



CITY OF KIRKLAND

Public Works Department

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www.kirklandwa.gov

MEMORANDUM

To: Kurt Triplett, City Manager

From: Joel Pfundt, Transportation Manager
Julie Underwood, Director of Public Works

Date: March 4, 2021

Subject: SOUND TRANSIT CAPITAL PROGRAM REALIGNMENT AND I-405 STRIDE BUS RAPID TRANSIT

RECOMMENDATION:

Staff recommends that the City Council receive an update from Sound Transit and the Washington State Department of Transportation (WSDOT) regarding the Sound Transit capital projects realignment process, I-405 Stride Bus Rapid Transit (BRT), and NE 85th Street Interchange and In-line Station. The study session will need to conclude by 6:30 p.m. to allow the Council to go into executive session on an unrelated topic.

BACKGROUND DISCUSSION:

The Council has been briefed on the I-405 Bus Rapid Transit project in the past. The most recent update concerning I-405-related projects—including I-405 Stride BRT—was provided by City staff at a study session on June 2, 2020. Prior to that, staff from both Sound Transit and WSDOT provided a presentation to City Council on I-405 Stride BRT and the I-405/NE 85th St Interchange and In-line Station at a study session on July 16, 2019.

On March 16, Sound Transit and WSDOT staff will speak to two separate but related topics.

Capital Program Realignment

During the first part of this study session item, Sound Transit staff will provide an update on the [capital program realignment process](#). The realignment process was initiated by the Sound Transit Board of Directors in the spring of 2020 as the potential revenue impacts to Sound Transit's capital program that stemmed from the COVID-19 pandemic began to become clearer. Then, in early 2021 Sound Transit staff provided additional information to the Sound Transit Board of Directors that the capital program was experiencing significant cost estimate increases for light rail projects that were in early planning and design.

Sound Transit staff will provide information on these two challenges, which are compounding each other and impacting Sound Transit's ability to deliver the capital program consistent with established project schedules. They also will discuss the impacts this process may have on Sound Transit

projects in Kirkland and the steps that the Sound Transit Board will take in the coming months to determine a path forward with realignment by the summer of 2021.

I-405 Stride Bus Rapid Transit

With the remaining time available during the study session, Sound Transit and WSDOT staff will provide an update on the [I-405 Stride BRT](#) "north" project, which will have stations in the cities of Lynnwood, Bothell, Kirkland, and Bellevue. Sound Transit and WSDOT staff will describe how the travel time improvements anticipated with the implementation of the BRT project are closely tied to WSDOT's [I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project](#) that also is in design.

WSDOT and Sound Transit's presentation will include a summary of the design and operation of the I-405/NE 85th Street Interchange and In-line BRT Station. This aspect of the presentation is intended to help the Council have a better understanding of how this project relates to the ongoing development of the NE 85th Street Station Area Plan.

I-405 Stride BRT, including the I-405/NE 85th Street Interchange and In-line BRT Station, currently is scheduled to begin operation in 2025. That target depends upon decisions by the Sound Transit Board of Directors related to the capital projects realignment process and the Legislature's decisions regarding funding for the I-405, SR 522 Vicinity to SR 527 Express Toll Lanes Improvement Project.

Attach A - Sound Transit Realignment and I-405 Bus Rapid Transit PowerPoint Presentation

Attachment A

Sound Transit and WSDOT: ST Realignment, I-405 BRT & NE 85th

*Kirkland City Council
3/16/21*



Today's Presenters

Matt Shelden

Sound Transit- Deputy Executive Director, PEPD

Paul Cornish

Sound Transit- Bus Rapid Transit Program Director

Lisa Hodgson, P.E., DBIA

WSDOT- I-405/SR 167 Program Administrator

What we'll cover today

- COVID-19 impacts on construction, ST ridership and service.
- Preview new service opening between 2021-2024.
- Discuss recession's impact on revenues and project costs
- Outline the 2021 realignment process to adjust project plans and schedules.
- I-405 BRT Project Update and NE 85th Design

Covid-19 Response

Powering progress



Powering Progress

- All construction currently continues at full speed, with strict worker safety protocols.
- 28 light rail stations under construction throughout the region, opening in stages between 2021– 2024.



Test trains at U District Station

Currently under construction

Light rail extensions

- **Northgate** (3 stations, opening **this year**).
- **Hilltop Tacoma** (6 stations, 2022).
- **East Link** (10 stations, 2023).
- **Lynnwood** (4 stations, 2024).
- **Federal Way** (3 stations, 2024).
- **Downtown Redmond** (2 stations, 2024).

Other

- **Operations & Maintenance Facility East** (2021).
- **Puyallup Station garage** (2022).



Ridership changes & service levels



Ridership & service changes

- Ridership down 70-80%, particularly on commuter-heavy routes.
- Ridership and service levels are mostly stable, but operator shortages a continuing problem.
- Some express bus routes suspended until more workers return to offices.
- ST operating the longest trains possible to promote social distancing.



Current service levels

- **Link** – Service every 12 minutes during weekday peak hours, 15 minutes off-peak and weekends, 30 minutes late night.
- **Sounder** – 9 Sounder South roundtrips, 2 Sounder North roundtrips.
- **Tacoma Link** – full service.
- **ST Express** – some routes running full service, some routes reduced or suspended.

Keeping riders safe

Action Plan

- Masks required, and compliance is high (90+%).
- Increased frequency and depth of cleaning onboard vehicles.
- Ramping up mask distribution.
- Increased passenger communications on safety and ridership.
- Increasing airflow and filtration to keep air fresh and clean.

Realigning expansion plans



Financial changes

Current 25-year capital program runs 2016-2041

- **Lower Revenue:** Lower fare collection and sales, motor vehicle excise, and rental car taxes due to recession.
- **Higher Costs:** Construction costs remain at record levels due to continued growth in property values and hot construction market.

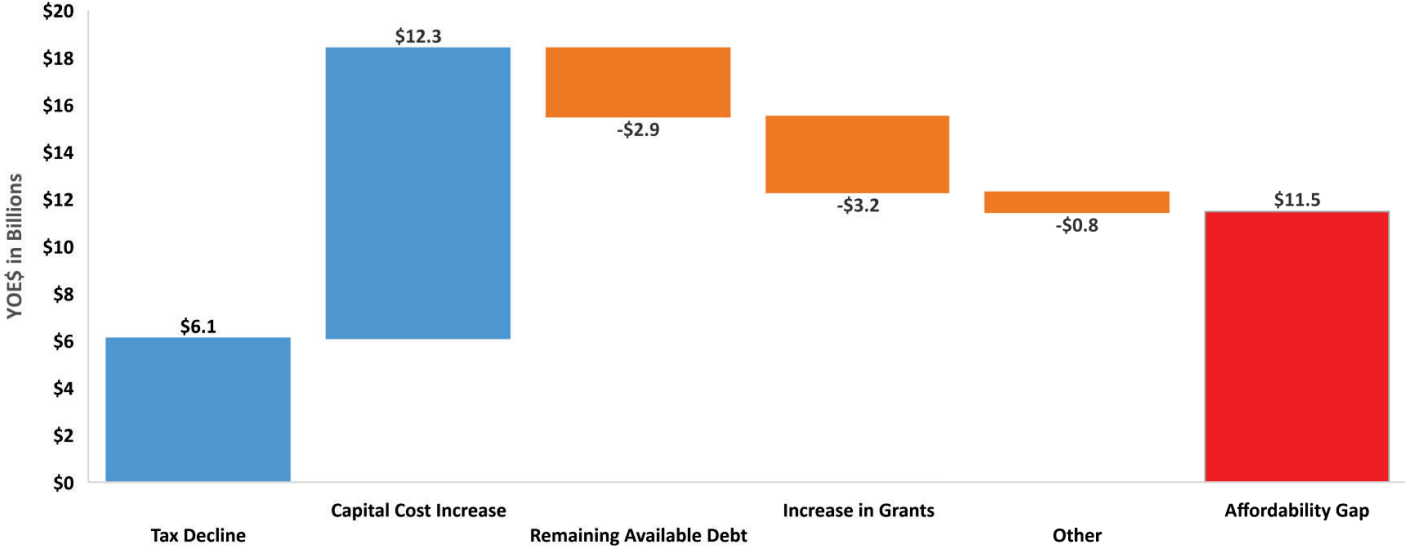
Financial changes through 2041

Current 25-year capital program runs 2016-2041

- **Revenue:** \$6.1 billion lower.
- **Costs:** \$12.3 billion higher. in estimate cost increases.
- **Offsets:** \$6.9 billion in new debt, higher grants and other revenue.
- **Overall:** \$11.5 billion affordability gap.

Major update in plan assumptions

Fall 2019 vs Jan 2021
Change 2017-2041
(In Billions)



Realignment tools available to Sound Transit

- **Cutting costs** through reduced project scope, suspending or canceling projects, etc.
- **Raising new revenues** through issuing higher debt or seeking additional state or federal funding.
- **Delaying or phasing projects** to spread costs over time and keep total agency debt within current legal limits.

Board criteria for re-evaluating projects

Criterion	Concept
Ridership potential	How many daily riders is the project projected to serve?
Socio-economic equity	How well does the project expand mobility for transit-dependent, low-income, and/or diverse populations?
Connecting centers	Does the project connect designated regional centers?
Tenure	How long have voters been waiting for the project?
Outside funding	Are other funding sources available, secured or at risk?
Completing the spine	Does the project advance development of the regional HCT spine?
Advancing logically beyond the spine	Is the project a 'logical next step' beyond the spine and within financial capacity?
Phasing compatibility (constructability)	Can the project be constructed and opened for service in increments?

Next steps

Anticipated realignment work through July 2021

March	Define approaches for public engagement.
April	Seek public feedback and discuss cost review results.
May	Discuss public feedback and Board priorities.
June	Develop realignment plan(s).
July	Adopt realignment plan(s).

I-405 Bus Rapid Transit

I-405 BRT Project

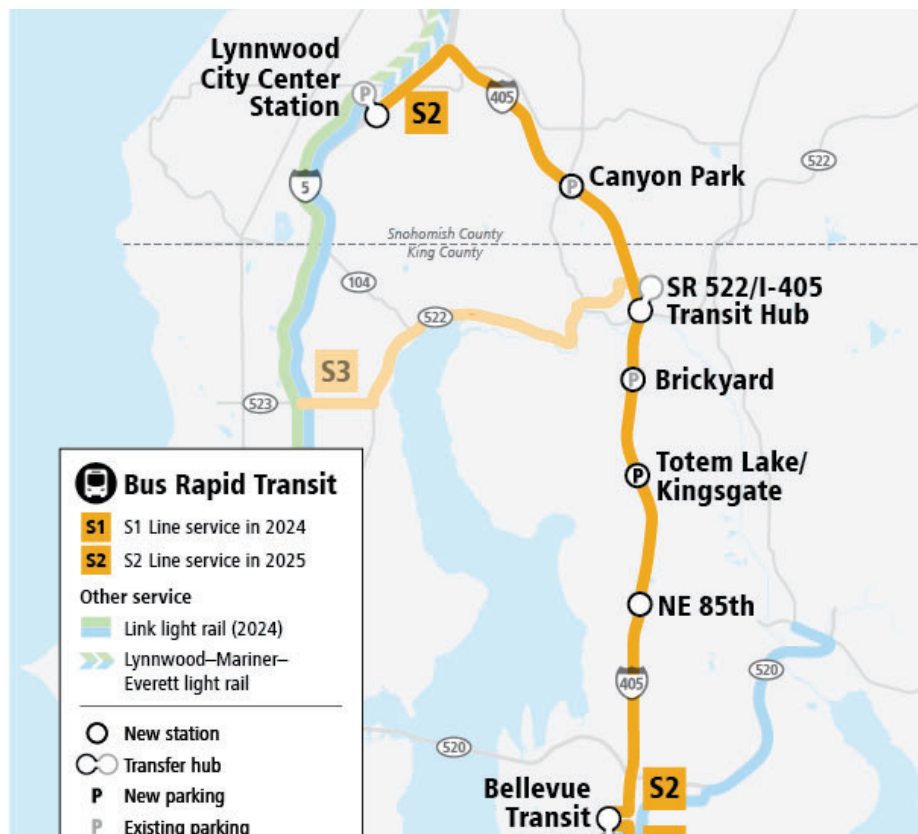
Project Overview: Lynnwood to Burien

- 37-mile corridor
- 11 BRT stations across 8 cities
- Three new/expanded parking facilities
- One transit center
- Connections to Link light rail in Lynnwood, Bellevue and Tukwila
- Estimated 19,100 – 26,000 riders daily by 2042
- Two distinct lines:
 - South, Burien to Bellevue (S1)
 - North, Bellevue to Lynnwood (S2)



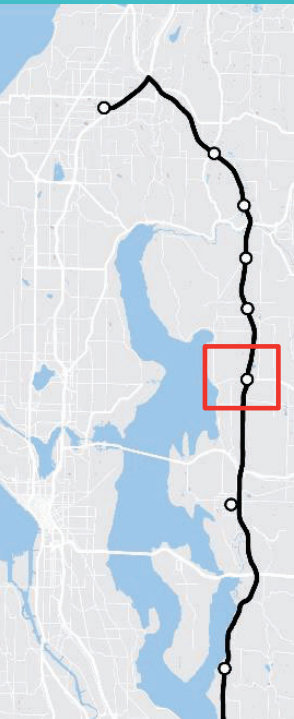
Stride North Line: S2 Changes from Phase 1:

- In north end WSDOT ETLs
- Canyon Park, Transit Hub, and Brickyard inline
- S3 transfer: UW Bothell/ Cascadia College



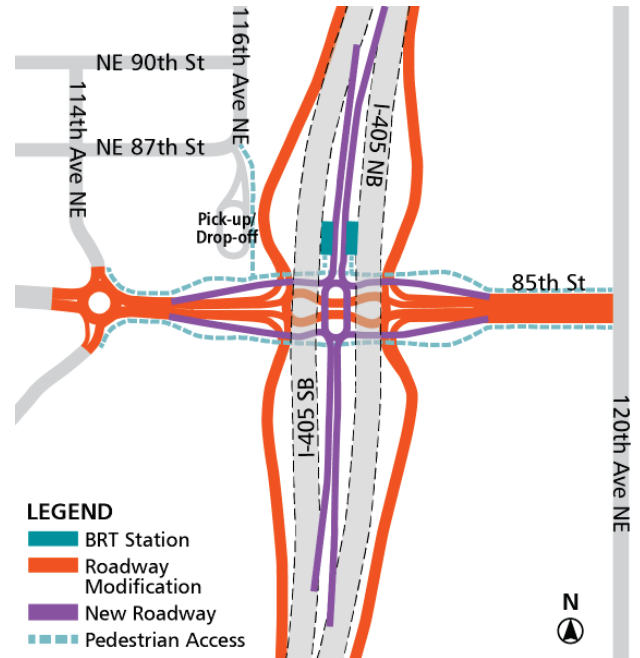


BRT STATION



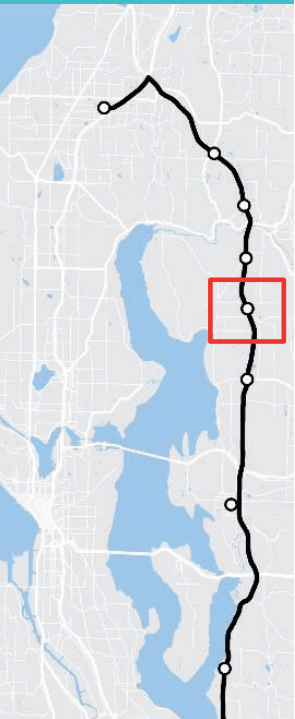
NE 85th Street

- WSDOT and Sound Transit are partnering to build the station.
- WSDOT will build new direct access ramps from I-405 express toll lanes to support BRT service.
- Local bus stops will be located on the same level as BRT stops for easy transfers.



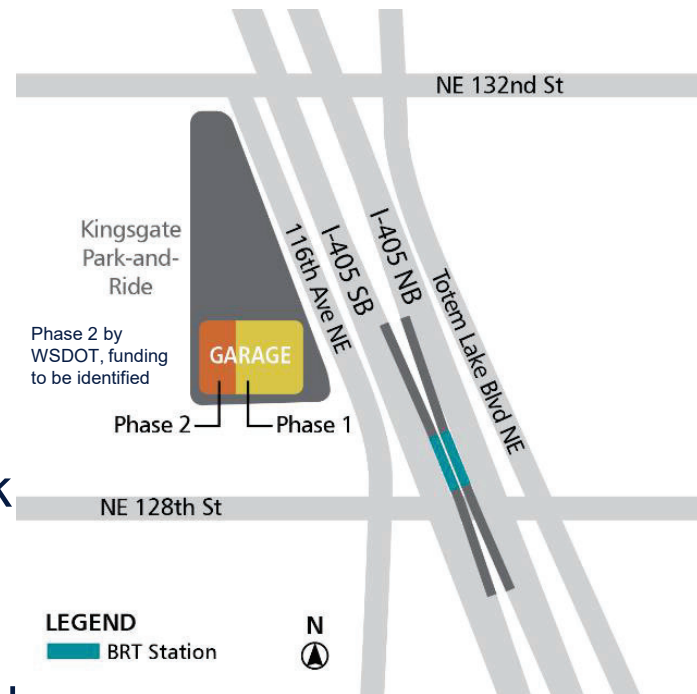


BRT STATION



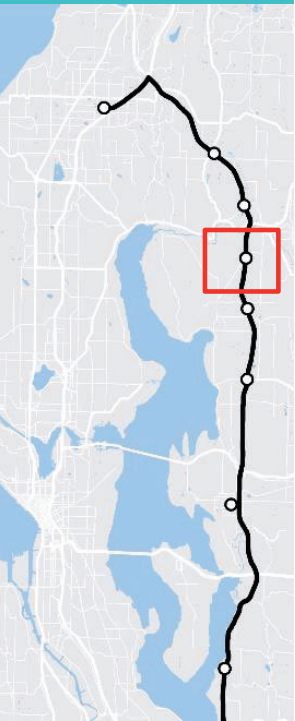
Totem Lake/Kingsgate

- Located at existing Totem lake freeway station.
- New parking garage that will add a net 400 parking stalls at the nearby Kingsgate Park and Ride.
- Partnership between ST, WSDOT & Kirkland



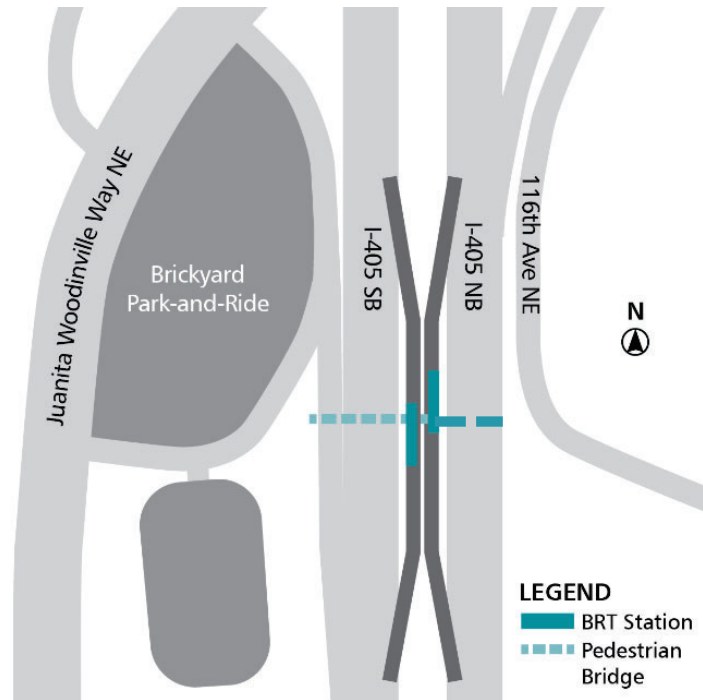


BRT STATION



Brickyard In-Line

- Will serve existing Brickyard Park and Ride.
- Inline BRT station connected to the park-and-ride by a pedestrian bridge.



I-405 Bus Rapid Transit

In millions, 2019\$

	ST3	2019	2020	Vs. 2019
• I-405 BRT	\$1,037	\$1,088	\$1,016	-7%

What has changed since 2019?

- Little has changed and project costs have held steady around \$1 billion.
- BRT benefits from use of existing and planned WSDOT infrastructure.
- Partnership opportunities with WSDOT at multiple station locations.



BRT bus base

In millions, 2019\$

	ST3	2019	2020	Vs. 2019
• BRT bus base	\$191	\$208	\$238	+14%

What has changed since 2019?

- Increase due to accommodating 40 additional buses for either potential ST Express needs or future BRT growth.
- Higher property costs.

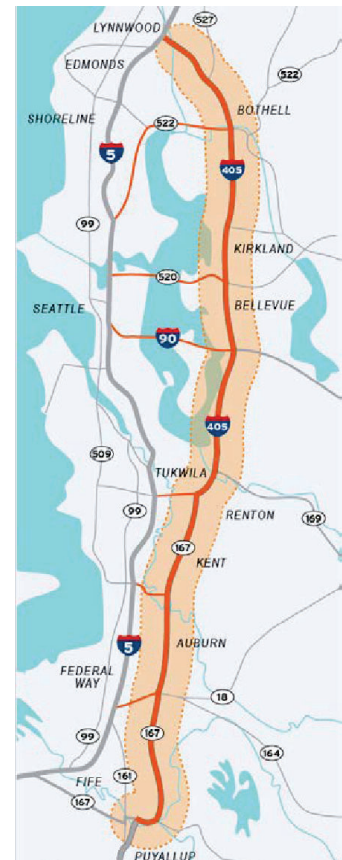


I-405/SR 167 Corridor Program System Benefits

Delivering multimodal corridor vision built on partnership support.

- Reliable 50+ mile north/south alternative to I-5; STRAHNET – Strategic Highway Network.
- Toll revenue reinvested back into the corridor to connect urban centers, employment, and transportation nodes.
- Sound Transit BRT service connects to Regional Growth Centers and runs on ETL system.
- Dual ETLs improve speed and reliability across all lanes and move more people, more efficiently through the system.
- Opportunity to address critical fish barriers and environmental enhancements and repair infrastructure through capital improvements.

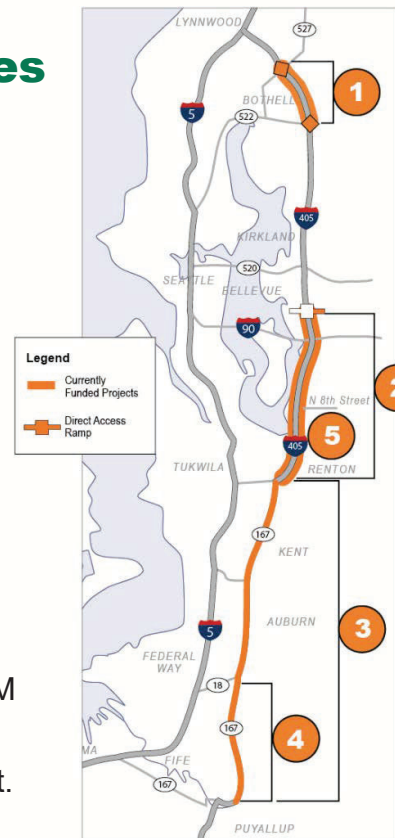
It's not a matter of IF we deliver the system benefits, but WHEN.



Projects funded through bonded toll revenues 2019 ESSB 5825 (\$1.16B)

- 1 I-405, SR 522 to SR 527 Express Toll Lanes Improvement Project**
(design and construction) - \$600M
- 2 I-405 Renton to Bellevue Widening and Express Toll Lanes Project**
(completion) - \$215M *(Includes NE 6th Extension & I-405, Coal Creek Improvements)*
- 3 SR 167 Master Plan Update** - \$3M
- 4 SR 167 Express Toll Lanes Extension to SR 410 and SR 512** (construction) - \$100M
- 5 I-405/North 8th Street Direct Access Ramp Project in Renton** (design) - \$20M

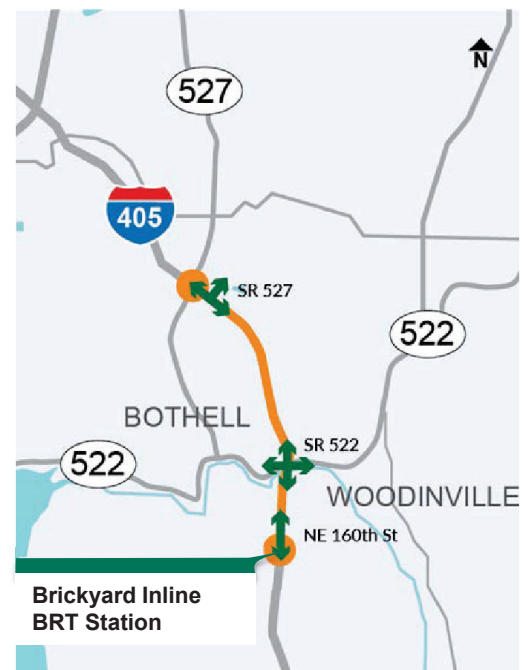
The state has not yet bonded any toll revenue from the express toll lane account.



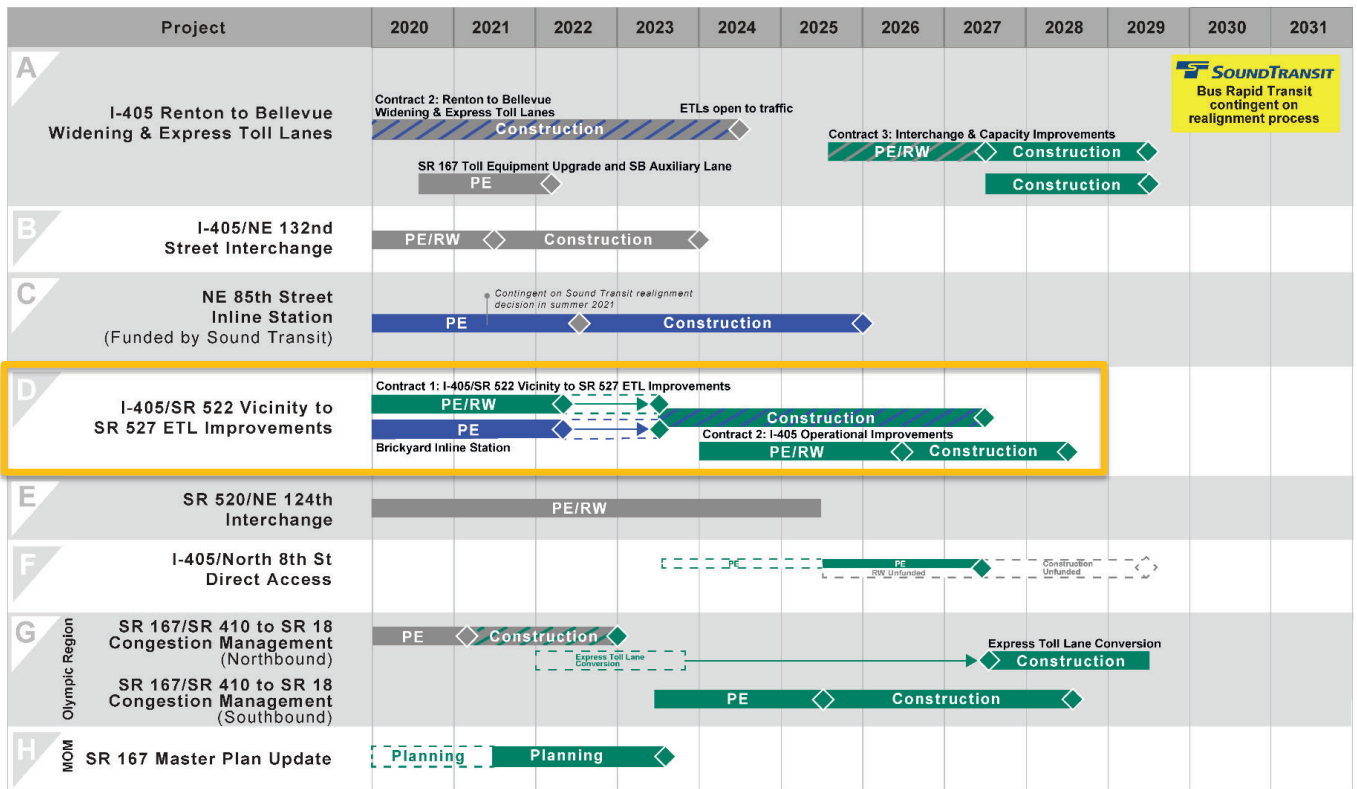
I-405, SR 522 Vicinity to SR 527 ETL Improvement Project

Project overview

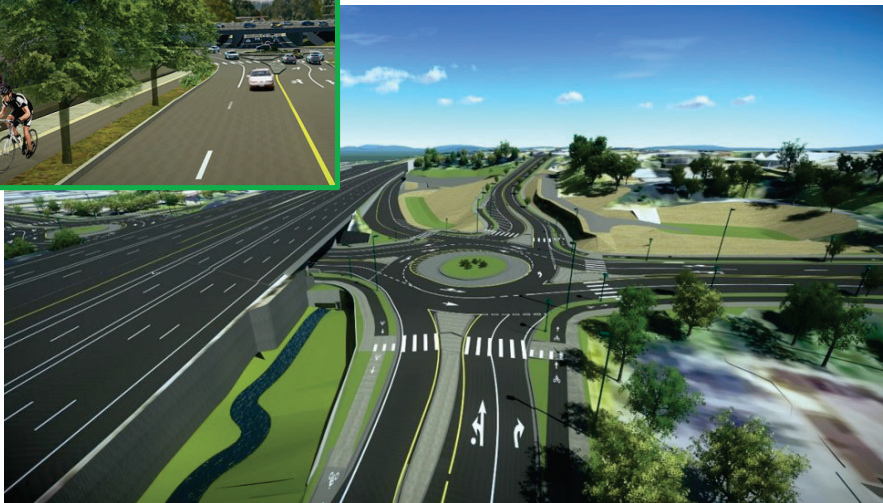
- Extends dual ETLs from SR 522 to SR 527.
- Builds direct access ramps with inline stations at SR 522 and SR 527.
- Connections to urban growth centers and transit nodes.
- Trail, ped and bike improvements.
- Addresses system preservation and resiliency.
- Environmental decision document expected in early 2021 to keep project moving towards construction readiness.



- Funding Sources
- CWA
 - Toll Revenue
 - Sound Transit



I-405/NE 132nd Street Interchange Project



Project overview

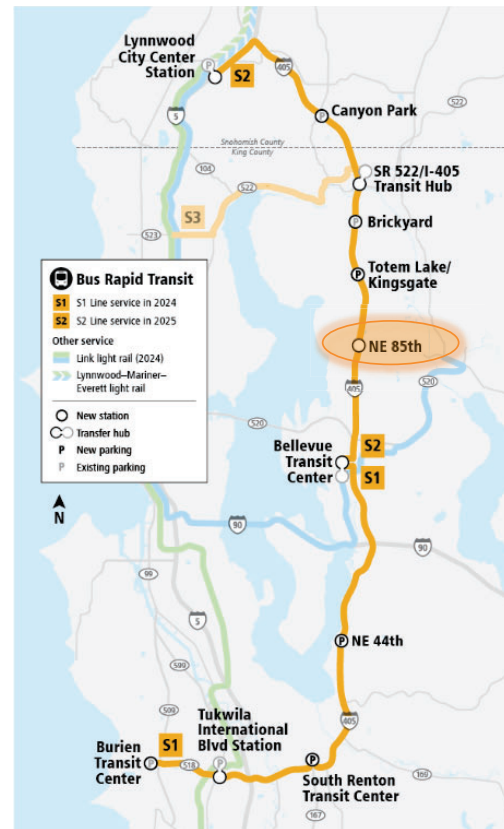
- Builds a new half-diamond interchange.
- Replaces signals with roundabouts optimizing movement and reducing long-term maintenance.
- Adds ped/bike infrastructure through the interchange.
- Provides access to Totem Lake urban growth center, Evergreen Hospital and Kingsgate Park-and-Ride.
- Corrects fish barrier creating over 3000 feet of upstream habitat gain.
- Improves water quality and addresses seismic retrofit.

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

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

Project Description

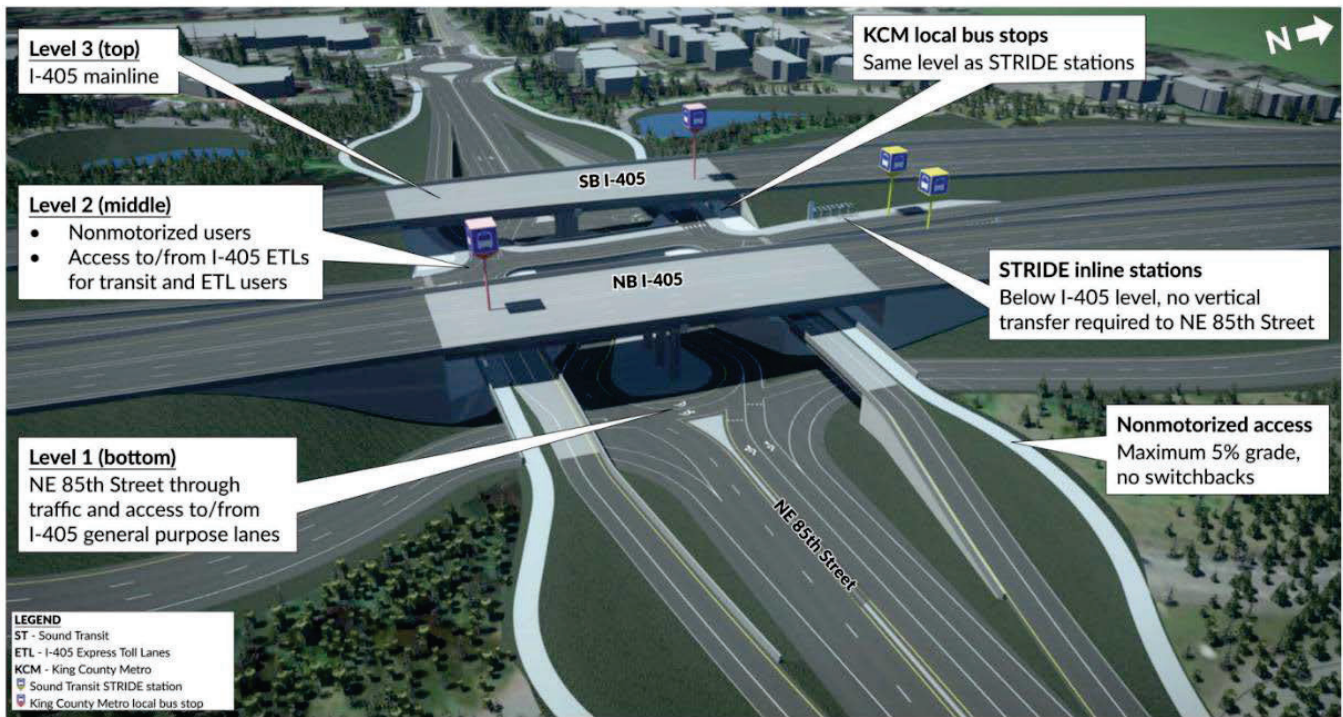
- Constructs a three-level interchange with BRT station, direct access ramps, and local improvements.
- Builds an inline station to serve Sound Transit's BRT, and rebuilds local bus stops.
- Builds direct access ramps to the I-405 Express Toll Lanes (ETLs).
- Builds pedestrian and bike connections.
- Design-build project.

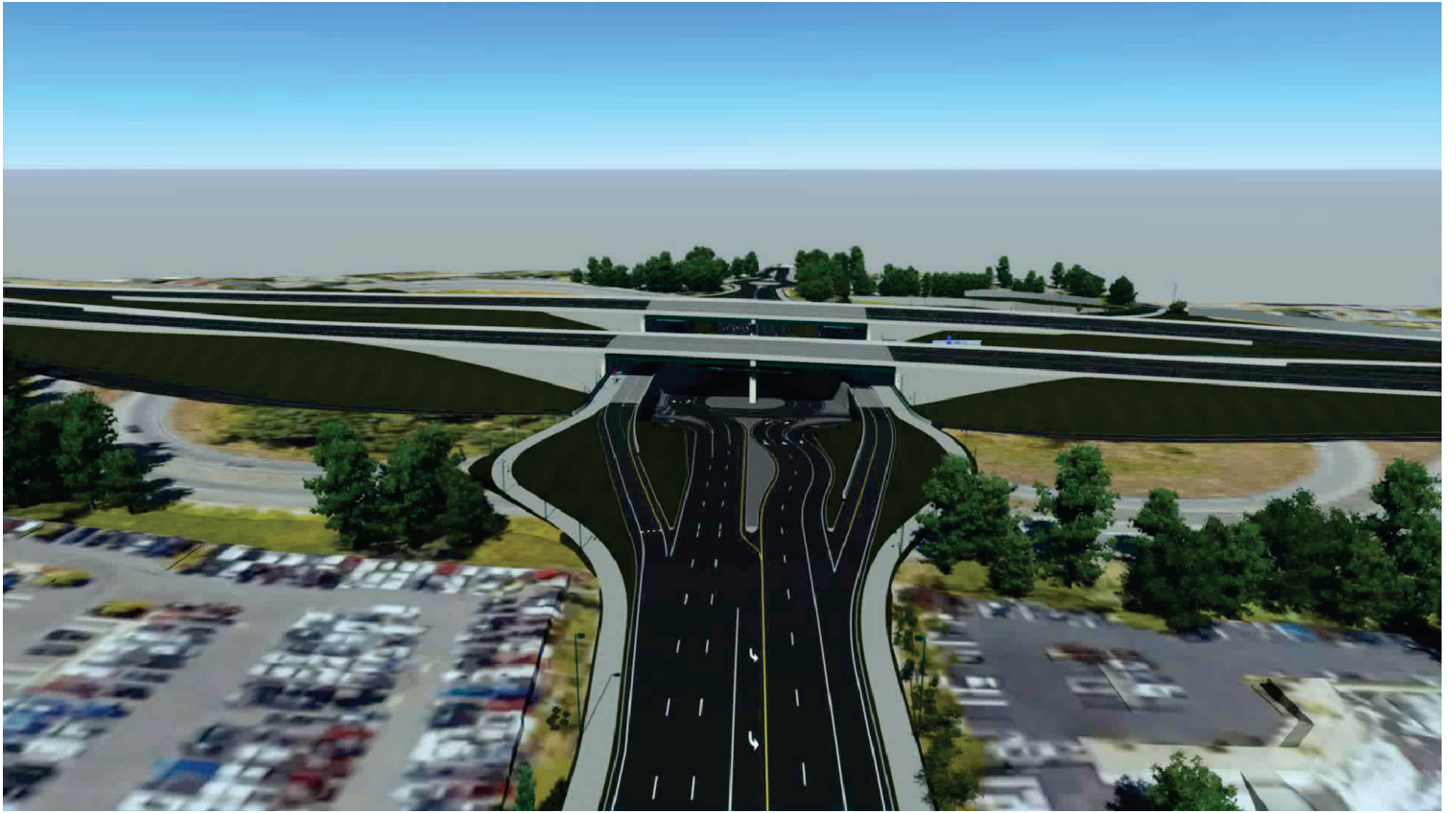


Existing conditions: NE 85th Street vicinity



Future interchange and station design





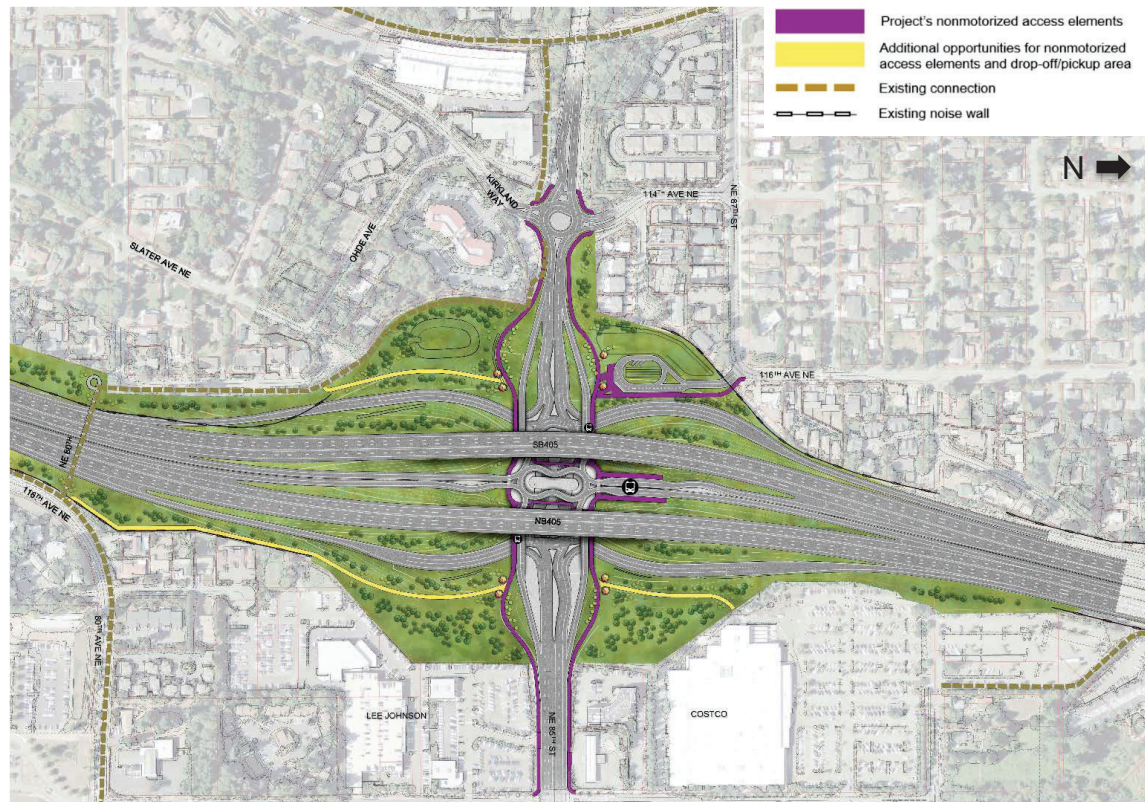
Current Design

Funded elements:

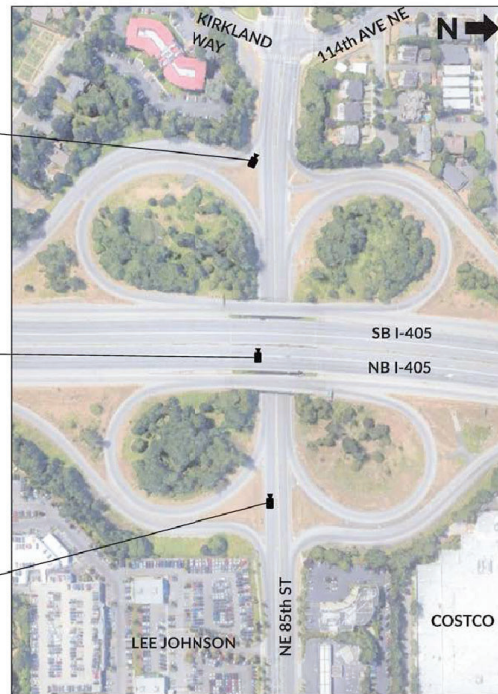
- Multimodal facility
- Three-level interchange
- BRT station/Local bus stops
- Direct access ramps
- Local improvements
 - Arterial
 - Ped/bike connections
 - 1 quadrant connection (NW)
 - 1 pickup/drop-off facility

Unfunded elements:

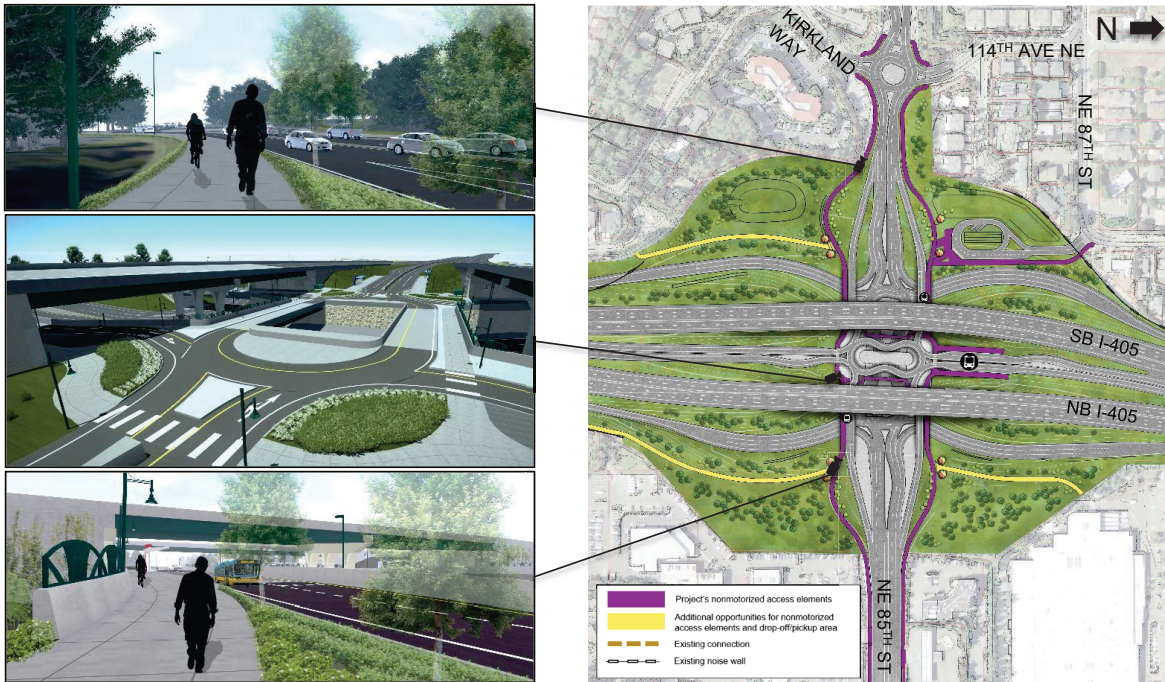
- 3 quadrant connections



Existing infrastructure

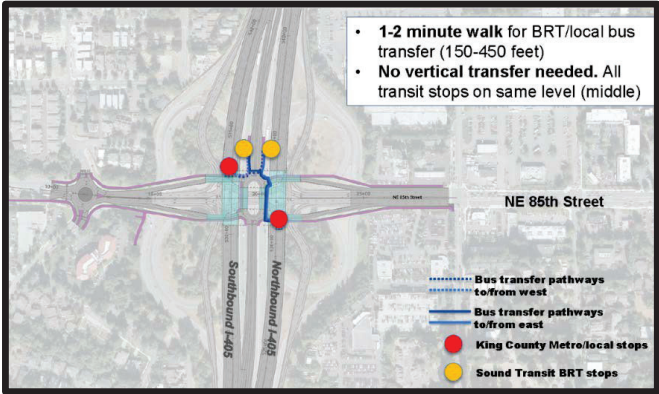


Future non-motorized access connections

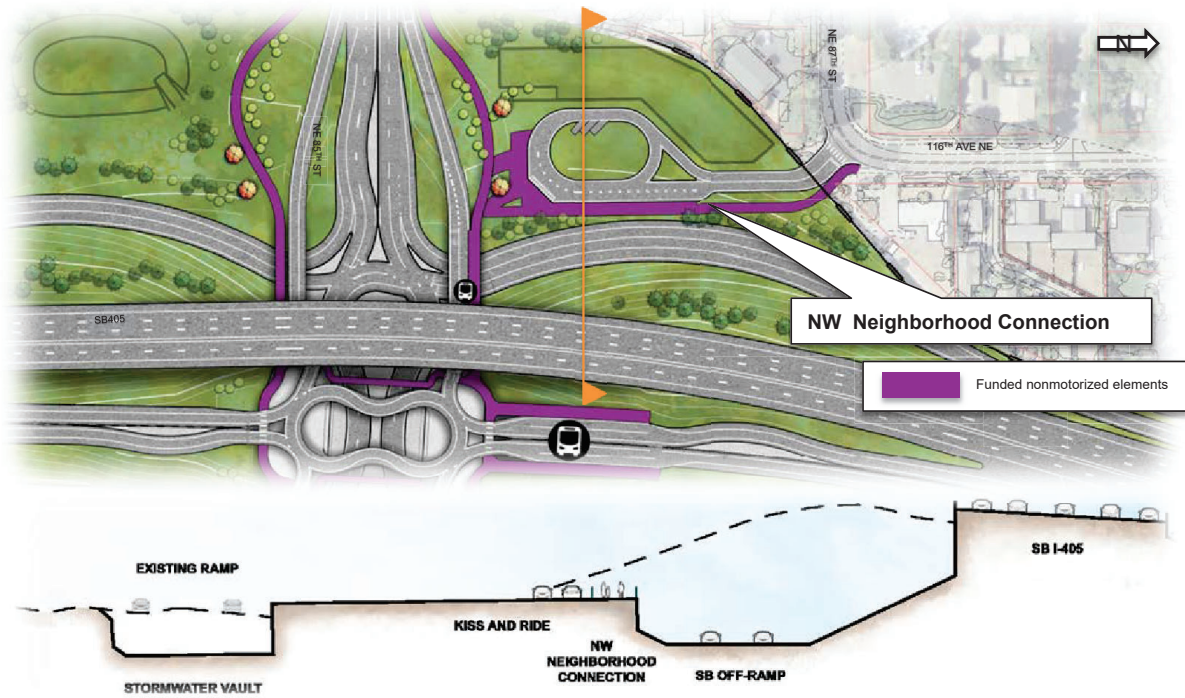


Transit connections

- Both I-405 BRT STRIDE and local King County Metro (KCM) bus stops on same level.
- Convenient transfer environment with no vertical transfer to or from NE 85th Street.



Northwest neighborhood connection



Northwest quadrant



Existing

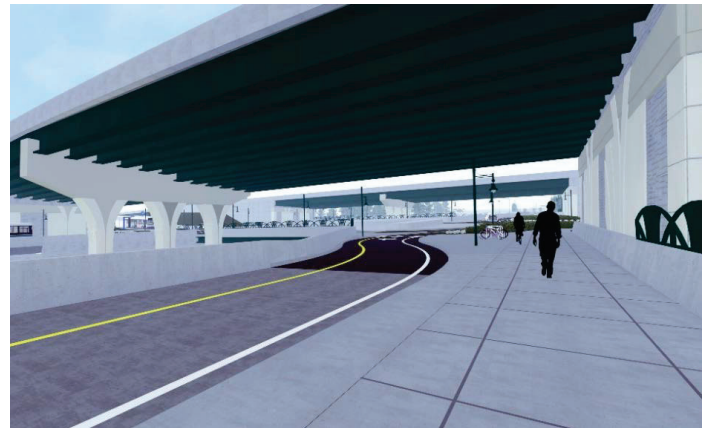


Proposed

Southwest quadrant



Existing

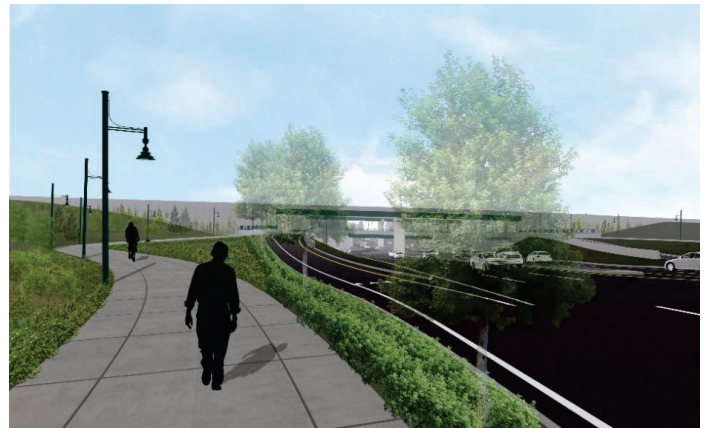


Proposed

Southeast quadrant



Existing

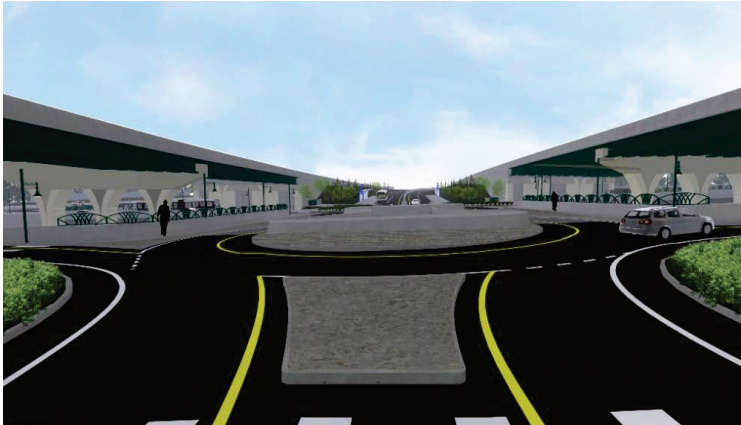


Proposed

Under bridge

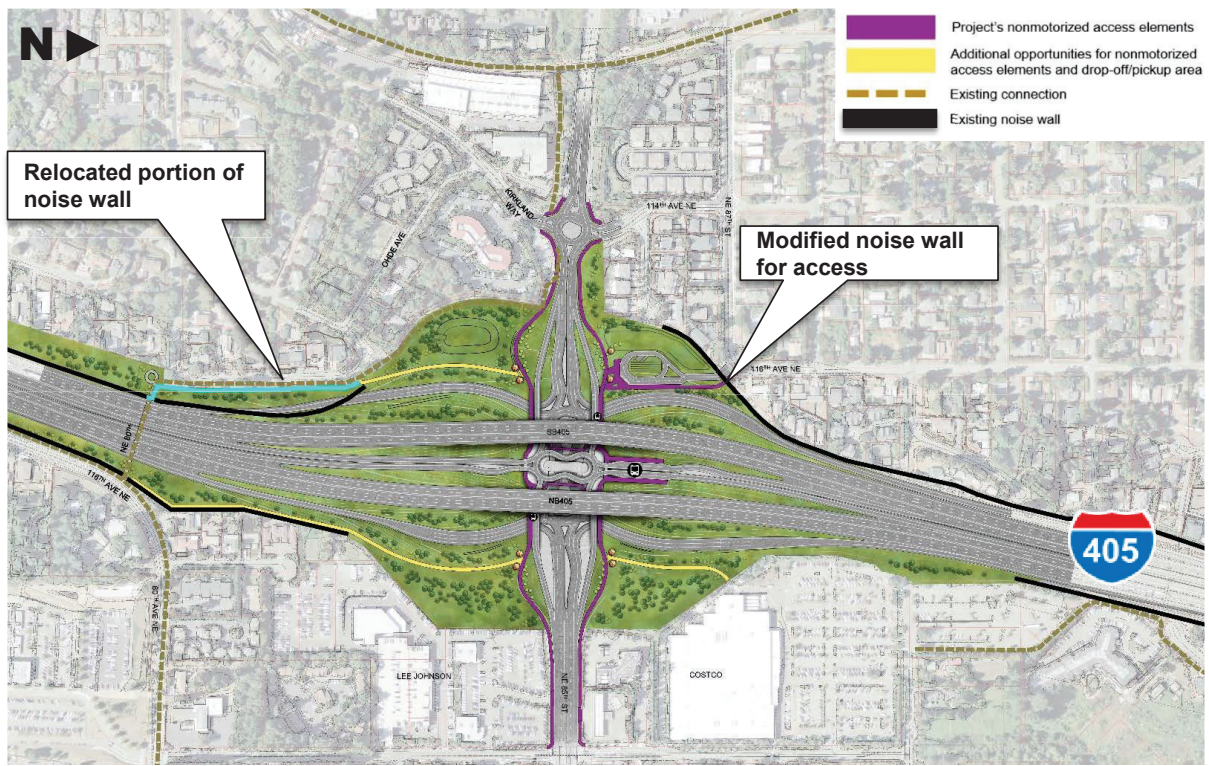


Existing

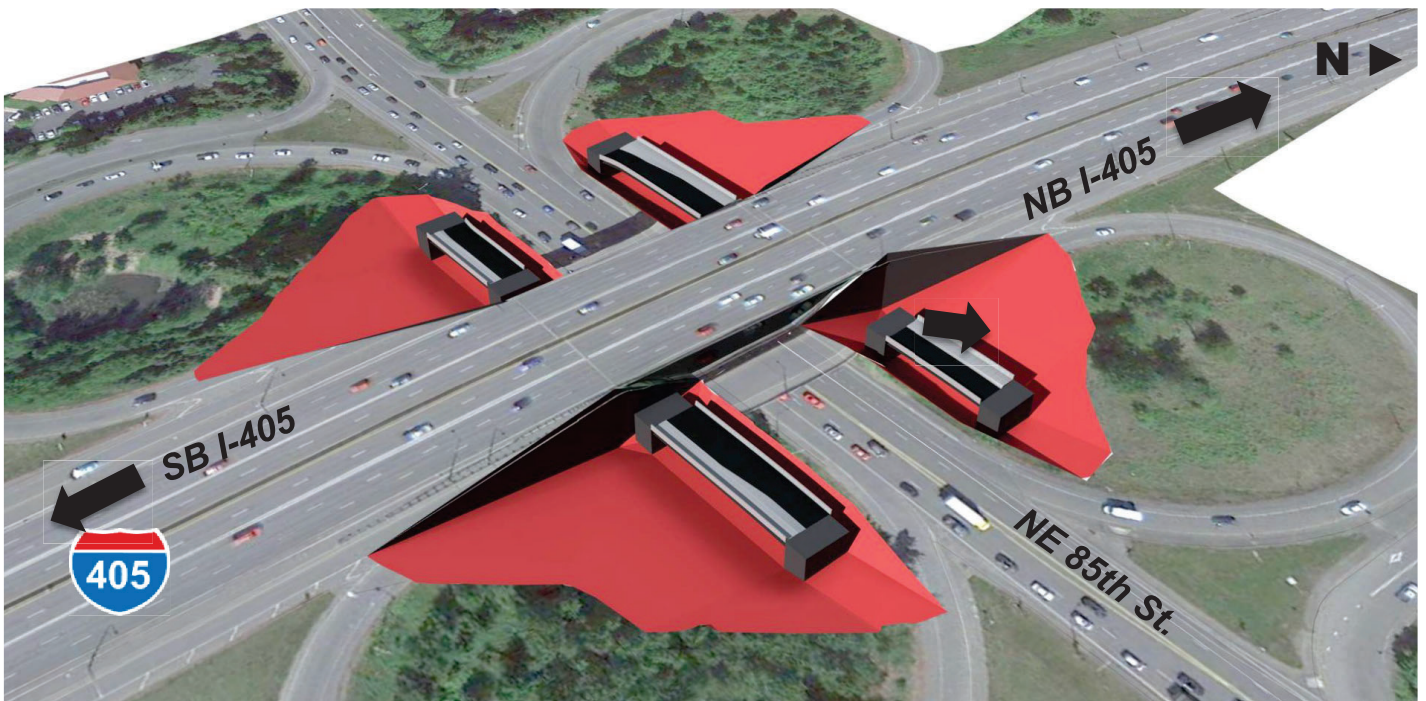


Proposed

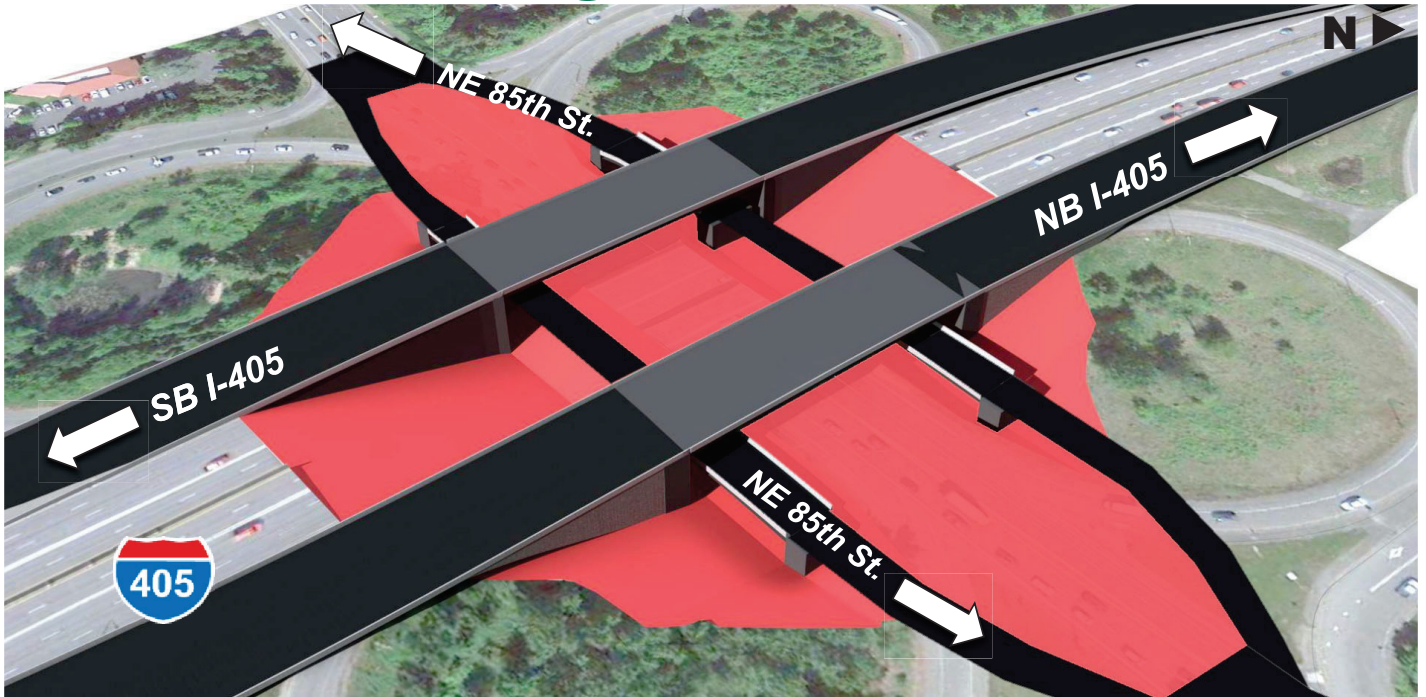
Noise walls



Construction – Stage 1



Construction – Stage 2



Final configuration



Questions?

Lisa Hodgson, P.E., DBIA
Paul Cornish, P.E.

WSDOT, I-405/SR 167 Program Administrator
Sound Transit, Bus Rapid Transit Director



Thank You

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www.wsdot.wa.gov/projects/i405/