

Seattle Bicycle Advisory Board
Simon Blenski
10/7/20 Department of Transportation



### Presentation overview

- Project background
- Design changes
- Results
- Shared bus stops

Full **NE 65<sup>th</sup> St Before and After Study** available at:

www.seattle.gov/visionzero/projects/ne-65th-st

# Project background

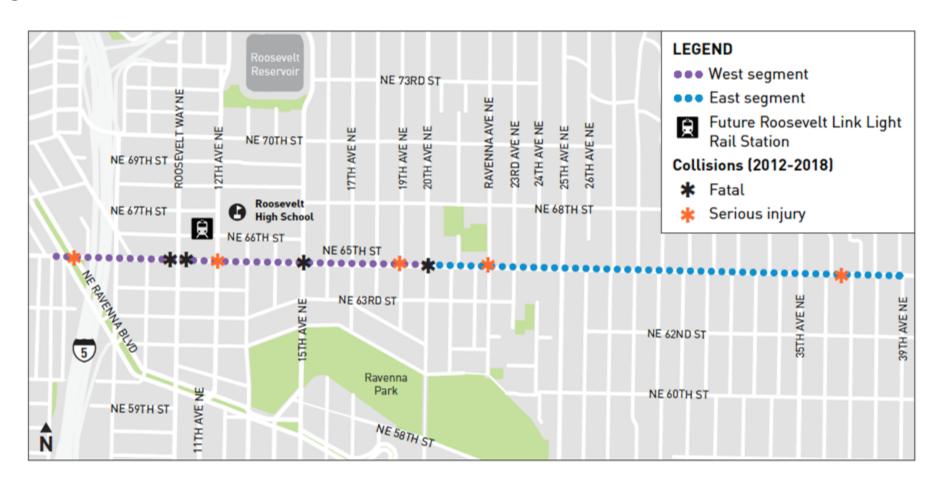
- From 2014-2018, 4 people were killed and 5 people were seriously injured in collisions along NE 65<sup>th</sup> St; there were over 200 other collisions during that time
- In response, SDOT worked with community to redesign NE 65th St from NE Ravenna Blvd to 39th Ave NF
- The **NE 65<sup>th</sup> St Vision Zero Project** aimed to respond to the high number of severe injury and fatal collisions and improve access to the future Roosevelt Link Light Rail Station
- SDOT made early enhancements in 2017 and final design changes in 2019







# **Project location**



# **Design changes**West Segment (NE Ravenna Blvd to 20<sup>th</sup> Ave NE)



#### **Before**

- 4 peak hour lanes
- 2 off-peak lanes
- Off-peak parking
- No dedicated space for bikes

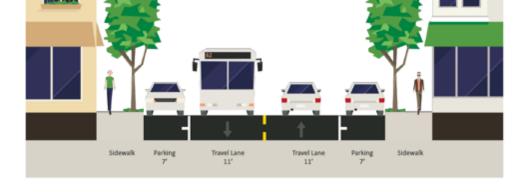
#### **After**

- 2 full time lanes with left turn lanes
- No parking
- Protected bike lanes (PBLs)
- Shared bus stop design at 4 locations

### **Design changes** East Segment (20th Ave NE to 39th Ave NE)







#### **Before**

- 4 peak hour lanes
- 2 off-peak lanes
- Off-peak parking
- No dedicated space for bikes

#### **After**

- 2 full time lanes
- Full time parking
- Parallel neighborhood greenway on NE 68<sup>th</sup> St (one block north)

# **Design changes**

#### **Other improvements**

- Lowered the posted speed limit from 30 mph to 25 mph
- Installed pedestrian countdown timers at signalized intersections
- Added protected left turn signal phases
- Installed a hardened centerline at Roosevelt Way NE
- Repainted marked crosswalks





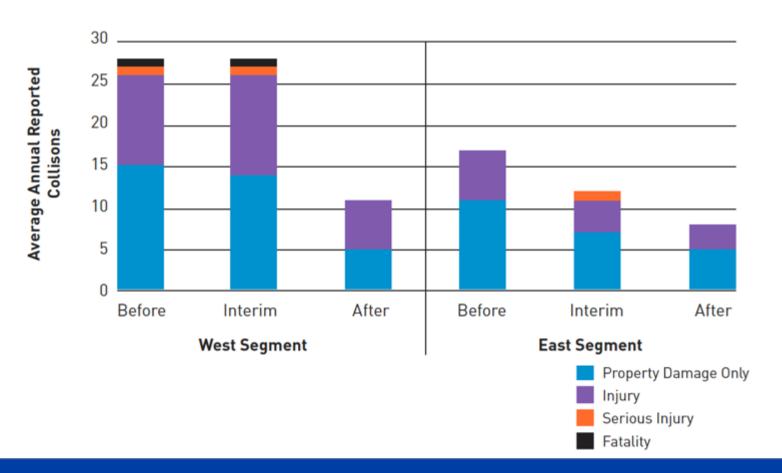






### **Collisions**

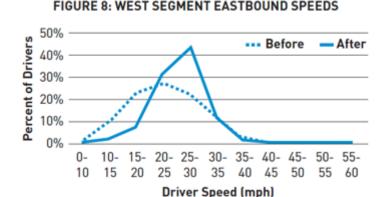
- Collisions and injuries decreased after implementation of the design changes
- There were no serious or fatal collisions after the full design changes were complete in 2019
- No left turn collisions in 2019
- 67% reduction in pedestrian collisions

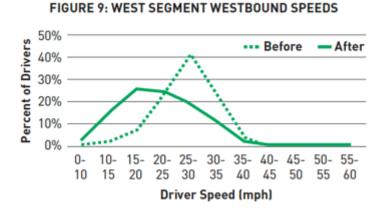


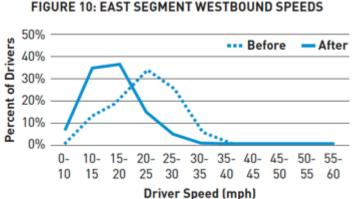


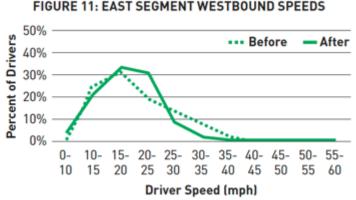
### **Speeds**

- Overall motor vehicle speeds decreased after the posted speed limit was reduced from 30 mph to 25 mph, with more substantial reductions on the east segment
- There was a 0-75% decrease in speeders (driving over 30 mph)
- There was a 35-60% decrease in top-end speeders (driving over 40 mph)









### **Volumes**

#### **Before and After Changes**

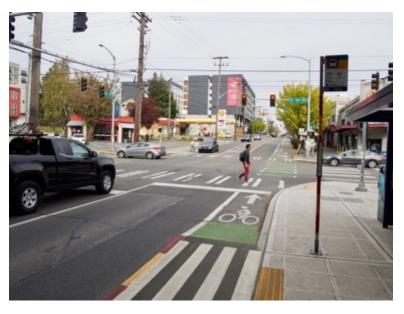
• General purpose travel: 3-8% increase

• Pedestrians: 25-36% increase

Bikes

• West segment: 11-40% increase (PBL)

• East segment: 43% decrease (parallel neighborhood greenway)





### **Travel Times**

#### **Before and After Changes**

- Transit: 1 to 1.8 min increase
- General purpose travel: 0.1 to 1.2 min increase

While general purpose travel times increased, the travel times are acceptable because the project prioritized enhancements for people walking/rolling and biking.





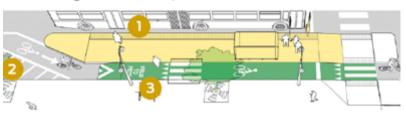


### **Shared Bus Stop**

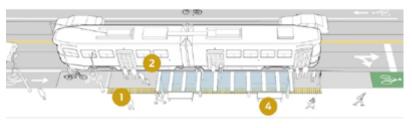
- There was a desire for an all ages and abilities design along NE 65<sup>th</sup> St, including at bus stops
- However, space for full transit boarding islands was not possible
- SDOT and King County Metro worked together to develop a "shared bus stop" design
- Implemented at 4 locations along NE 65<sup>th</sup>
   St (first installations in Seattle)

#### **Transit Stop Design Options (NACTO)**

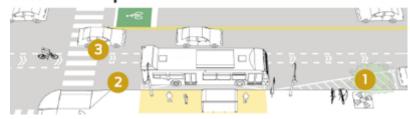
#### **Boarding Island Stop**



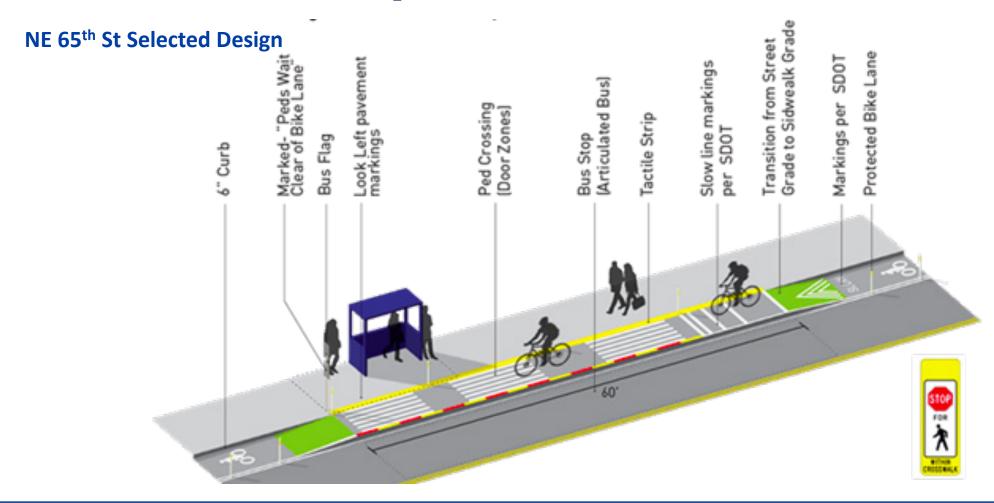
#### **Shared Stop**



#### **Pull Out Stop**



# **Shared Bus Stop**















### **Shared Bus Stop**

#### **Observed Operations from 2019**

- Pedestrians, bikes, and transit passengers generally used the space as intended
- No conflicts observed between bikes and transit passengers, even during Roosevelt High School arrival/dismissal
- Unfortunately, the bus ramp/accessible lift was not deployed during the observed periods
- Metro received no customer or operator complaints in 2019

Results show that the design can be successful at locations with lower volumes of bike traffic and moderate levels of passenger activity.







### **Questions?**

simon.blenski@seattle.gov | (206) 615-1207 www.seattle.gov/visionzero/projects/ne-65th-st

www.seattle.gov/transportation









