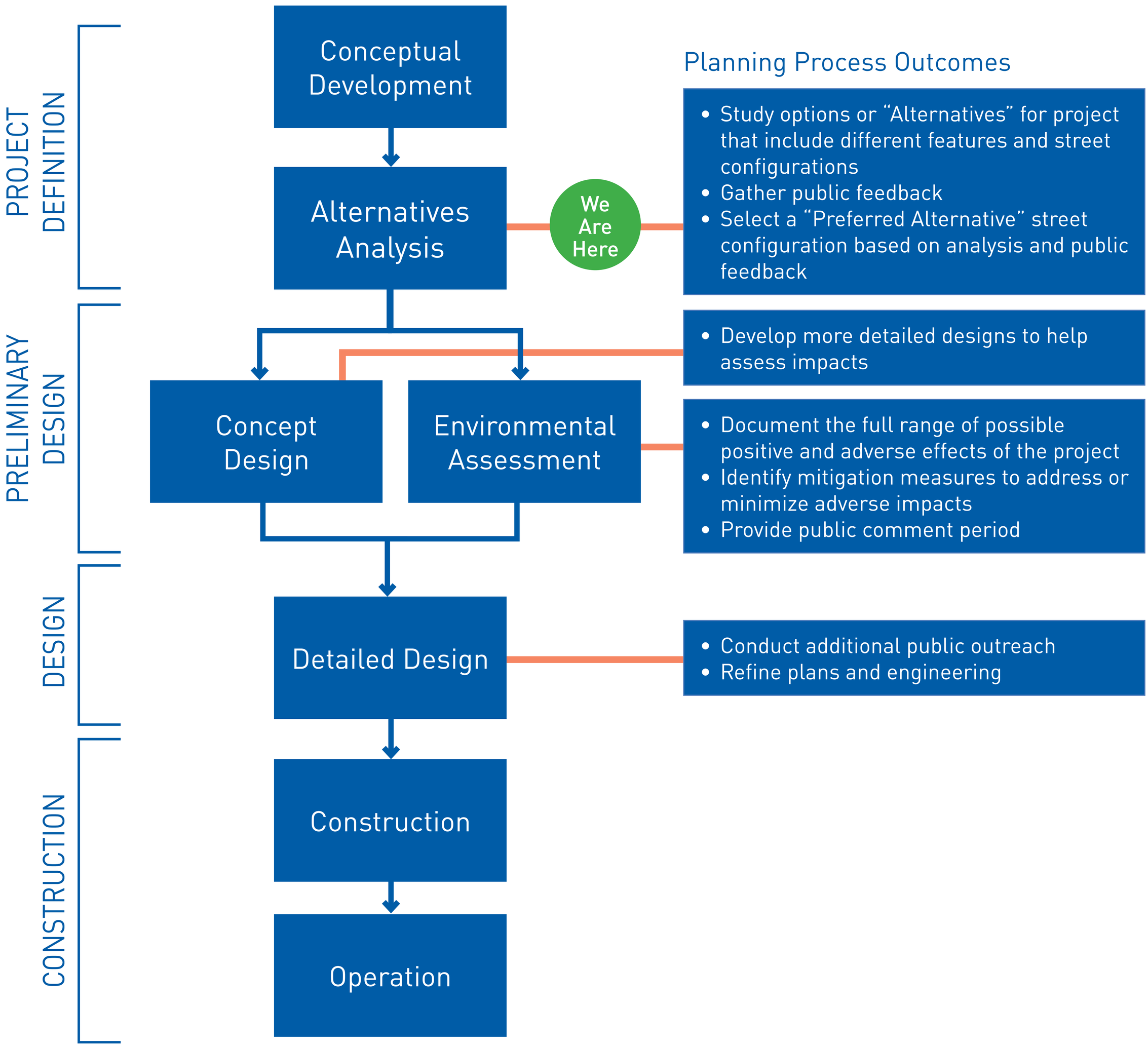
Public Input Gathered from Businesses & Residents

**We are here**

**November 2015**
Announce a locally preferred alternative

SDOT
*Seattle Department of Transportation*

# PROJECT PLANNING PROCESS




This is the Federal Transit Administration (FTA) process for all federally funded capital projects.

SDOT
*Seattle Department of Transportation*

ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE

# DRAFT
# PROJECT PURPOSE AND NEEDS

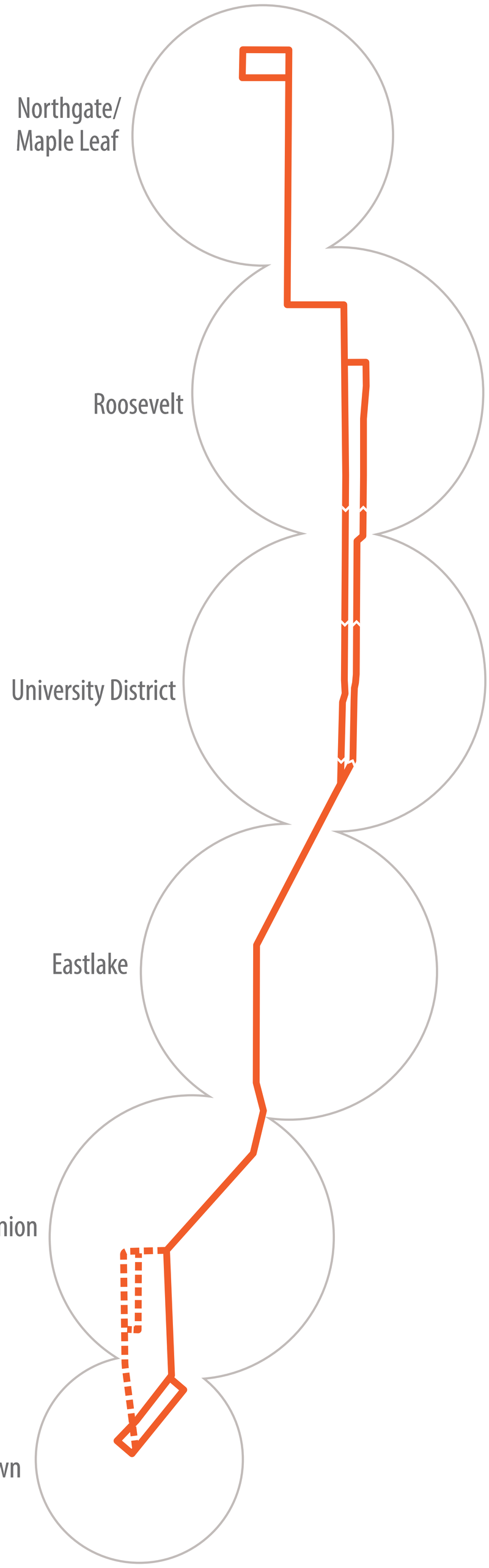
- **Develop high capacity transit service that includes physical enhancements to existing pedestrian and bicycle facilities,** including smooth sidewalks, ADA-compliant curb ramps, and protected bicycle lanes, to improve access, circulation, and safety

- **Provide high capacity transit service to support the transit mode share goals** outlined in the Northgate, Roosevelt, University District, and South Lake Union Neighborhood Community Plans

- **Strengthen the north-south connections** to the regional transit system, including future Link stations, to improve livability and support growth in the Northgate, Maple Leaf, Roosevelt, University District, Eastlake, South Lake Union, and Downtown neighborhoods and connect two of the fastest growing employment centers

- **Provide high capacity transit service that is fast, reliable, comfortable, and easy to use** to replace existing crowded, unreliable, and slow service along the Roosevelt to Downtown corridor

- **Connect residential developments**, especially moderate income housing in the Maple Leaf, Roosevelt, University District, and Eastlake neighborhoods, to new major technology employment and medical service centers, mainly in South Lake Union, University District, and Downtown Seattle neighborhoods




SDOT
*Seattle Department of Transportation*

# WHAT IS BUS RAPID TRANSIT (BRT)?

**BRT combines a rubber-tired  bus with the operating characteristics of a rapid streetcar, including longer stop spacing, exclusive right-of-way where possible, and high quality stations**


Cleveland

## MOVING BEYOND RAPIDRIDE

- Seattle's existing RapidRide service offers limited BRT features including fewer stops and along some segments, transit signal priority and semi-exclusive lanes
- BRT on the RDHCT Corridor would provide full-featured BRT service including dedicated lanes, enhanced stations, and signal priority, allowing for faster travel times similar to RSC

# WHAT IS RAPID STREETCAR (RSC)?

**Rapid Streetcar is a streetcar with enhancements to improve capacity and performance including longer vehicles, faster operating speed, longer station spacing, and more extensive use of exclusive right-of-way**


Toronto

*Photo Courtesy of Toronto Transit*
vvv/photos/510_4400_2014_12_07a.jpg

SDOT
*Seattle Department of Transportation*

# SIMILARITIES BETWEEN RSC & BRT

- **High Capacity** vehicles accommodate more patrons and have more doors than existing Metro buses
- Utilizes **Exclusive Traffic Lanes** and **Transit Signal Priority** to improve performance
- **Limited Stops** decreases running time
- **Boarding Area Amenities** such as **Real Time Bus Arrival Signs** create positive user experience
- Integrated **Street Design** that improves aesthetics and pedestrian movements
- **Prepaid Boarding, Level Boarding,** and **Wide Doors** ensure efficient boarding and alighting
- Runs on electric-catenary lines for **Efficient Operation** and **Low Carbon Footprint**

SDOT
*Seattle Department of Transportation*

# DIFFERENCES BETWEEN RSC & BRT

*(INDUSTRY STANDARDS)*

| | BRT | RSC | DIFFERENCE | ADVANTAGE |
|---|---|---|---|---|
| Annual Operating Cost | $ 9-11 million | $ 12-15 million | ~$3.5 million | BRT |
| Per Mile Capital Costs | $ 10-50 million / mile | $ 50-100 million / mile | $ 40-50 million / mile | BRT |
| Peak Hour Capacity | 2,400 | 3,000 | 600 | RSC |

SDOT

*Seattle Department of Transportation*

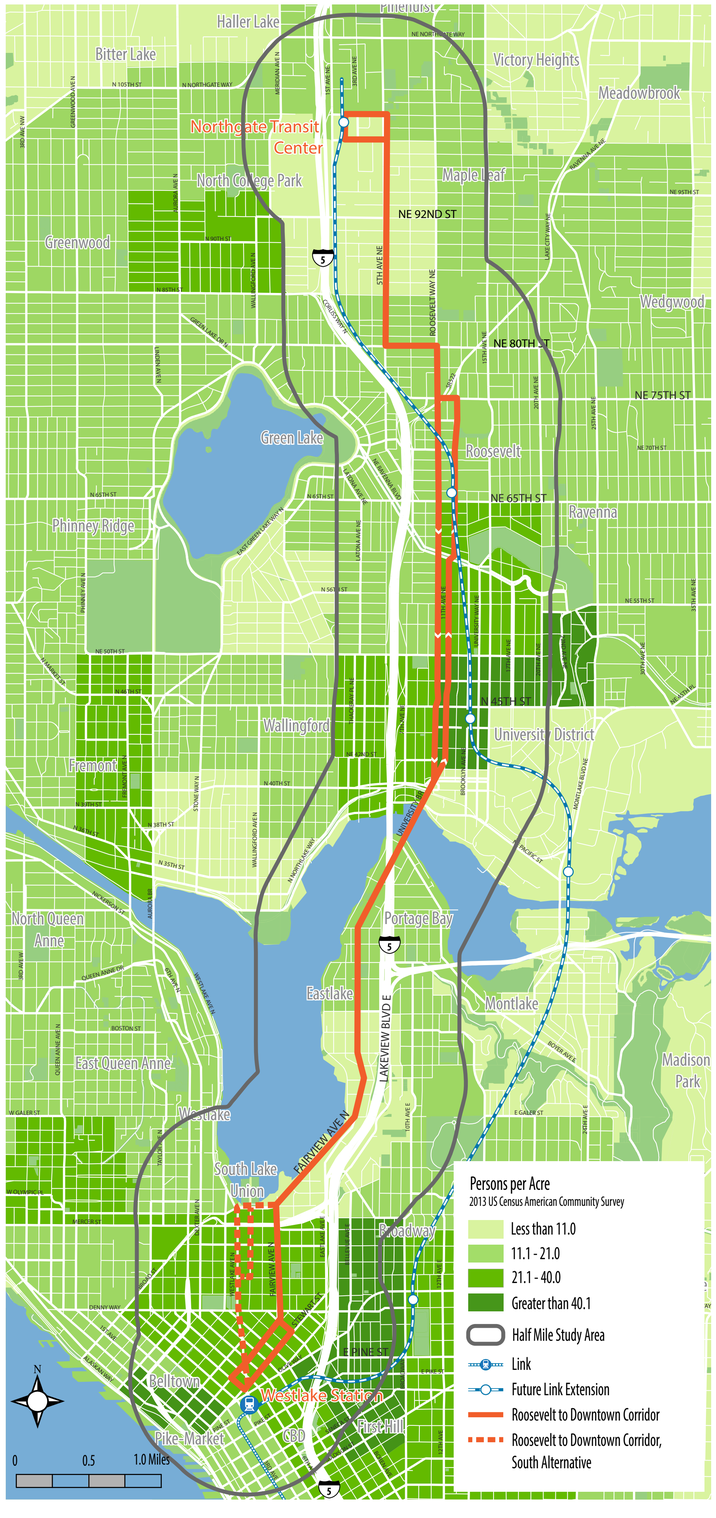
# COMPARISON OF MODE ALTERNATIVES

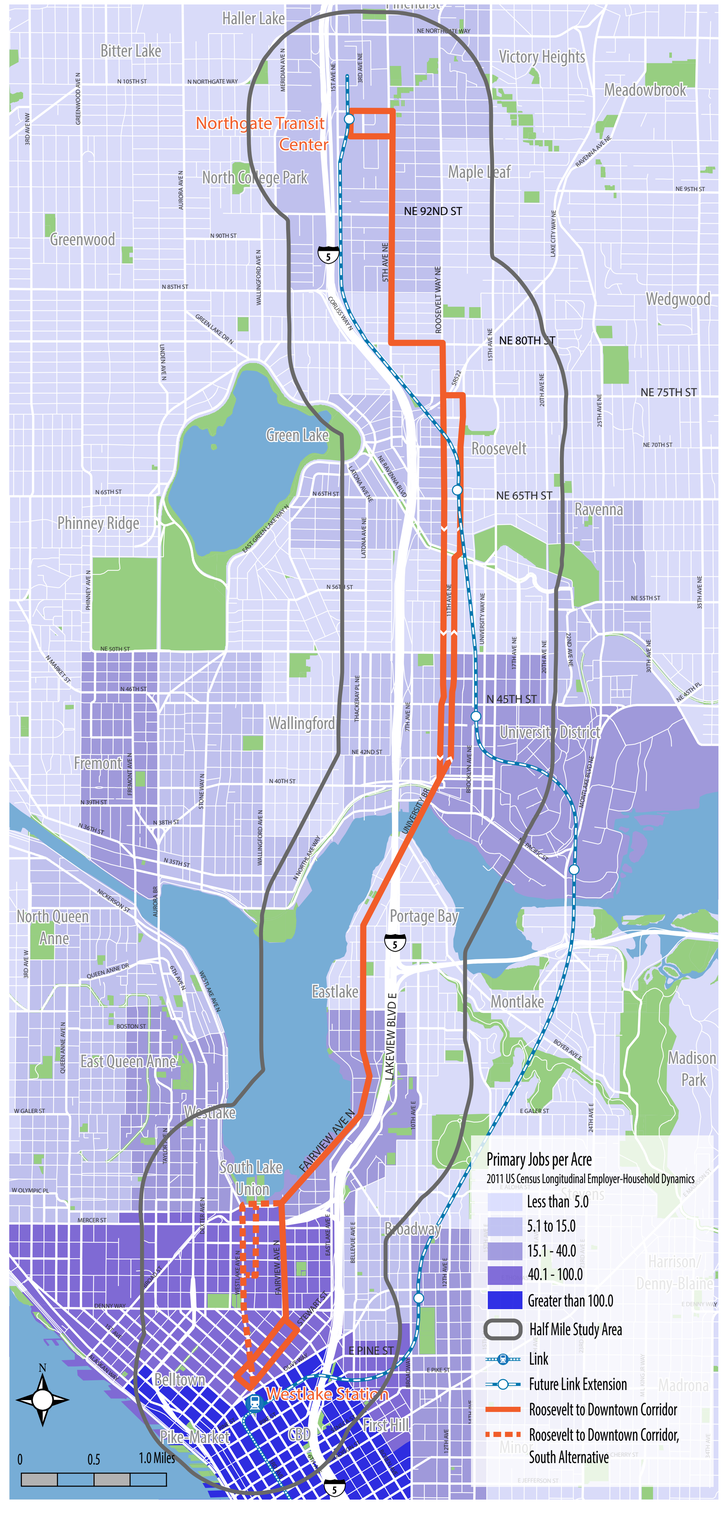
| | BRT Unique Advantage | RSC Unique Advantage | Overall Advantage |
|---|---|---|---|
| Vehicles | More availability and increased flexibility | Higher capacity | BRT |
| Fuel/Power | Brief 'off-wire' use possible | N/A | BRT |
| Stations | Higher service interoperability | N/A | BRT |
| Service | Greater frequency, reliability, and flexibility | Higher passenger capacity | BRT |
| Ridership | N/A | Higher expected ridership | RSC |
| Transit Experience | N/A | Greater ride comfort | RSC |
| Impacts to Other Modes | Greater interoperability with existing modes | Less wear on asphalt | BRT |
| Project Phasing | Smaller minimum segments | N/A | BRT |
| Construction | Simpler construction | N/A | BRT |
| Land Use | Less exterior noise and vibration | Spurs greater development | RSC |
| Costs | Significantly lower capital costs | Slightly lower operating costs | BRT |

# EXISTING POPULATION AND EMPLOYMENT

| | Corridor | City |
|---|---|---|
| Population | 95,000 | 625,000 |
| Youth % | 23% | 13.5% |
| Senior % | 9% | 11% |
| Low Income % | 20% | 14% |
| Employed Residents | 60,000 | 355,000 |
| Households with No Vehicle | 29% | 8.5% |

## Corridor jobs: 168,000 in 2011




SDOT
*Seattle Department of Transportation*

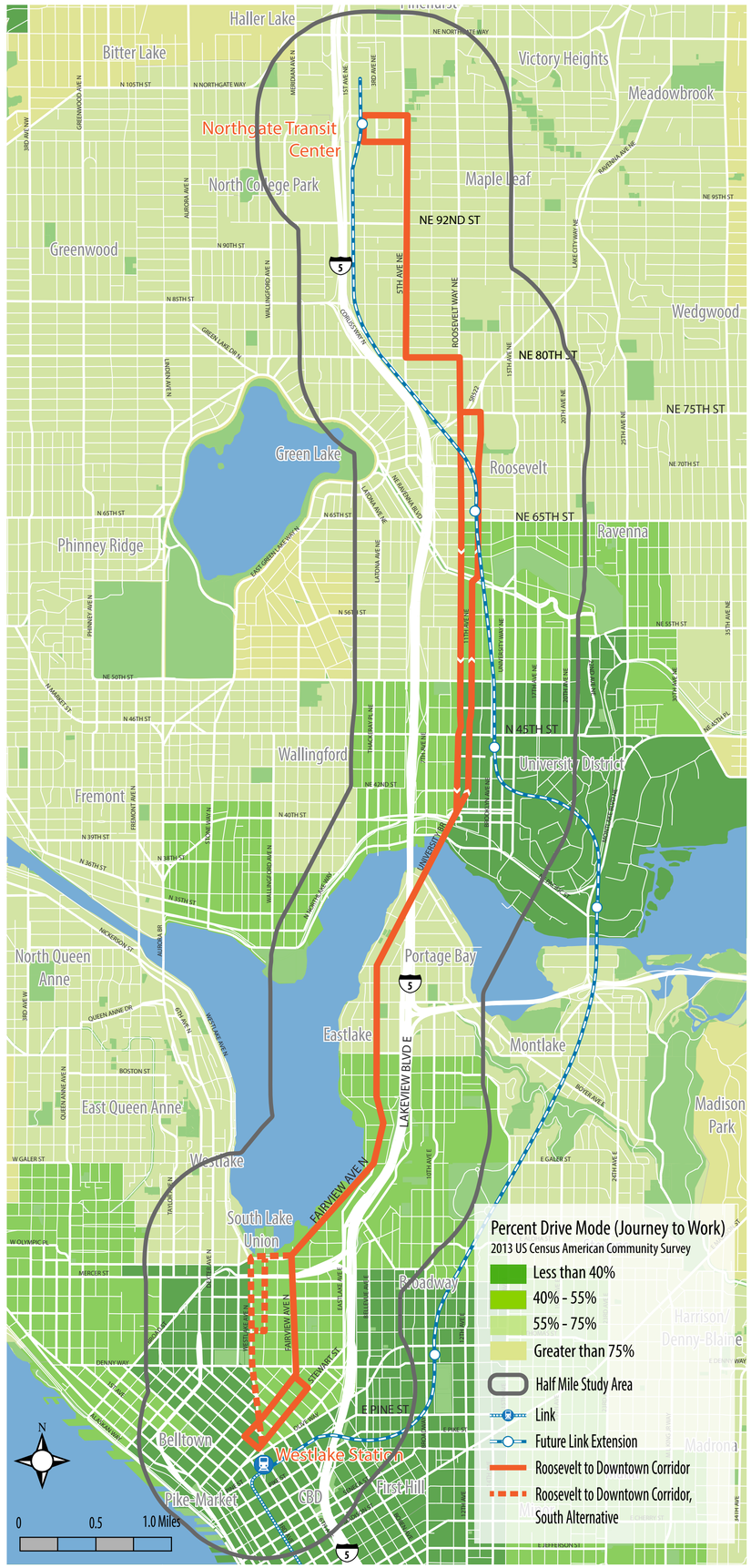
# PROJECTED POPULATION AND EMPLOYMENT GROWTH

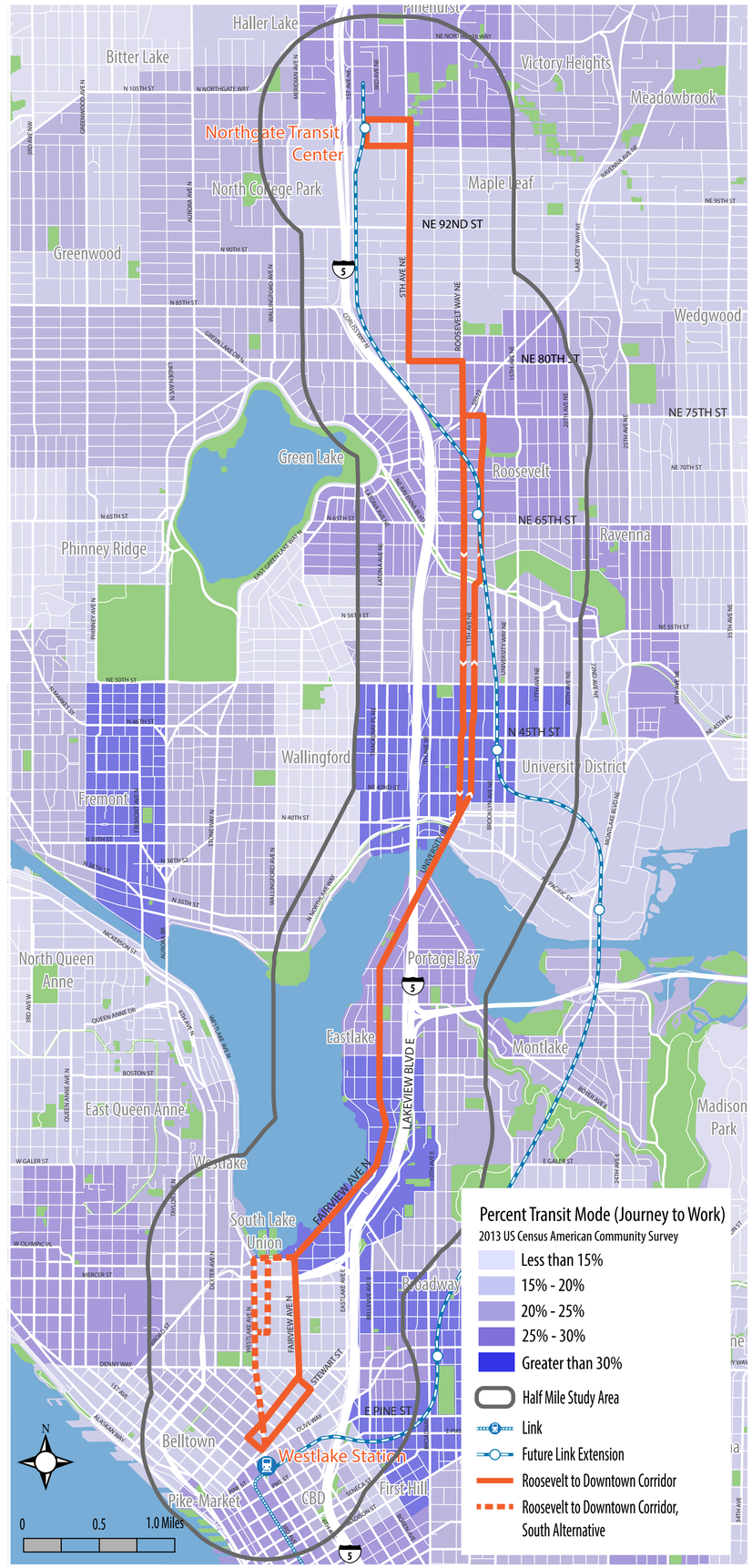

SDOT
*Seattle Department of Transportation*

## ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE

# MODE SHARE

| Mode Percent of Total Workers | Corridor | City |
|---|---|---|
| Drive Alone | 39% | 52% |
| Carpool | 7% | 9% |
| Public Transportation | 23% | 19% |
| Bicycle | 4% | 4% |
| Walked | 20% | 9% |
| Taxi, Motorcycle, Work from Home, Other | 7% | 8% |

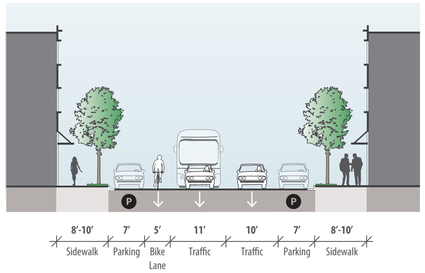


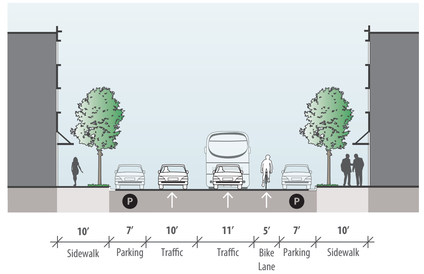

SDOT
*Seattle Department of Transportation*

# EXISTING ROADWAY CROSS SECTIONS

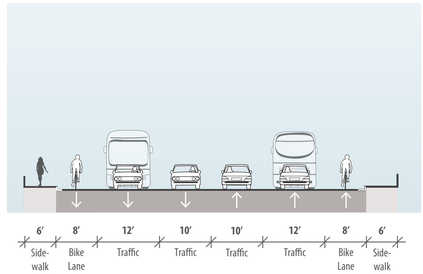

**A** Roosevelt Way NE, Southbound (40′ CtC, 56′-60′ ROW)
*From NE 42nd Street to 65th Street*



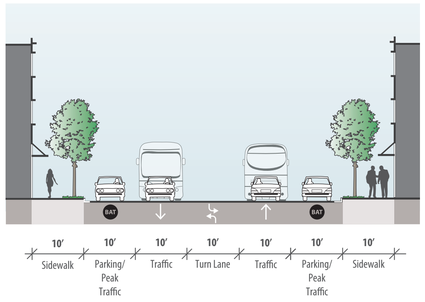

**B** 11th/12th Avenue NE Northbound (40′ CtC, 60′ ROW)
*From NE 42nd Street to 65th Street*



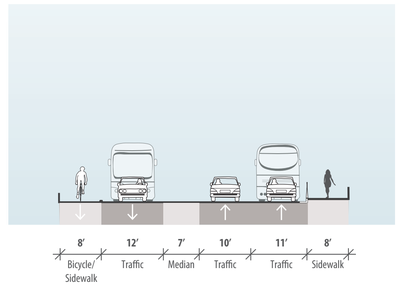

**C** University Bridge, Southbouth Approach (60′ CtC, 72′ ROW)
*South of NE 40th Street*



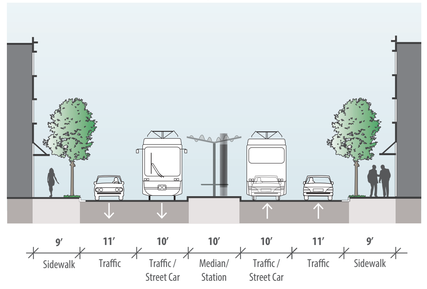

**D** Eastlake Avenue E (50′ CtC, 70′ ROW)
*From E Allison Street to Fairview Avenue E*



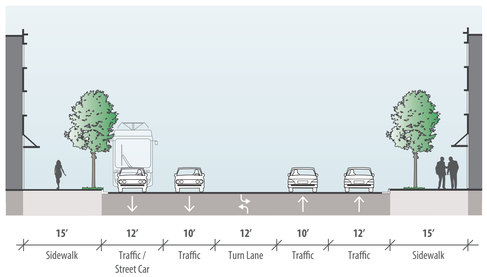

**E** Fairview Avenue N Bridge (40′ CtC, 56′ ROW)
*South of Eastlake Avenue E*



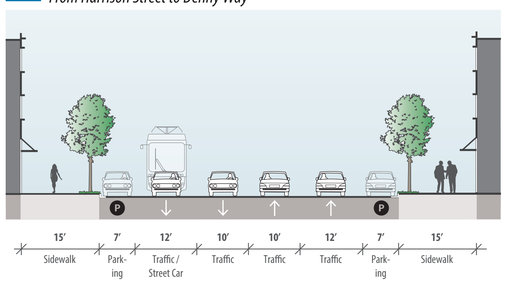

**F** Fairview Avenue N (50′ CtC, 70′ ROW)
*From Yale Avenue N to Valley Street*



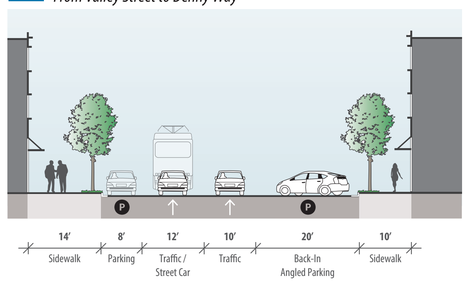

**G** Westlake Avenue N (58′ CtC, 88′ ROW)
*From Mercer Street to Harrison Street*



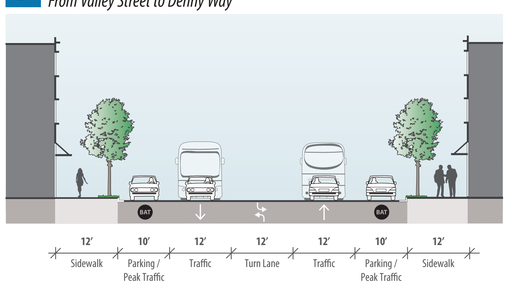

**H** Westlake Avenue N (58′ CtC, 88′ ROW)
*From Harrison Street to Denny Way*



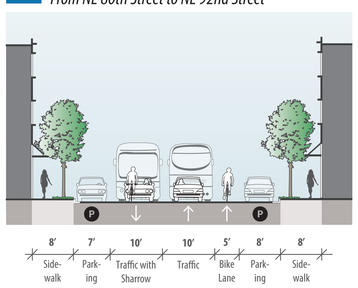

**I** Terry Avenue N (50′ CtC, 74′ ROW)
*From Valley Street to Denny Way*




**J** Fairview Avenue N (56′ CtC, 80′ ROW)
*From Valley Street to Denny Way*




**K** 5th Avenue NE (40′ CtC, 56′ ROW)
*From NE 80th Street to NE 92nd Street*




SDOT
*Seattle Department of Transportation*

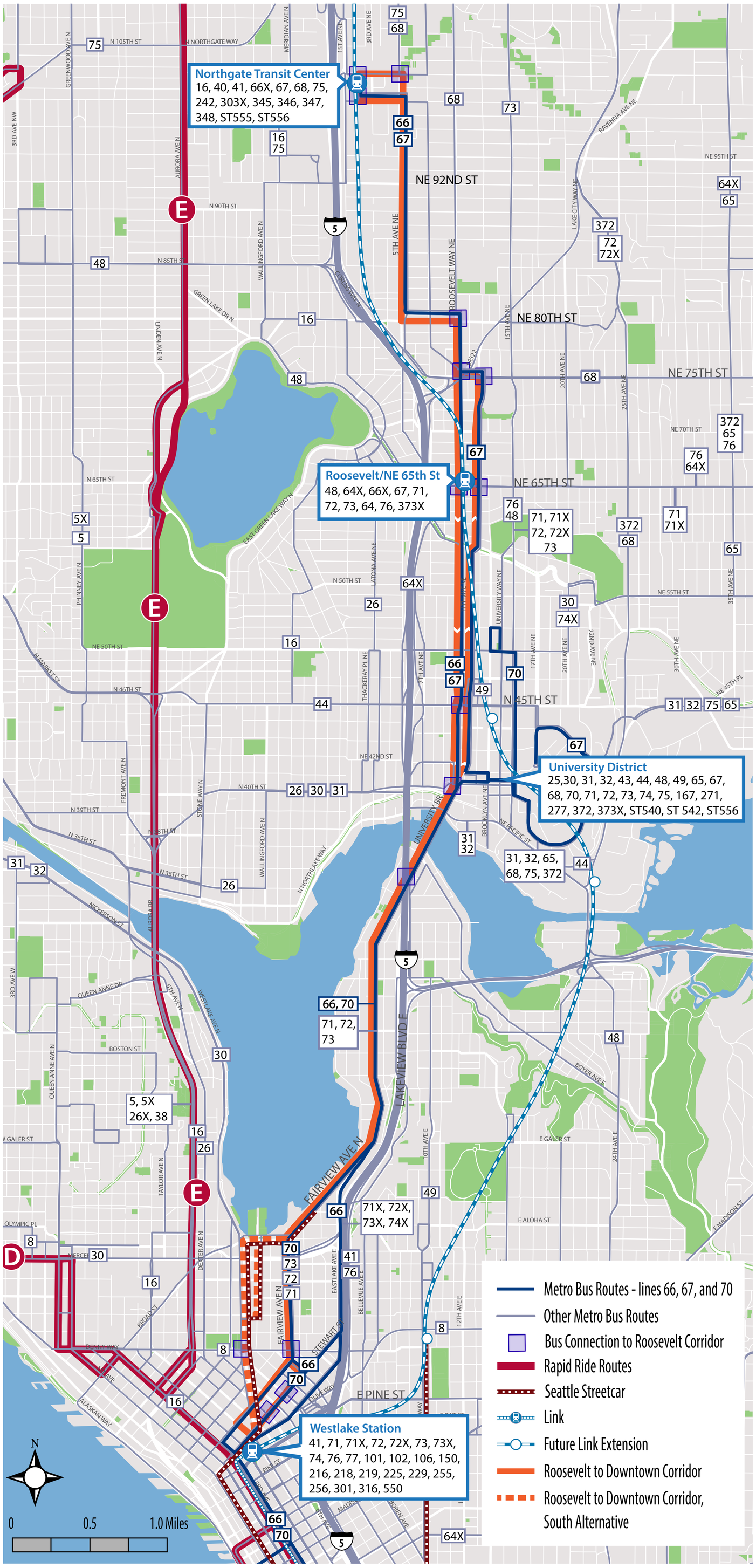
## ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE

# MAJOR BUS LINES

## Three Metro bus routes operate along portions of the corridor:

## Routes 66 (Express), 67, and 70

- 66/67: Northgate TC to Roosevelt to University District to Downtown Seattle
- 70: University District to Eastlake to Downtown Seattle
- Combined frequency 5-10 minutes during weekday peak periods




SDOT
*Seattle Department of Transportation*

ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE

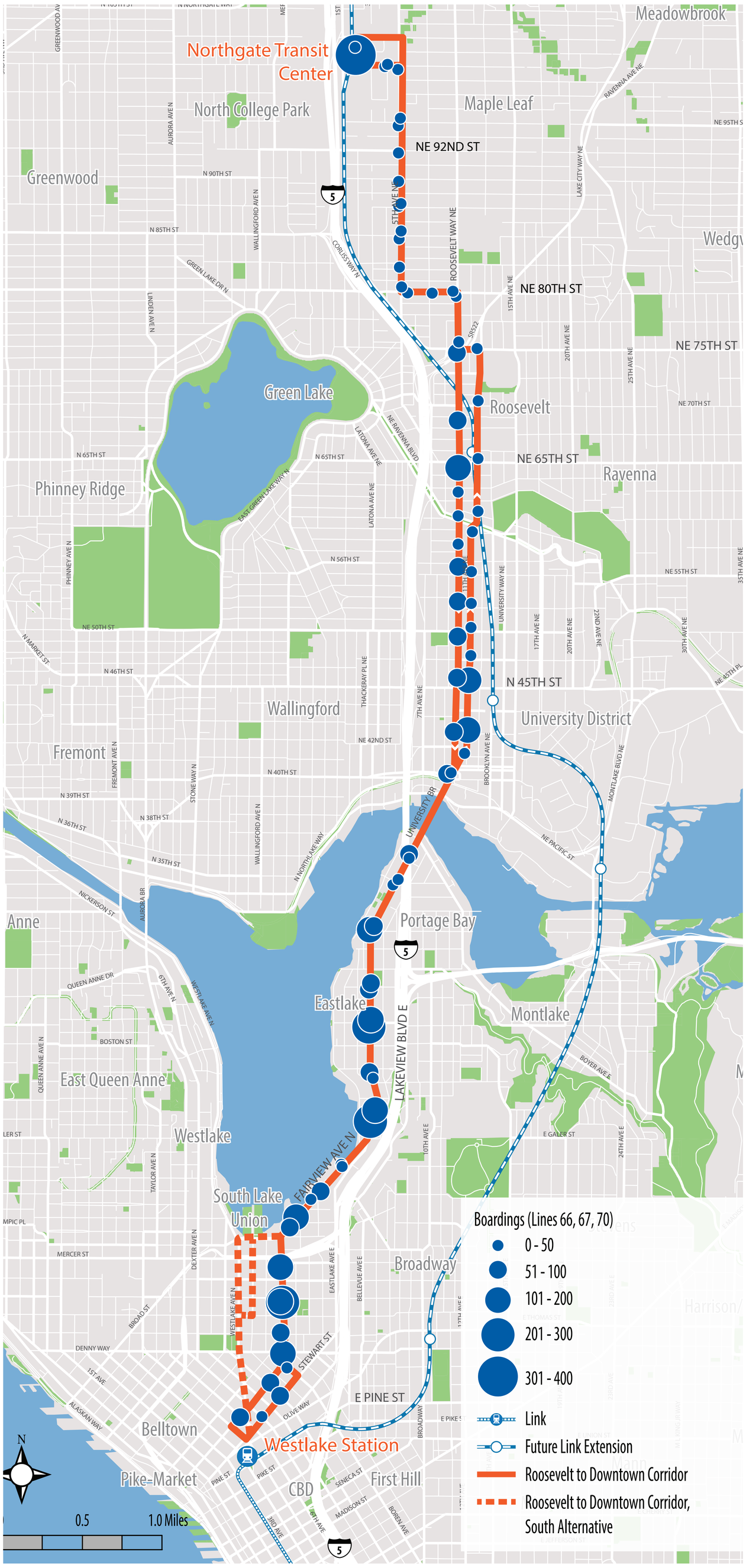
# CURRENT TRANSIT RIDERSHIP

| Route | Average Weekday Boardings* |
|---|---|
| 66 | 2,274 |
| 67 | 1,344 |
| 70 | 4,653 |

* Represents boardings for entire route, not only stops along RDHCT Corridor

## Top 3 Stops for Boardings

- Northgate TC
- NE Campus Pkwy & 12th Ave NE
- Eastlake Ave E & E Lynn St




SDOT
*Seattle Department of Transportation*

ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE

# TRAFFIC VOLUMES

- **Average weekday traffic volumes vary between 6,600 and 28,000 vehicles**
- **Highest volumes at the University Bridge**


SDOT

*Seattle Department of Transportation*

ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE

# CORRIDOR TRAVEL TIMES

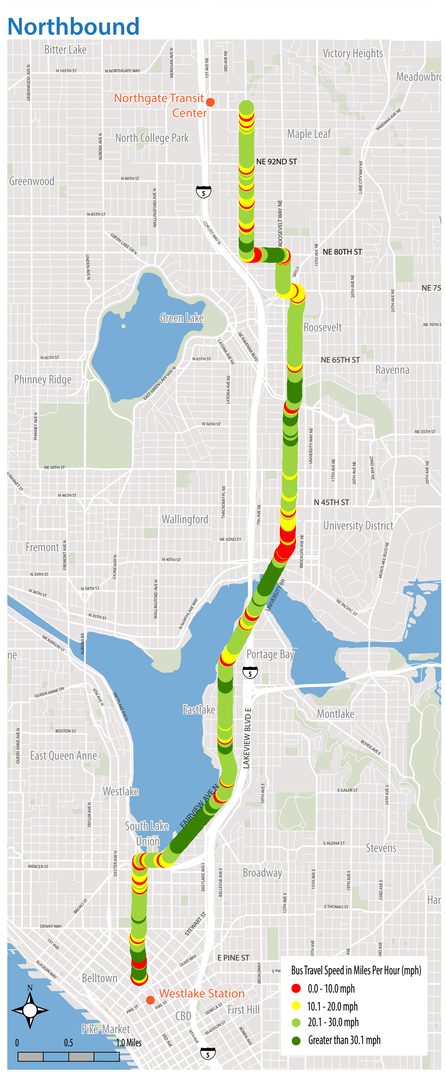
## WEEKDAY PM PEAK PERIOD

- **Free flow travel time is about 20 minutes to travel the 7-mile corridor**
- **Congestion occurs predominantly during the PM peak hours, in both directions**
- **Travel times can reach or exceed 1 hour during congested periods**
- **By bus, traveling the entire corridor takes 1 hour or more**

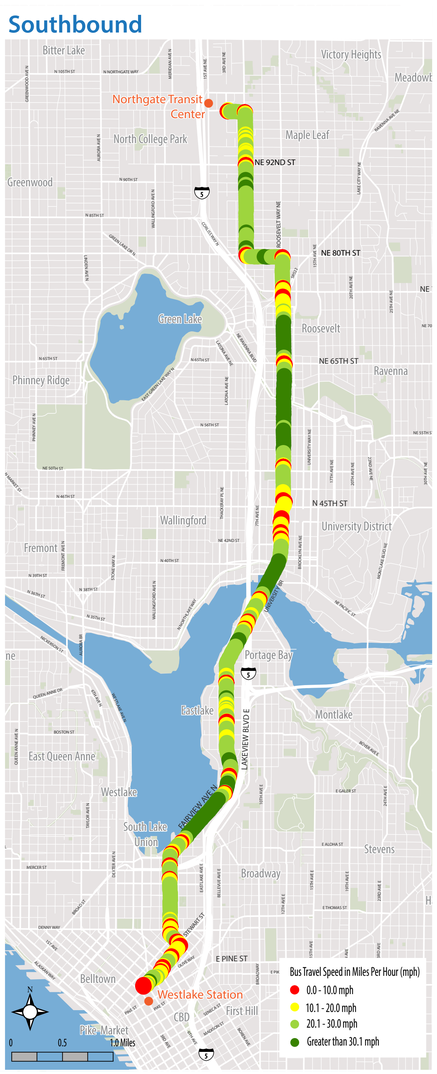
| Avg Speed (mph) | Car | Bus |
|---|---|---|
| Northbound | 11.8 | 7.9 |
| Southbound | 12.6 | 9.5 |

## BY CAR

### Northbound

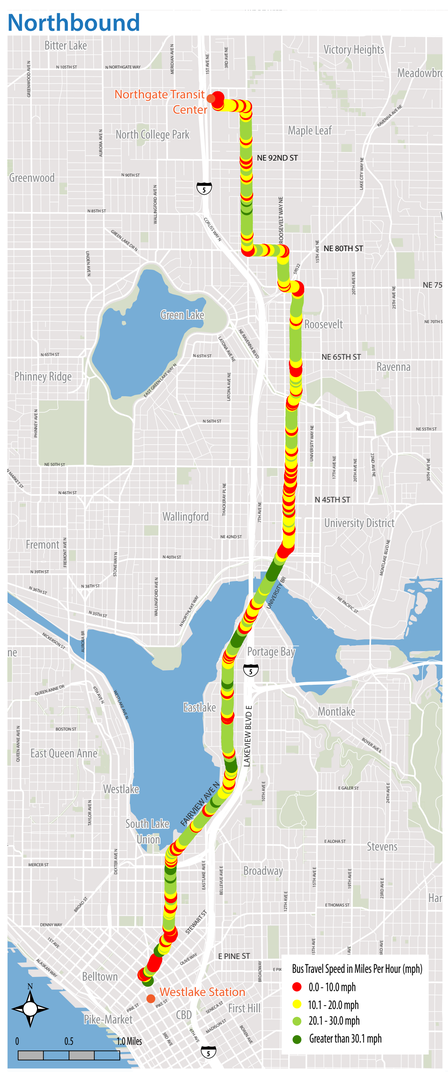



### Southbound

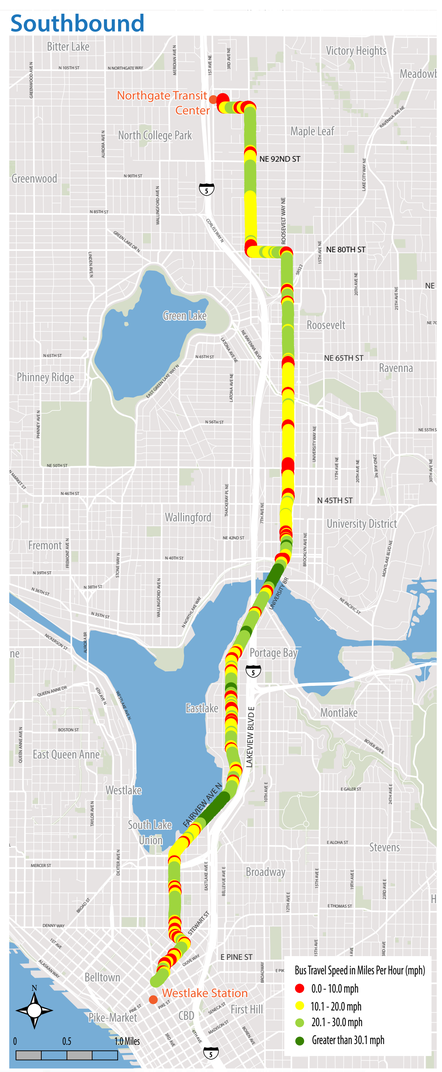



## BY BUS

### Northbound




### Southbound

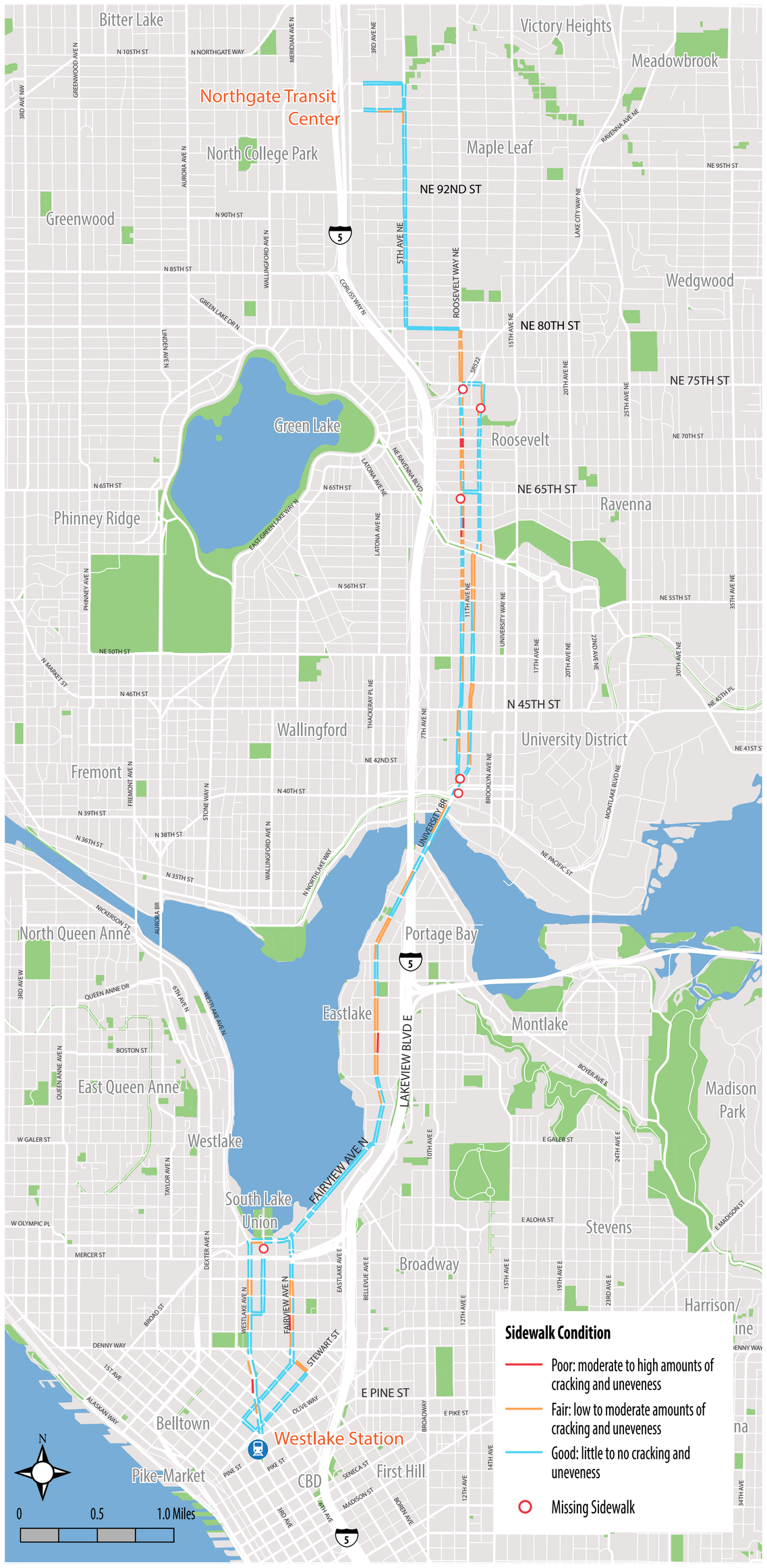



SDOT
*Seattle Department of Transportation*

ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE

# BICYCLE FACILITIES


# SIDEWALK CONDITIONS




SDOT
*Seattle Department of Transportation*

## ROOSEVELT TO DOWNTOWN HIGH-CAPACITY TRANSIT STUDY OPEN HOUSE