I-405/NE 85th Street Interchange and Inline BRT Station Project

Kirkland Transportation Commission

May 22, 2019
Agenda

• Welcome and introductions
• Objectives
• Project overview
• Design development
• Design, access, and mobility
  • Funded elements
  • Unfunded elements
• Next steps
• Questions

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Objectives for tonight’s meeting

- Provide recap of NE 85th Street interchange project progress to date
- Review previous outreach efforts and how WSDOT has responded to feedback
- Present design concepts incorporating previous outreach comments
- Collect additional feedback from commissioners
Cynthia Padilla, AIA, LEED AP BD+C
I-405 BRT Project Manager
Sound Transit
I-405 Transit Planning

I-405 Bus Rapid Transit builds upon the:
- I-405 Master Plan (2002)
- Sound Transit Long-Range Plan (2014)
- Sound Transit 3 Plan (2016)
I-405 Bus Rapid Transit

I-405/NE 85th Street Interchange and Inline Station Project

• Stride BRT Station location adjacent to downtown Kirkland to the west and access to Redmond to the east.

• WSDOT and Sound Transit began conceptual development in early 2018

• Sound Transit Board approved continued design development in December 2018

• Preliminary engineering in 2019.
DESIGN DEVELOPMENT

Barrett Hanson, PE
Engineering Manager
WSDOT I-405/SR 167 Program
I-405 Master Plan

Regional Consensus

• EIS Record of Decision, 2002
• Multimodal, multiagency plan

Roadways

• Two new lanes in each direction
• Local arterial improvements

Transit and Transportation Choices

• Bus rapid transit system
• New transit centers
• 50 percent transit service increase
• HOV direct access ramps and flyer stops
• Managed lanes system
• 5,000 new park and ride spaces
• 1,700 new vanpools

Environmental Enhancements
Concept development process

**Statement of Need:** Multimodal connectivity between I-405 Bus Rapid Transit and the NE 85th Street corridor to fulfill the City of Kirkland’s vision and the I-405 Master Plan, including express toll lanes.

**Stakeholders involved:**
- City of Kirkland
- Federal Highway Administration
- Federal Transit Administration
- King County Metro
- Sound Transit
- WSDOT

**Items of importance:**
- Transit connectivity
- Nonmotorized mobility/connectivity
- Kirkland Vision
- Compatibility with master plans
- Vehicular traffic operations
- Cost
I-405/NE 85th Street Interchange

Project Description:

- Construct a three-level interchange with inline BRT station, direct access ramps to ETLs, and local roadway improvements
- Fully funded by Sound Transit

Level 3 (Top)
I-405 mainline

Level 2 (Middle)
Transit station and access to ETLs

Level 1 (Bottom)
Through traffic on NE 85th Street and access to/from I-405 general purpose lanes

Local bus stops
Same level as BRT stops

BRT stations
Below I-405 level, no vertical transfer required to 85th

Pedestrian walkways
Maximum 5% grade, no switchbacks
I-405/NE 85th Street Interchange

Video
Considerations identified by stakeholders

Motorized access and mobility issues
• Kiss and ride/drop-off facilities
• Compatibility for automated/connected vehicles
• Existing local street traffic issues
• Existing intersections at 114th and 120th Ave NE
• Coordination with 85th BAT lanes

Nonmotorized access and mobility issues
• BRT and local stop locations and design
• Bike parking facilities
• Connections between inline station and Cross Kirkland Corridor, local streets, greenways
• Urban design
DESIGN, ACCESS, AND MOBILITY (FUNDED ELEMENTS)

Karl Westby, PhD
Traffic Engineering Manager
WSDOT I-405/SR 167 Program
Design concepts: NE 85th Street (level 1)

Existing

Signalized

Non-signalized
Signalized design – motorized operations
Non-signalized design – motorized operations

- Eliminates need for left turn lanes; footprint reduction from 7 lanes to 4 lanes
- Allows for continual traffic flow
Signalized design – nonmotorized

7-lane crossing (~100 feet)

40-60 second signal delay at each crossing
Non-signalized design – nonmotorized

Shorter crossings (~48 feet) w/ refuge areas

Buffer separation for nonmotorized users

Crossings prior to intersection with flashing beacons
Non-signalized design – roundabout safety

Source: Federal Highway Administration and Insurance Institute for Highway Safety (FHWA and IHS)
NE 85th Street Operations (between 120th Ave NE and 122nd Ave NE):

Third eastbound lane from 120th Ave NE to 122nd Ave NE, assumed in Build alternative, to be constructed by others
Diana Giraldo, PE
Design Project Engineer
WSDOT I-405/SR 167 Program
Neighborhood connections

- SW Connection
- NW Connection
- NE Connection
- SE Connection
- Drop-off/pickup area (kiss and ride)

Legend:
- Funded nonmotorized elements
- Proposed unfunded nonmotorized elements and drop-off/pickup area
- Existing connection
Neighborhood connections: SW

- Funded nonmotorized elements
- Proposed unfunded nonmotorized elements and drop-off/pickup area
- Existing connection

SW Connection
Neighborhood connections: NE

- Funded nonmotorized elements
- Proposed unfunded nonmotorized elements and drop-off/pickup area
- Existing connection

NE Connection

[Image of a map showing connections in the NE neighborhood, including funded and proposed nonmotorized elements and an existing connection.]
Neighborhood connections: NW

NW Connection

- Funded nonmotorized elements
- Proposed unfunded nonmotorized elements and drop-off/pickup area
- Existing connection

[Diagram showing NW connections with labeled elements]
Drop-off/pickup area

Drop-off/pickup area (kiss and ride)
NEXT STEPS

Cynthia Padilla, AIA, LEED AP BD+C
I-405 BRT Project Manager
Sound Transit
Project timeline

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<thead>
<tr>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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Public and Stakeholder Communications
Community outreach

2018
• Kirkland Transportation Commission
• Kirkland City Council Ad Hoc Committee
• Kirkland City Council Study Session
• 4 stakeholder workshops
• 1 public open house

2019 (to date)
• 6 Kirkland neighborhood briefings for I-405 BRT

Upcoming outreach
✓ Kirkland Alliance of Neighborhoods (May 8)
✓ Kirkland Transportation Commission (May 22)
☐ Kirkland City Council Ad Hoc Work Group (May 24)
☐ Open house (June 10)
☐ Kirkland Transportation Commission (June 26)
☐ Kirkland City Council (July 2)
Questions?
Contact

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