

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

Kirkland Transportation Commission

June 26, 2019

Agenda

- Welcome and introductions
- BRT update and overview
- Project overview
- Community outreach update
- Roundabout operations
- Questions

Objectives for tonight's meeting

- Present update on I-405 BRT project
- Provide recap of NE 85th Street interchange project outreach
- Review roundabout operations and provide examples
- Collect additional feedback from commissioners

BRT UPDATE AND OVERVIEW

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

Bus Rapid Transit – New Line of Service

Sound Transit welcomes **STRIDE**



Station Design Concept

Connecting the region

LINK connections

I-405 BRT

Redmond-Seattle-Lynnwood
Lynnwood City Center & Bellevue Downtown

Issaquah-Bellevue-South Kirkland
Bellevue Downtown

Everett-Seattle-West Seattle
Lynnwood City Center

Ballard-Tacoma

Tukwila International Boulevard Station

SR 522 BRT

Redmond-Seattle-Lynnwood
Shoreline South/145th

Everett-Seattle-West Seattle
Shoreline South/145th

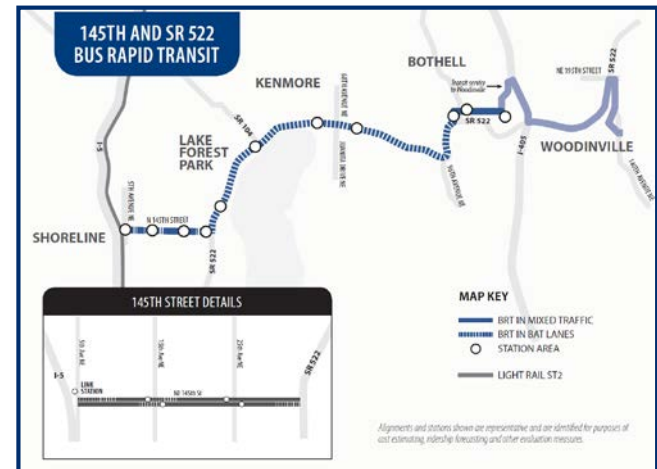
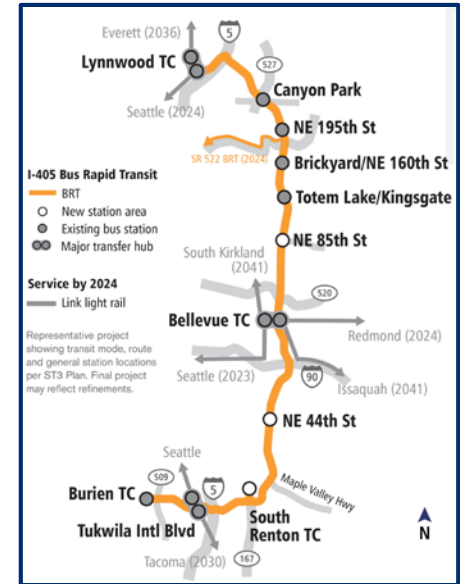


BRT: A New Line of Business

- Opens in 2024
- Two Corridors (I-405 and SR 522/ NE 145th)

BRT Systems Elements of Success

- Transit speed, reliability and access improvements
- BRT stations (signage, shelter, amenities)
- Parking facilities
- New BRT bus fleet
- Bus operations and maintenance facility
- Branding
- Rider information system



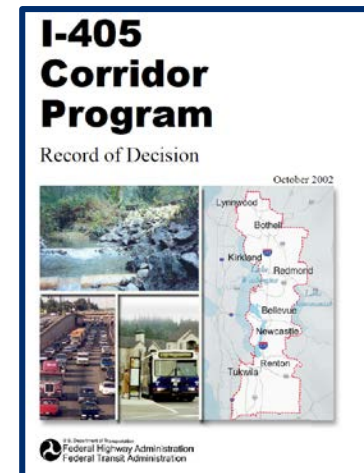
I-405 BRT: History

I-405 BRT builds upon the I-405 Master Plan and the Sound Transit Long-Range Plan

- *I-405 Master Plan adopted in 2002*
 - Identified a master list of potential projects, to be implemented incrementally when funds were secured
 - Identified BRT as the preferred high-capacity-transit mode
 - Sound Transit and WSDOT were co-leads
 - Improve personal and freight mobility and reduce foreseeable traffic congestion in the I-405 study area.

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

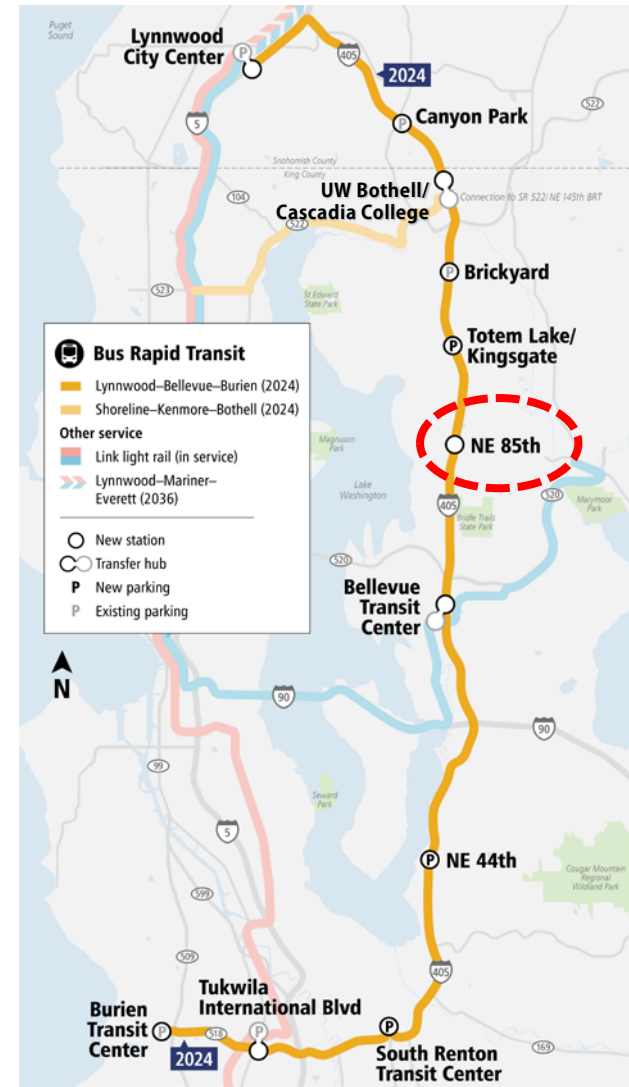
- *ST Board approved continued design development in December 2018*
- *Preliminary engineering in 2019*



I-405 BRT Project

37-mile corridor: Lynnwood to Burien

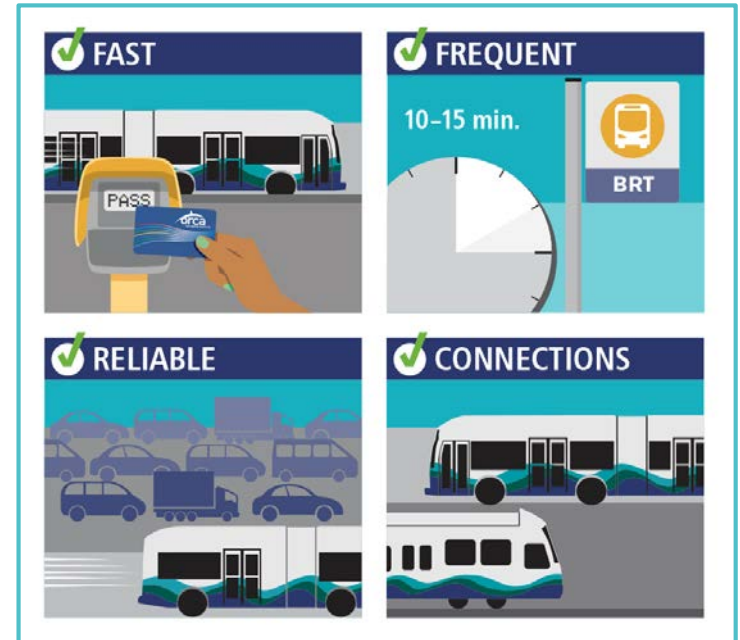
- Proposed refined project:
 - 11 BRT stations across 8 cities
 - 3 new/expanded parking facilities
 - 1 transit center
 - Connections to Link light rail in Lynnwood, Bellevue and Tukwila
 - Estimated 25,800 riders daily by 2040
- Start of service in 2024



Fast, frequent, reliable service

I-405 BRT infrastructure designed for fast, frequent and reliable service

- 10-minute peak, 15-minute off-peak headways for I-405 BRT
- Up to 19 hours of service Monday through Saturday
- Up to 17 hours on Sunday



I-405 BRT travel times

AM peak hour travel times to Bellevue

North Line – Lynnwood to Bellevue



ST Express (existing)

57_{MIN}

ST3 representative project*

50-55_{MIN}

I-405 BRT proposed refined project*

46-51_{MIN}

South Line – Burien to Bellevue



ST Express (existing)

55_{MIN}

ST3 representative project*

45-49_{MIN}

I-405 BRT proposed refined project*

38-42_{MIN}

* Preliminary travel time estimates for planning purposes, subject to change. Existing travel times are average times. Year 2025 estimates assume new express toll lanes are open between Renton to Bellevue. Updated information will be provided prior to beginning service.

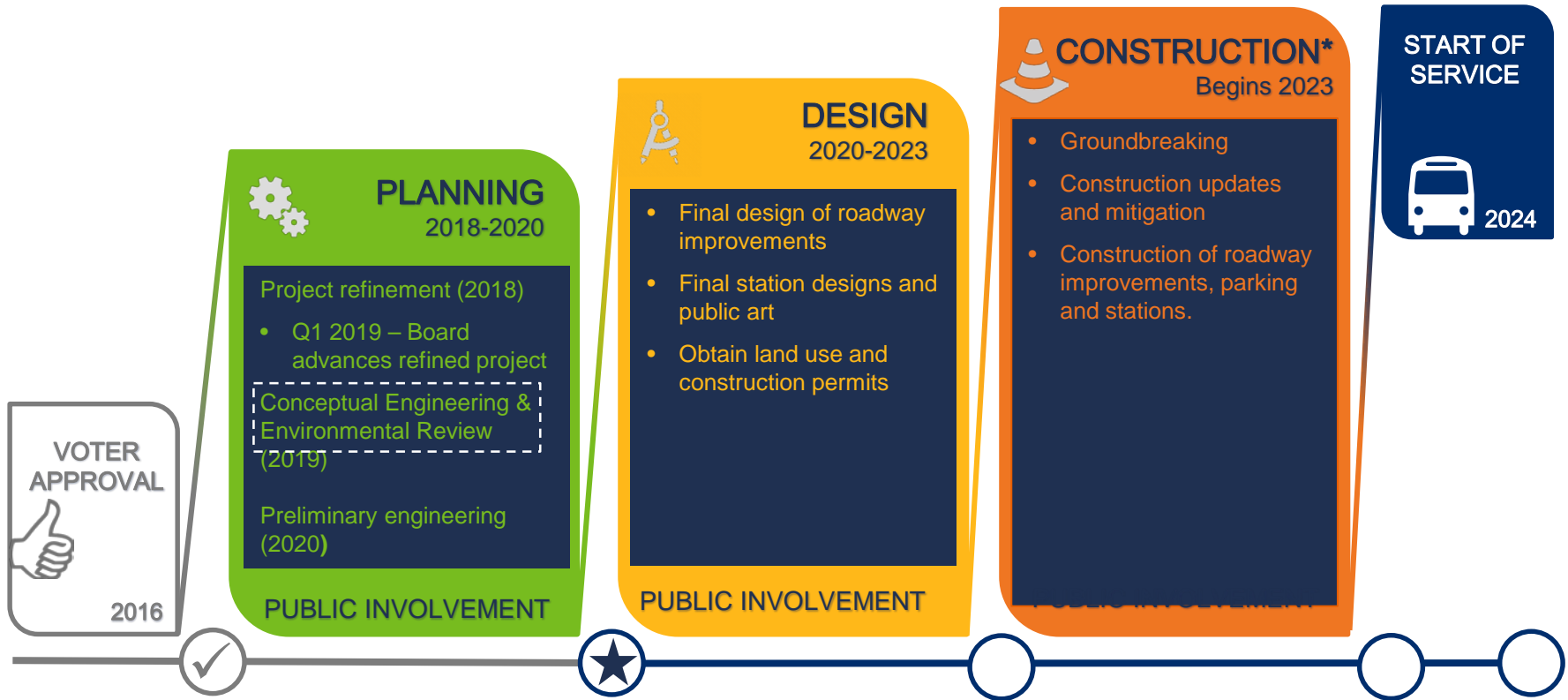
Vehicle propulsion and selection

- Early scan potential propulsion technologies
- Current status of BEB production in the US
- Maintenance base considerations
- Compare both BRT corridors suitability for electric bus operations



King County Metro

Project schedule



*Construction for most of the BRT projects are expected to begin by 2023 and be completed by 2024. Construction of some elements may begin before 2023 and others may occur after service starts in 2024.

Project coordination



PROJECT OVERVIEW

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**

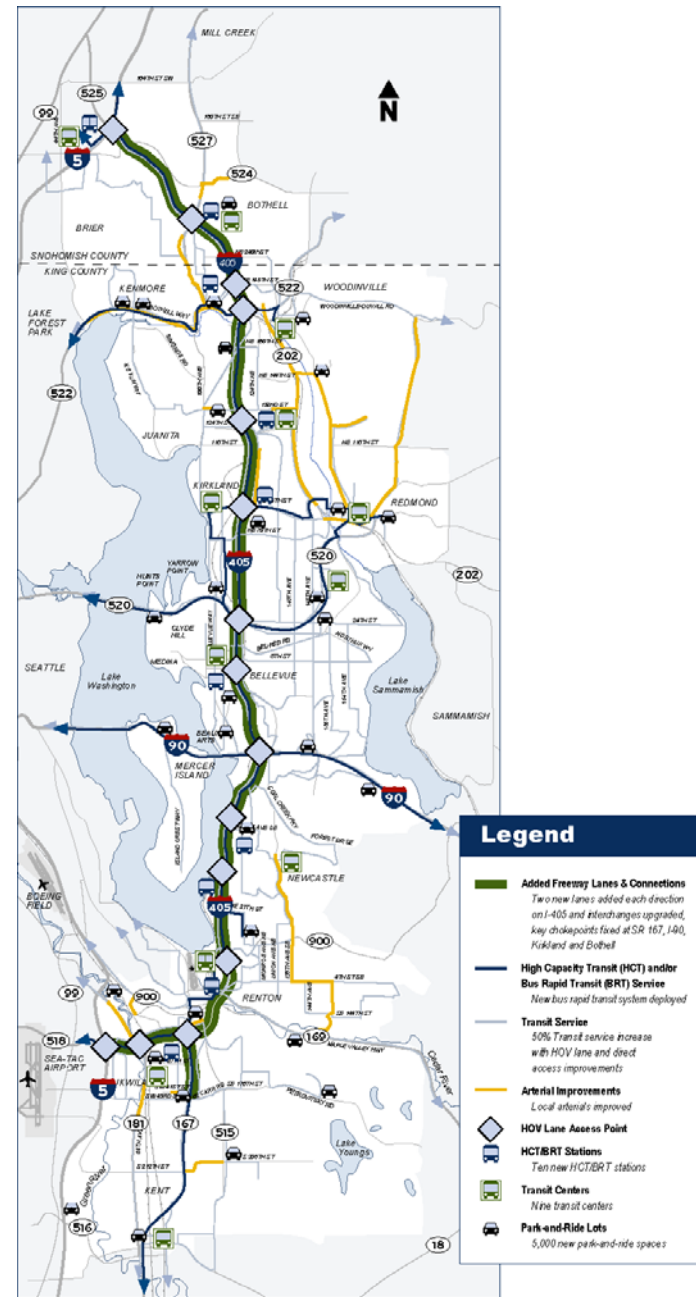
Roadways

- Two new lanes in each direction
- Local arterial improvements

Transit and Transportation Choices

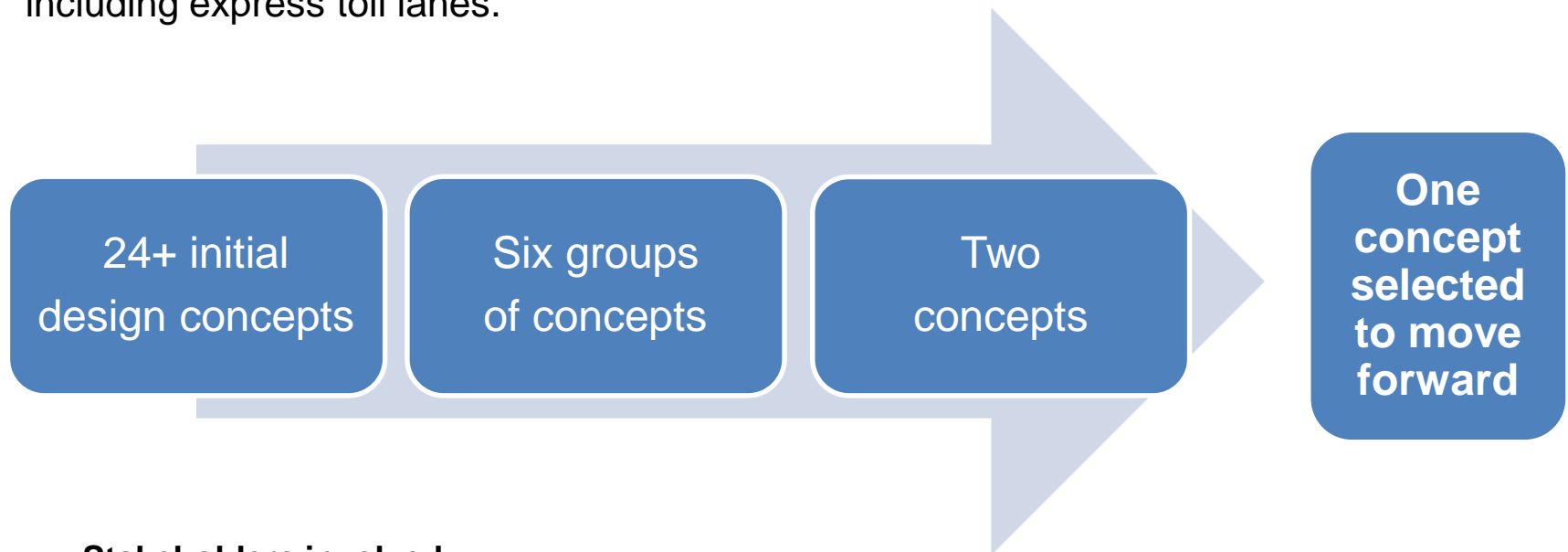
- Bus rapid transit system
- New transit centers
- 50 percent transit service increase
- HOV direct access ramps and flyer stops
- Managed lanes system
- 5,000 new park and ride spaces
- 1,700 new vanpools

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

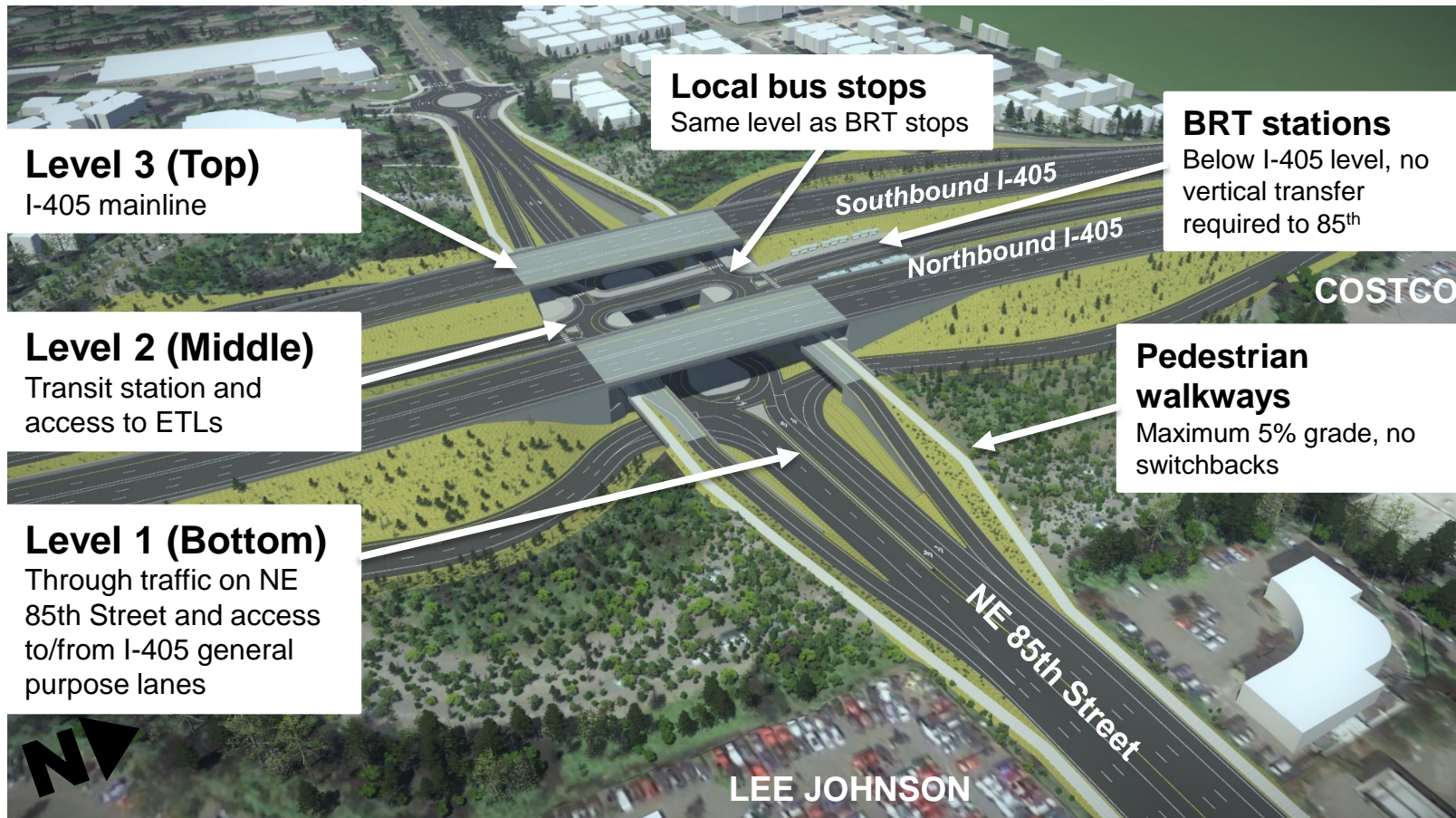
Items of importance:

- 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

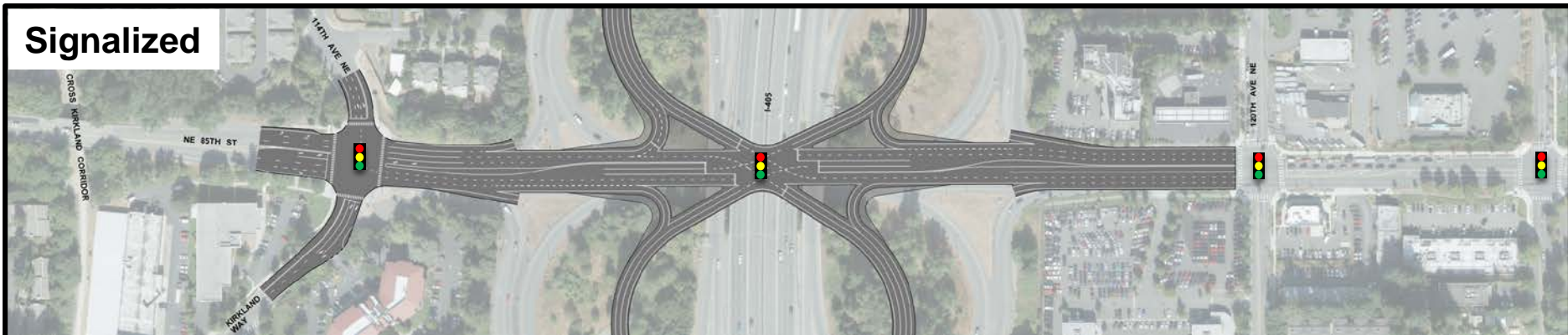


Design concepts: NE 85th Street (level 1)

Existing



Signalized



Non-signalized



COMMUNITY OUTREACH UPDATE

Diana Giraldo, PE
Design Project Engineer
WSDOT I-405/SR 167 Program

Outreach to date

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
- ✓ Kirkland Alliance of Neighborhoods (May 8)
- ✓ Kirkland Transportation Commission (May 22)
- ✓ Open house (June 10)
- ✓ Kirkland City Council Ad Hoc Work Group (June 14)

Upcoming outreach

- ✓ Kirkland Transportation Commission (June 26)
- ❑ Kirkland City Council (July 16)



What we heard

- Questions on pedestrian safety at roundabouts and through interchange, particularly for Lake Washington HS students
- Request to include additional intersections in traffic study, such as NE 87th Street and 114th Avenue NE
- Need for park and ride space and/or drop-off/pickup areas
- Questions about queueing on I-405 off ramps due to smaller footprint
- Pedestrian disruption of traffic without signalized intersection
- Importance of bike infrastructure
- Need for more information on roundabout operations and examples
- Importance of a connection to Downtown Kirkland
- Need for transit priority elements for local bus service on NE 85th Street
- Questions on additional eastbound lane between 120th Ave NE and 122nd Ave NE
- Request to fund additional nonmotorized access opportunities

Open house

June 10, 2019 at Kirkland City Hall

- 50 attendees
- 12 comments received

What we heard

- General support for project
- Preference for roundabouts over signals
- Support for nonmotorized access elements
- Need to fund additional nonmotorized access opportunities
- Importance of connections to Downtown Kirkland
- Concern about construction impacts
- Need for BRT station amenities
- Support for new connection to ETLs



“Roundabout at 85th/114th sounds like a good idea. We need an abundance of community education about how to use it.”

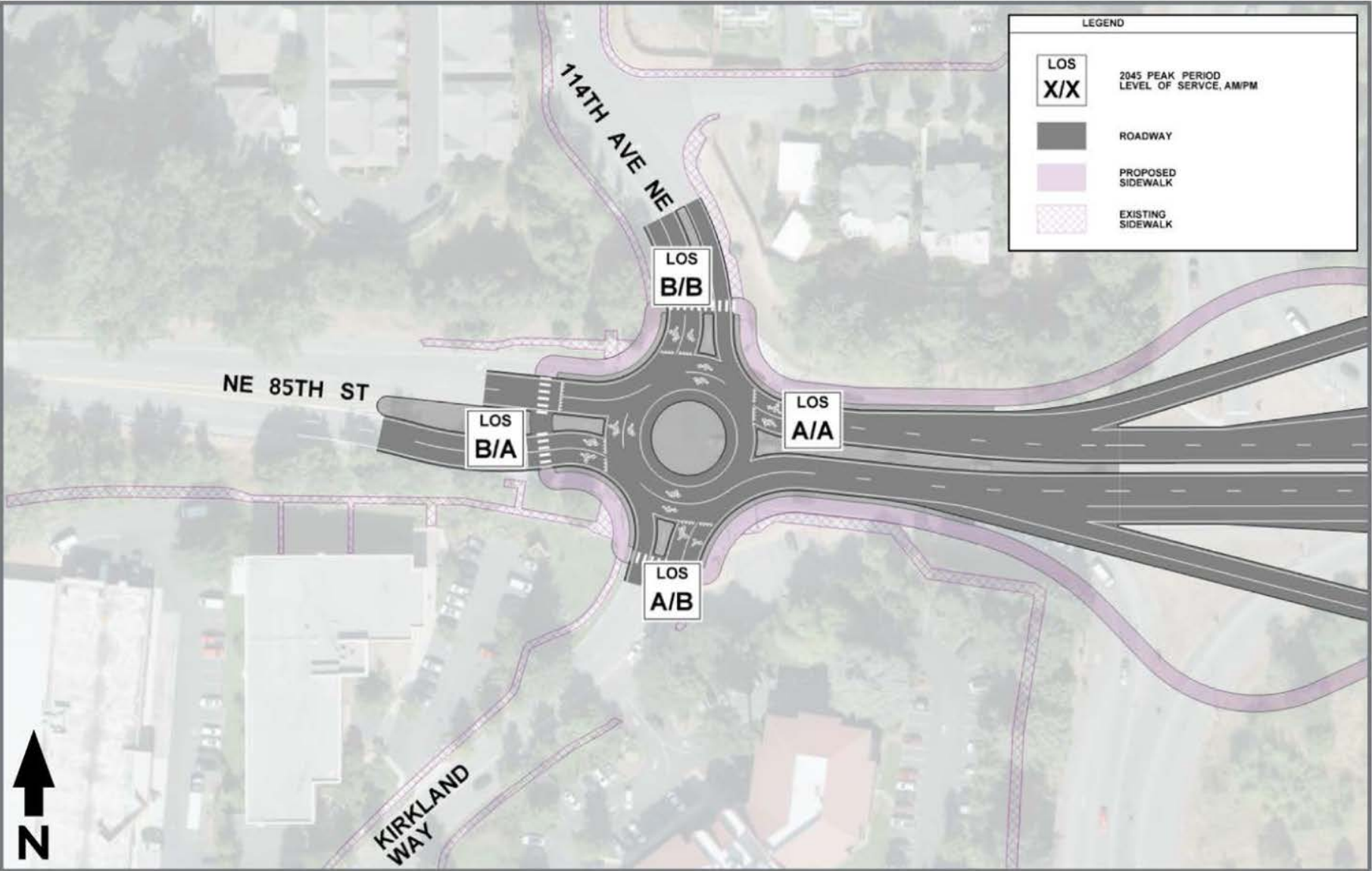
“Please include nonmotorized access elements into the plan and fully fund them – Kirkland is a walking and biking community.”

“I like that we’ll finally be able to access the HOT lanes from downtown.”

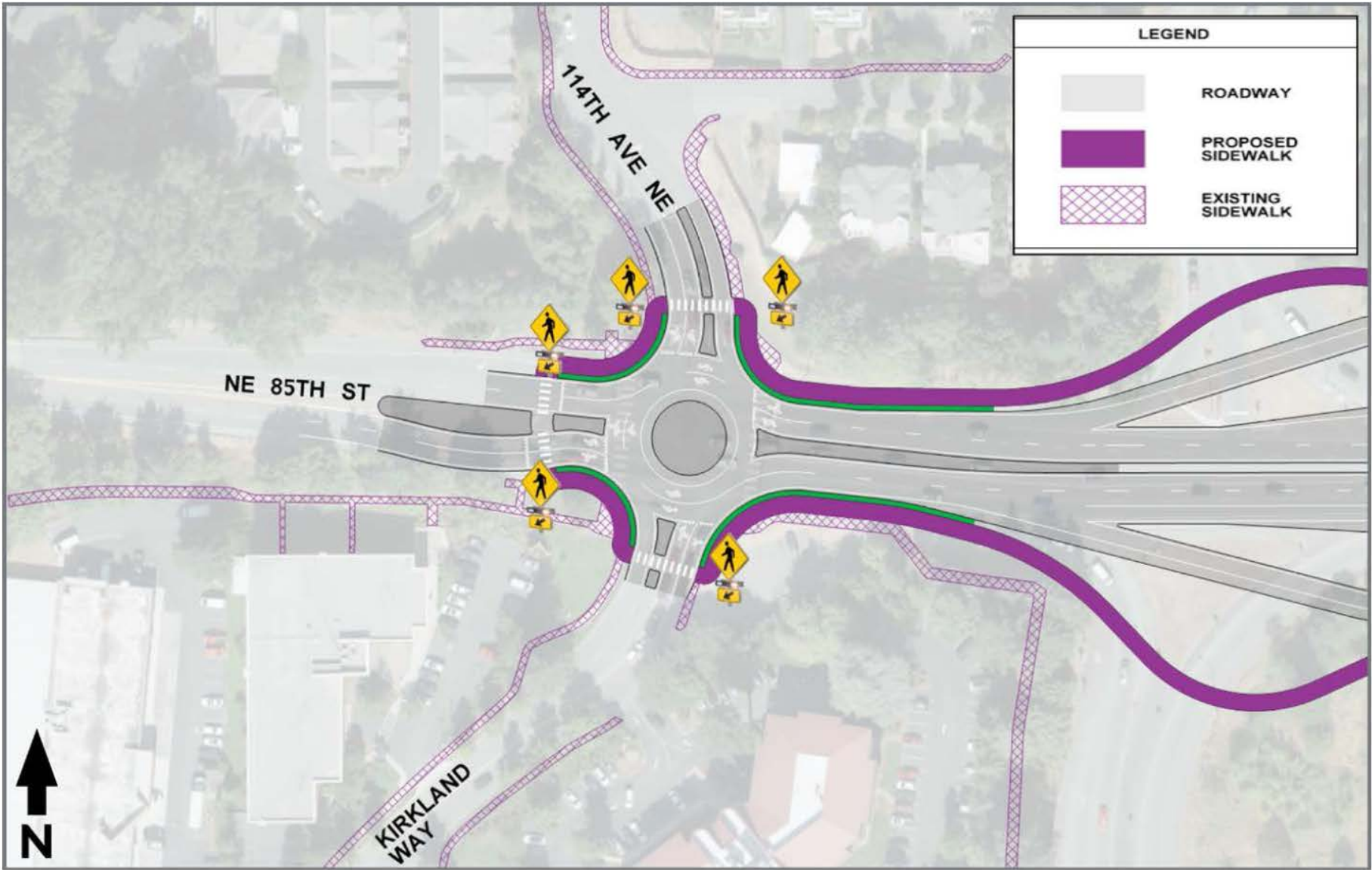
ROUNDAABOUT OPERATIONS

Karl Westby, PhD
Traffic Engineering Manager
WSDOT I-405/SR 167 Program

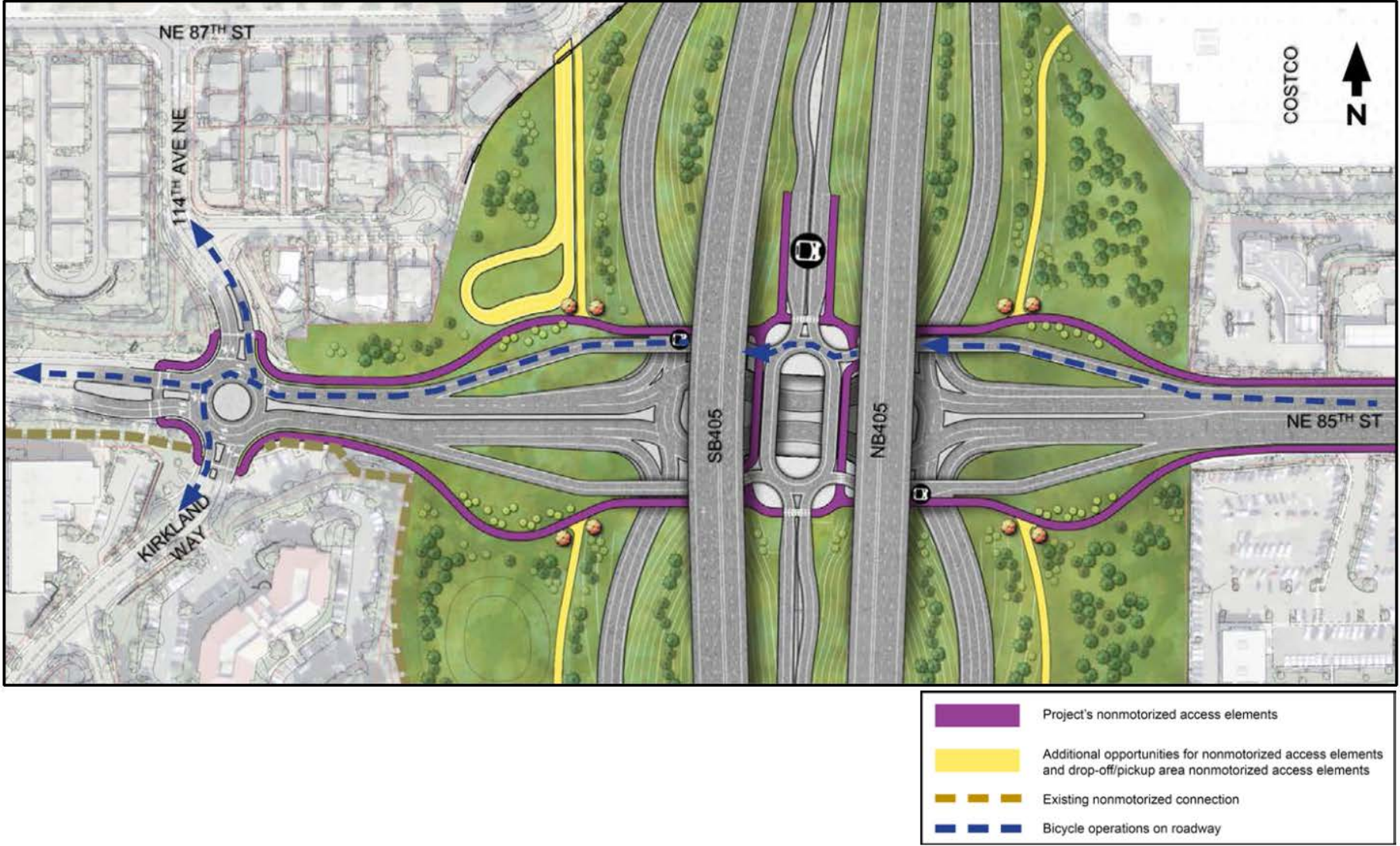
Non-signalized design – motorized operations



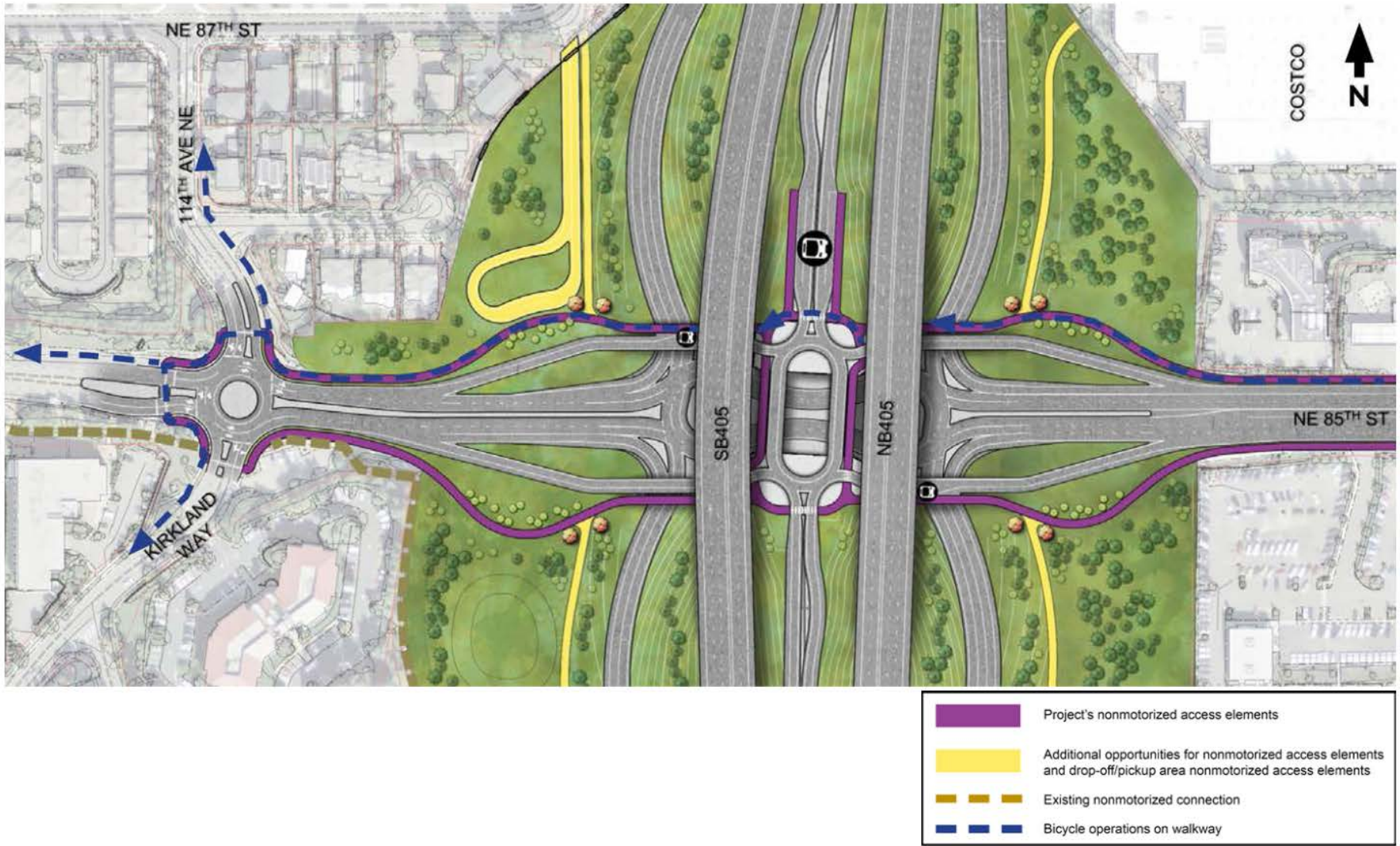
Non-signalized design – nonmotorized



Bike operations using roadway



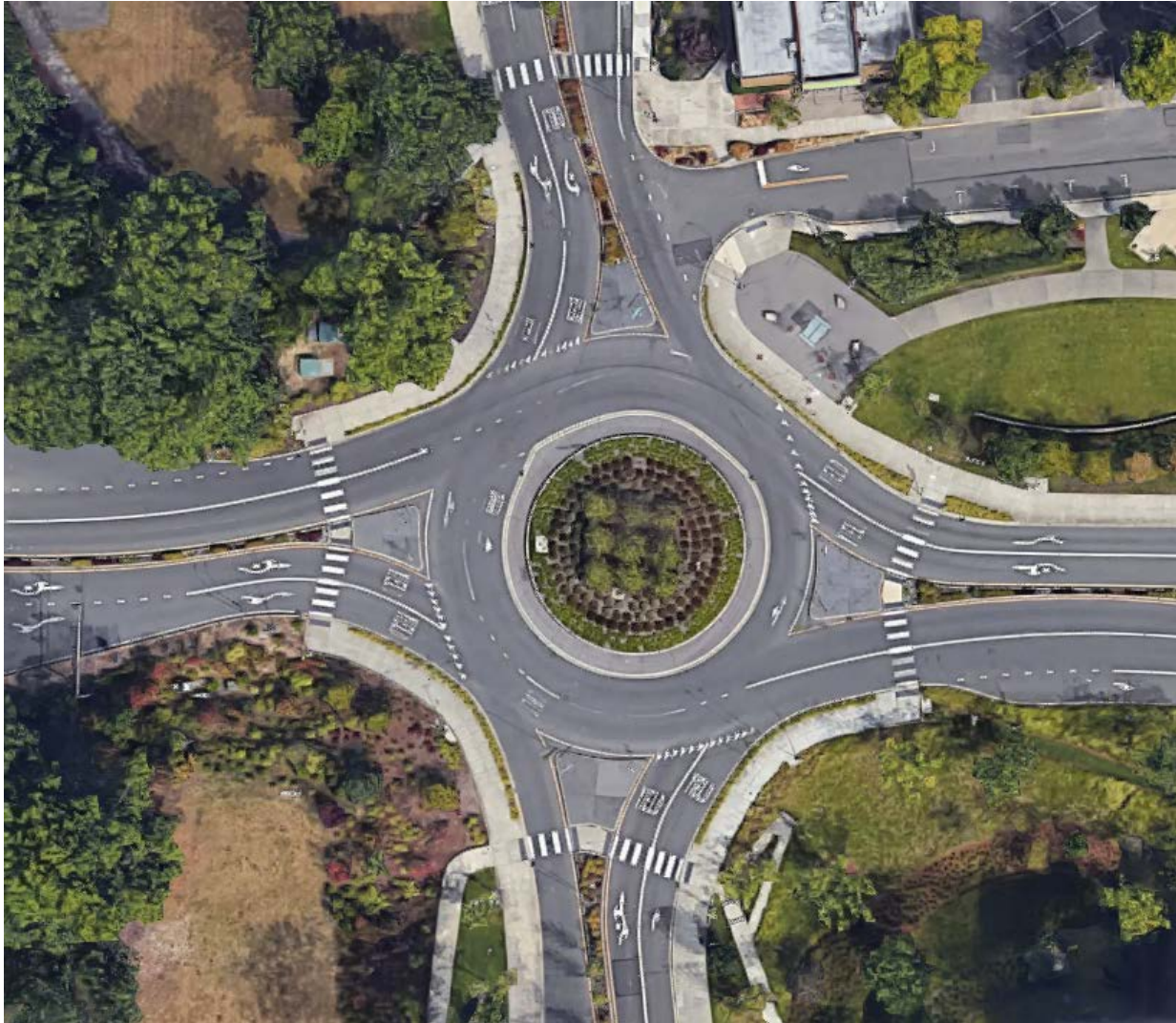
Bike operations using nonmotorized walkway



Roundabout simulation: NE 85th Street and 114th Avenue NE

Video

Roundabout example: 14th Ave SE and Jefferson St SE (Olympia)



Roundabout example: Midday 14th Ave SE and Jefferson St SE (Olympia)

Video

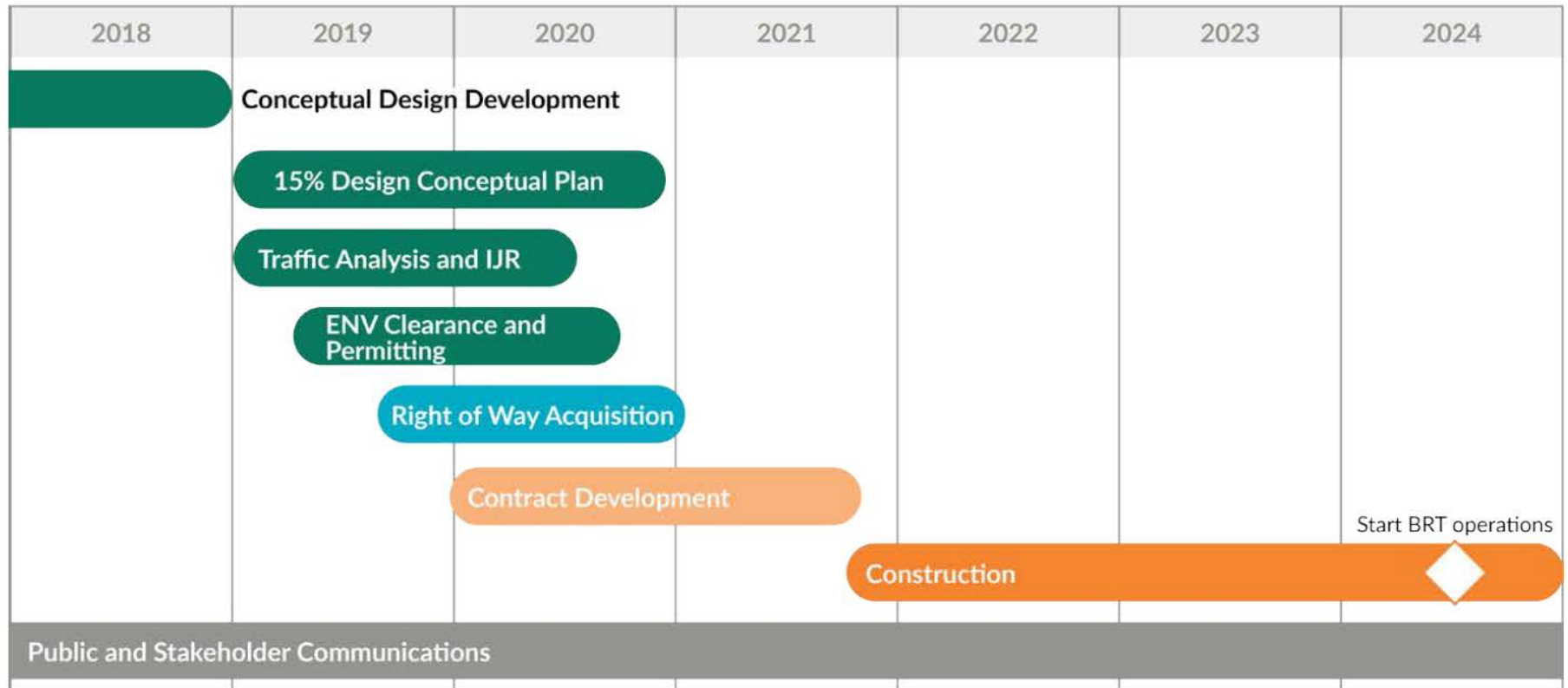
Roundabout example: PM peak commute 14th Ave SE and Jefferson St SE (Olympia)

Video

Roundabout example: TBD

Video

Project timeline



Questions?

Contact

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