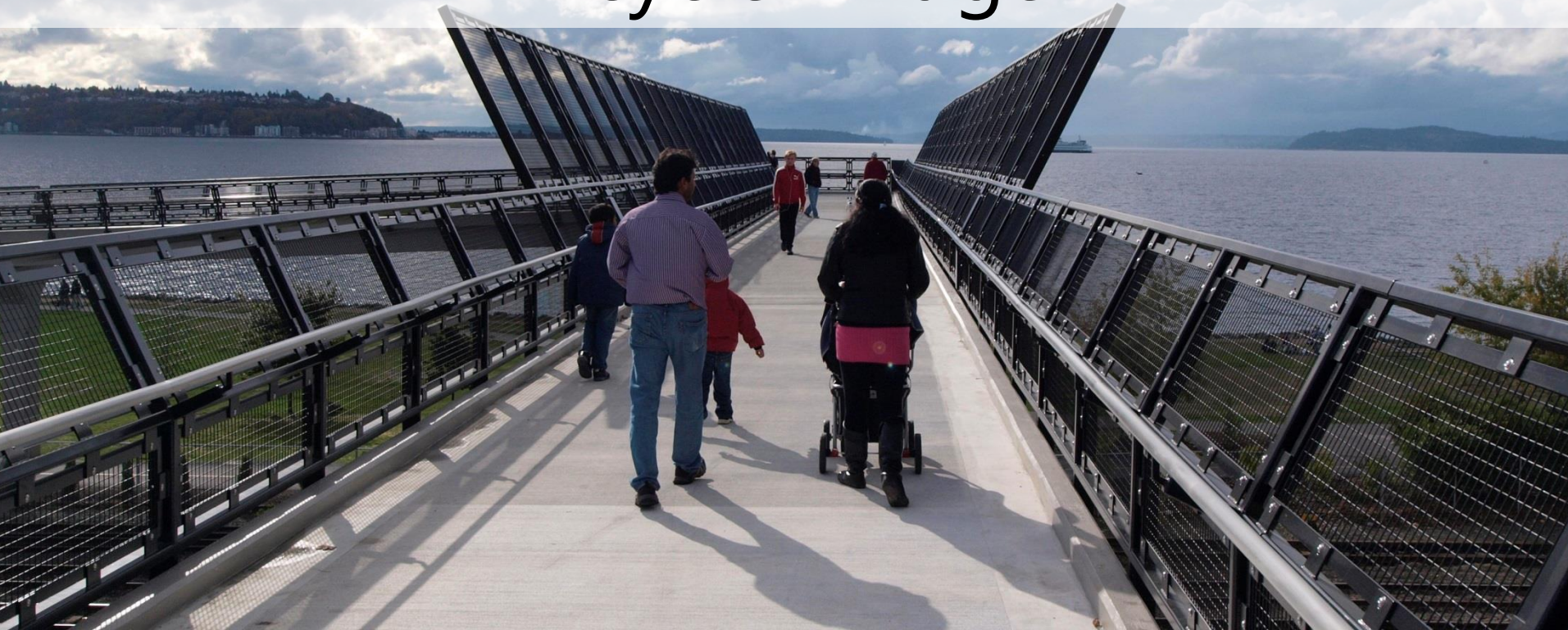


Northgate Pedestrian and Bicycle Bridge



Open House
June 3, 2014

SDOT's mission & vision

Mission: delivering a first-rate transportation system for Seattle.

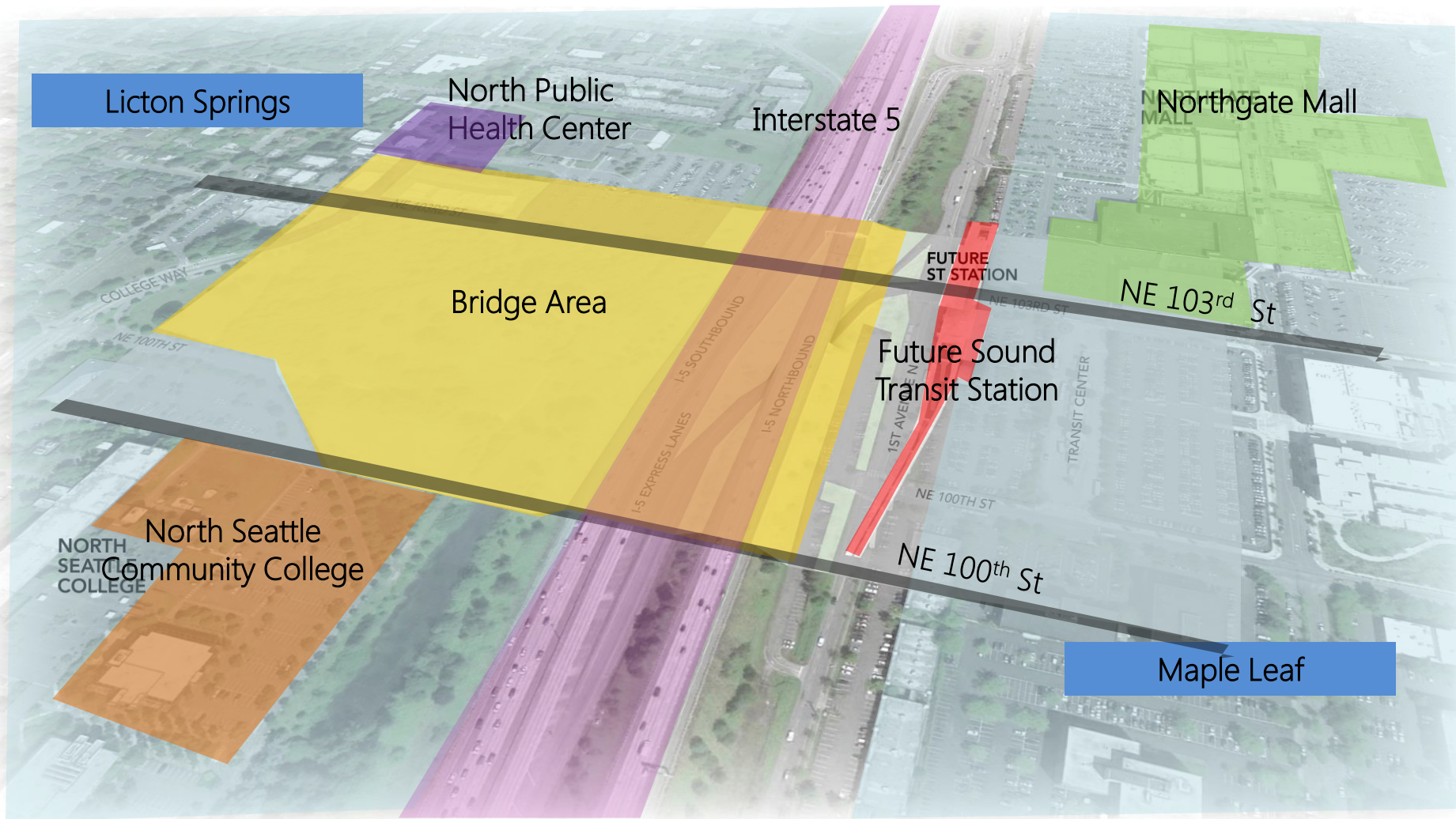


Vision: a vibrant Seattle with connected people, places, and products.

SDOT's values



Site and Context



Project Need

- I-5 is a barrier separating the communities on the east and west sides.
- The project will create improved connections to major transit investments, education facilities, retail centers and reconnect the community.

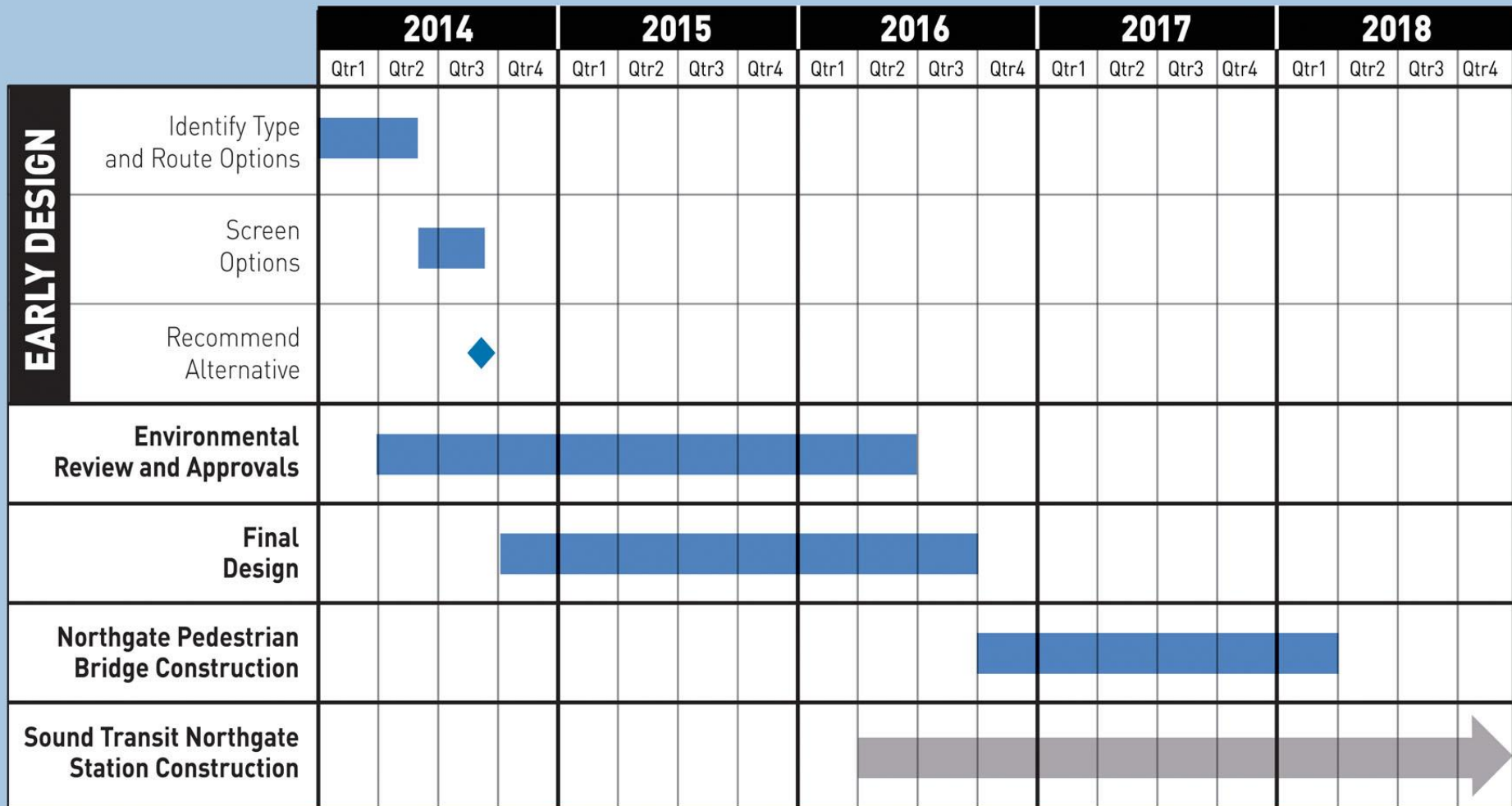
Project Benefits

- The project benefits Northgate neighborhoods, businesses and schools by:
 - Increasing ridership at the Transit Center and future Light Rail Station.
 - Creating an easier connection for students to and from North Seattle College by shortening the walk distance from the Transit Center by almost a mile.
 - Providing important access for bicyclists and pedestrians to other improvements coming to the Northgate area.

Northgate Pedestrian and Bicycle Bridge Project Overview

- Currently in early design and environmental review
- Overall length is estimated at 1800 to 2200 feet depending on the chosen alternative
- Exact location and access points to the bridge are being developed

Project Timeline



Screening Criteria: Alignment Options



Bridge & Approach Geometry

- Span Lengths
- Approach Lengths
- WSDOT Sign Bridge Visibility



Connectivity

- Pedestrian Access
- Bicycle Network Integration



Cost

- Construction
- Right of Way
- Maintenance
- Corridor Improvements



Constructability

- Impact to Traffic
- Impact to Property
- Construction Staging
- Construction Duration



Design Opportunities

- User Experience
- Neighborhood Context
- Interstate Context
- Bridge and Trail Aesthetics



Environmental Impacts

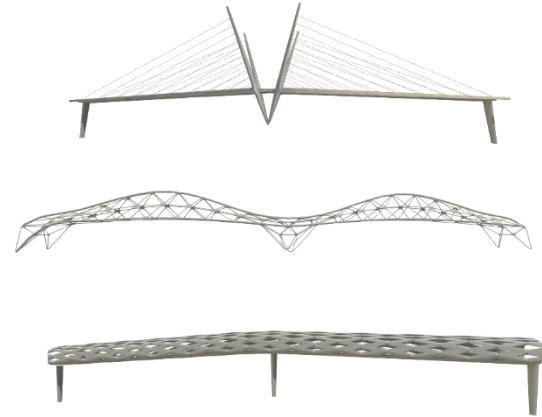
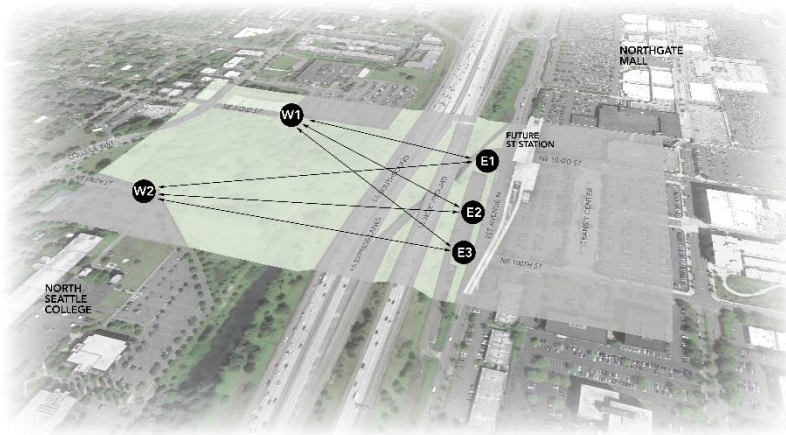
- Wetland Area
- Footprint of the Structure



Safety

- Lighting
- Visibility
- Egress
- Multi-modal interaction

Design Feedback from YOU today:



ALIGNMENT + **SPAN DESIGN**

North Seattle College

**14,000 STUDENTS
AND OVER 400 STAFF**



Existing Northgate Transit Center

**CURRENTLY
6,000 RIDERS / DAY**



NORTHGATE
MALL

FUTURE
STATION

TRANSIT CENTER

Future Northgate Sound Transit Station



NORTH
SEATTLE
COLLEGE

NORTHGATE
MALL

FUTURE
STATION

NE 103RD ST

1ST AVENUE N

TRANSIT CENTER

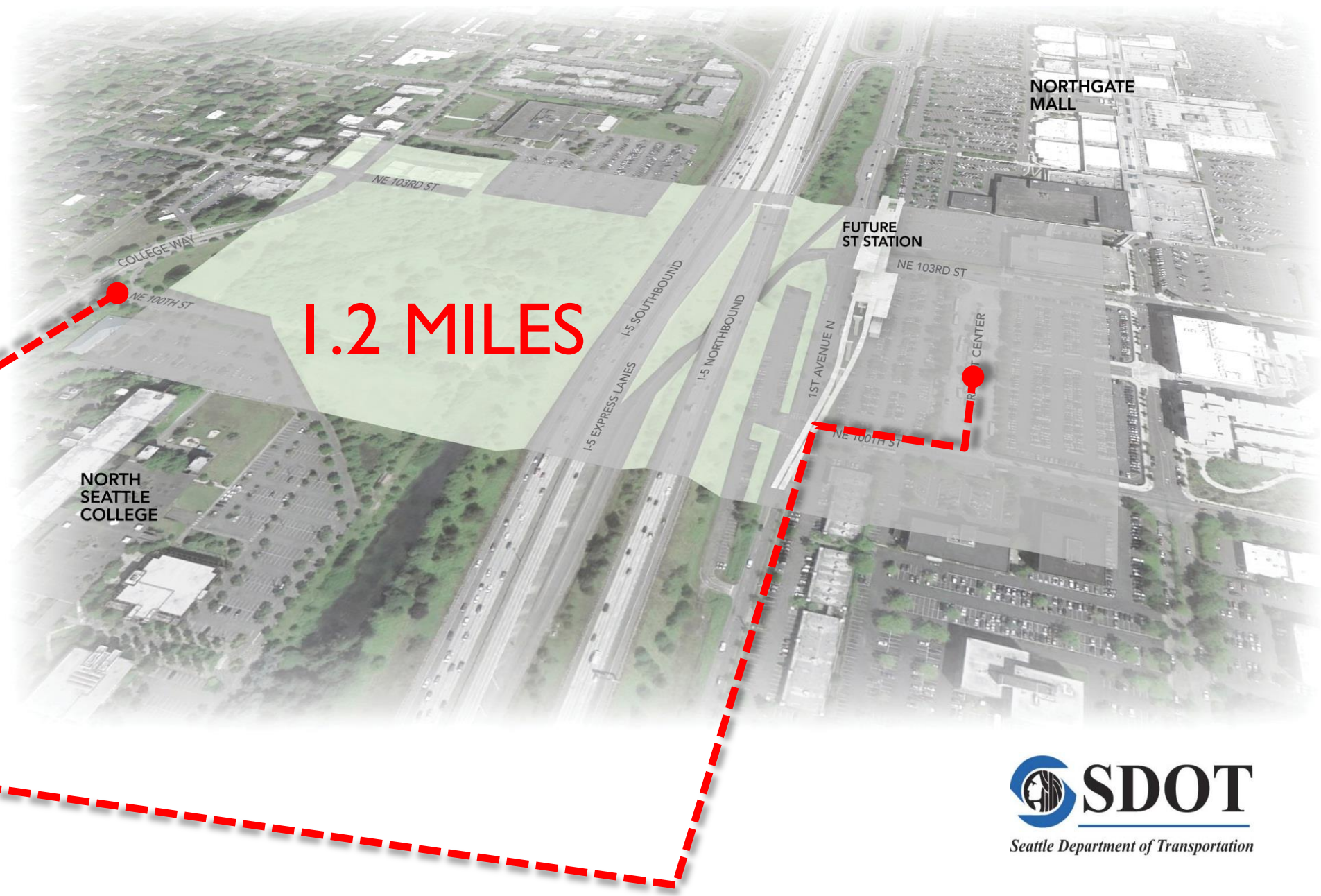
NE 100TH ST

15,000 PASSENGERS
PER DAY PROJECTED

Existing Connections



Existing Connections



Existing East Walking Connections



Northgate Way at I-5 overpass



Northgate Way at 1st Ave NE

Existing West Walking Connections

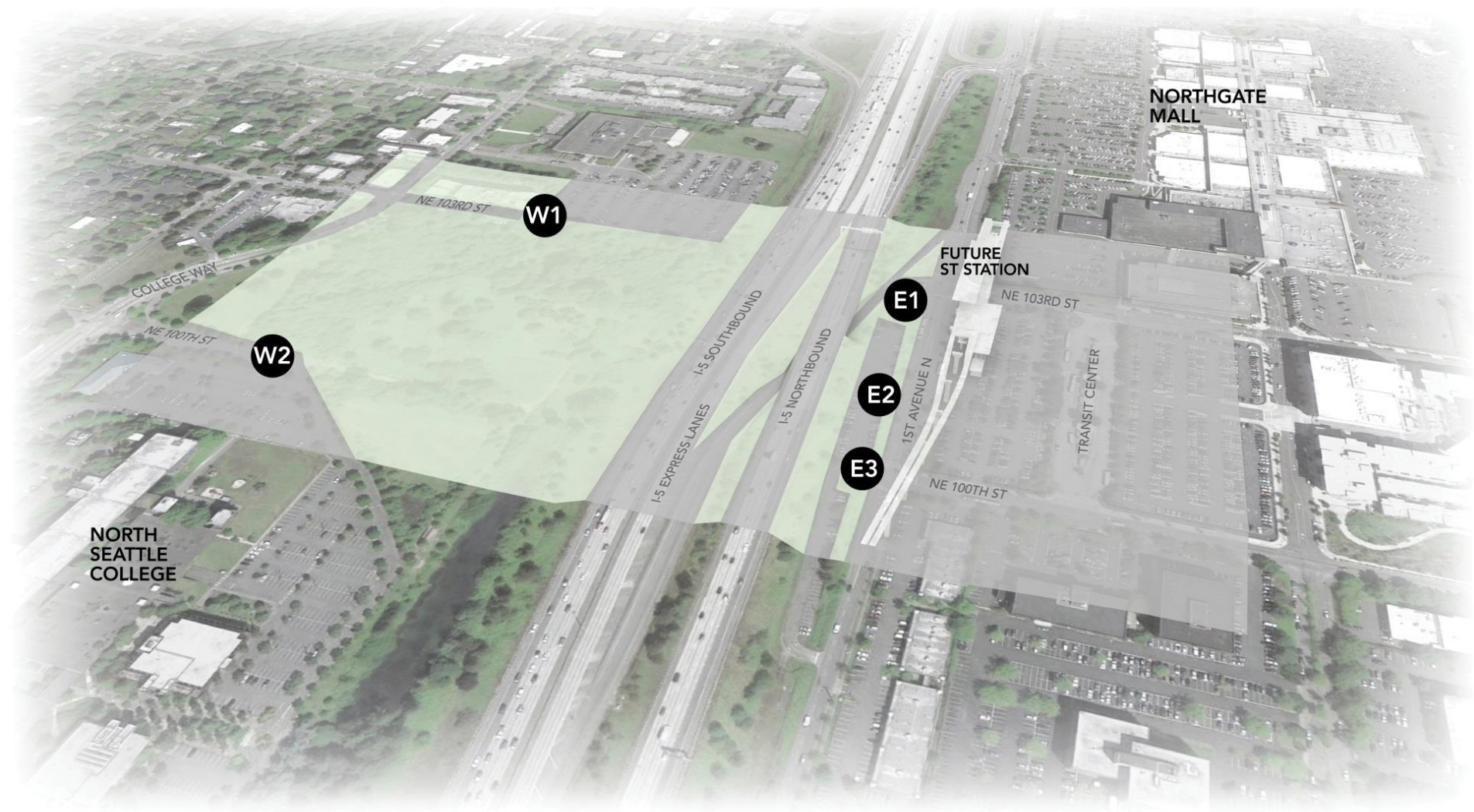


92nd Street Overpass



Northgate Way at I-5 Overpass

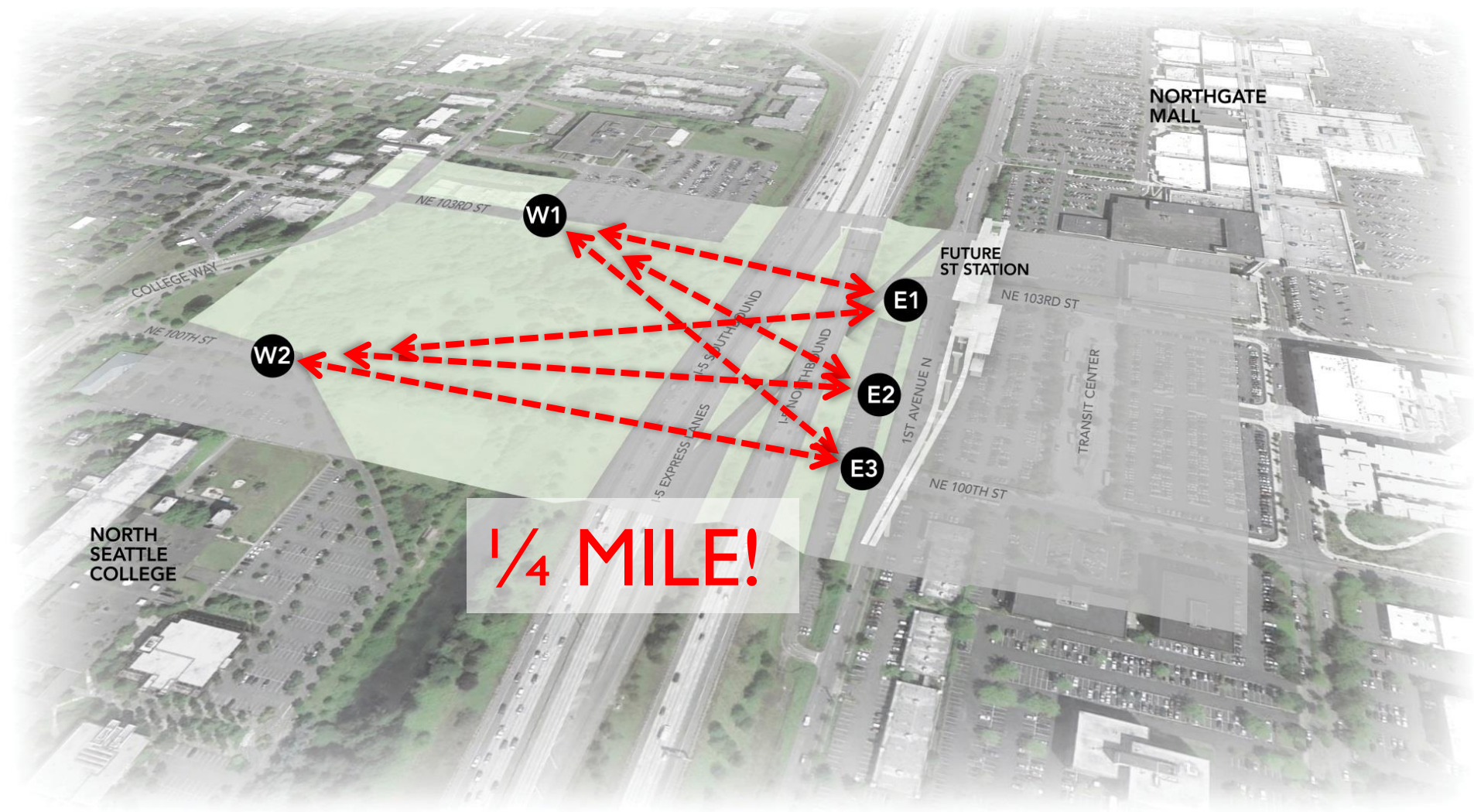
Bridge Access Points



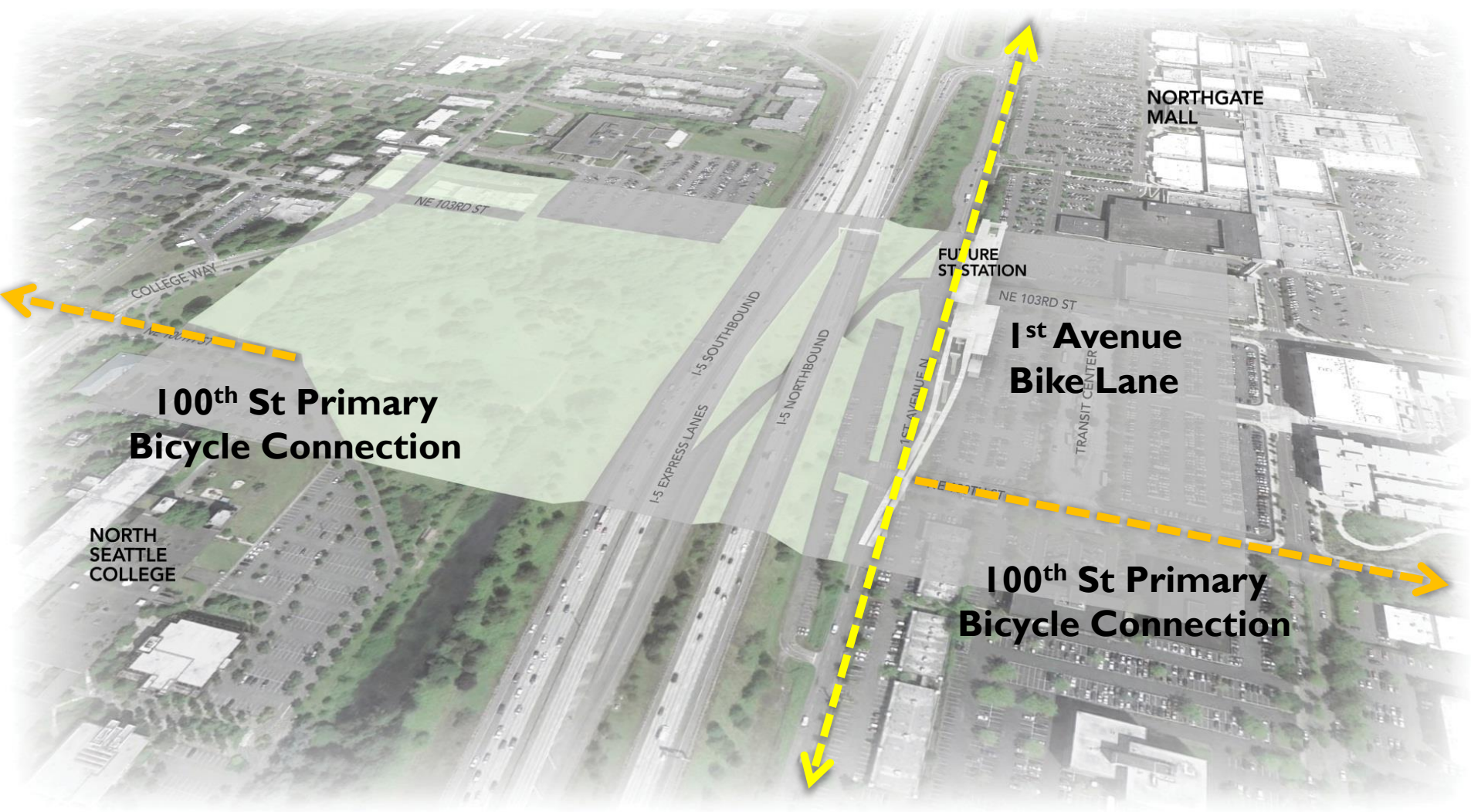
Existing Conditions



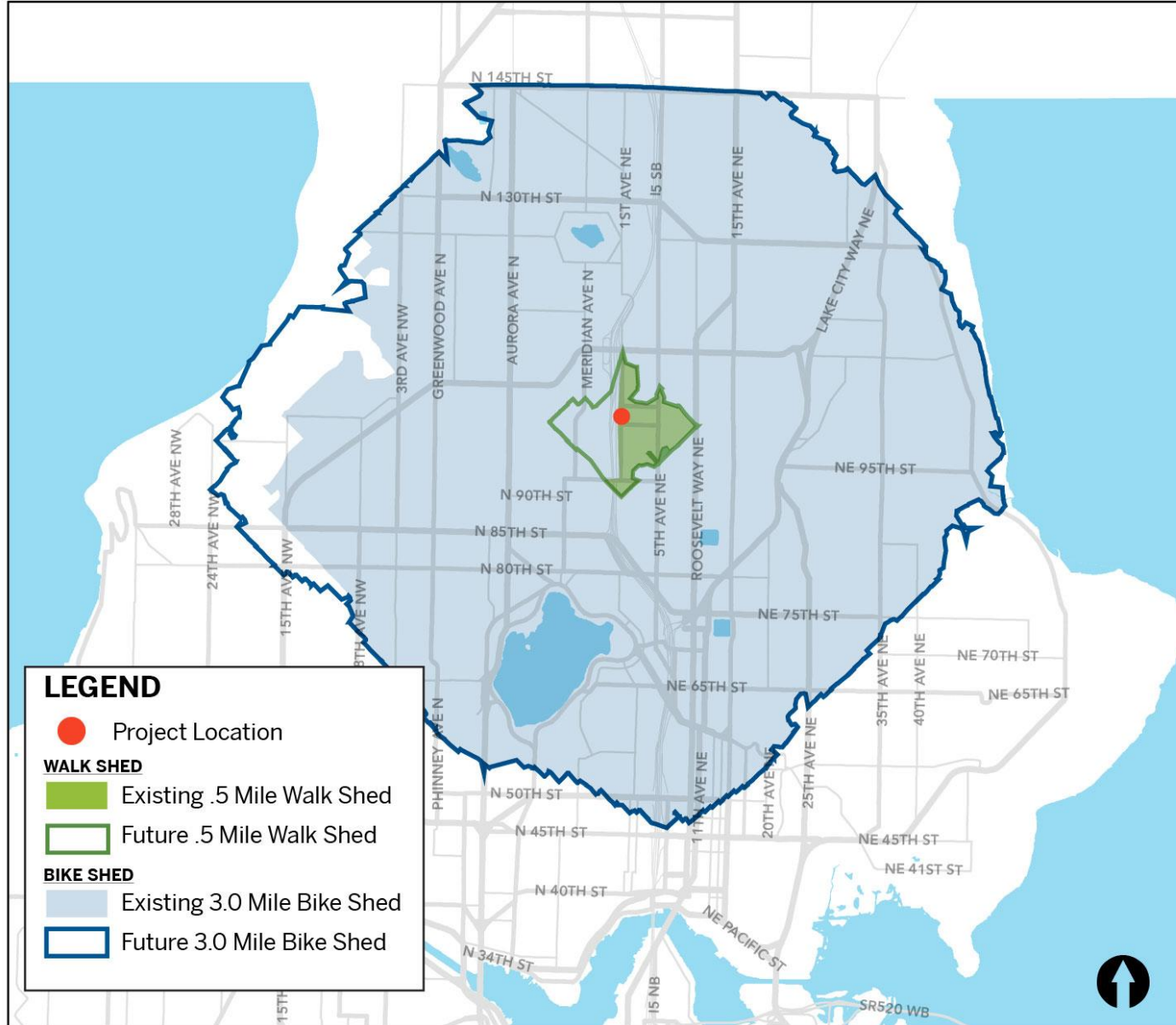
Bridge Alignment Options



Proposed Bike Infrastructure



Expanded walk and bike sheds



Bridge Components

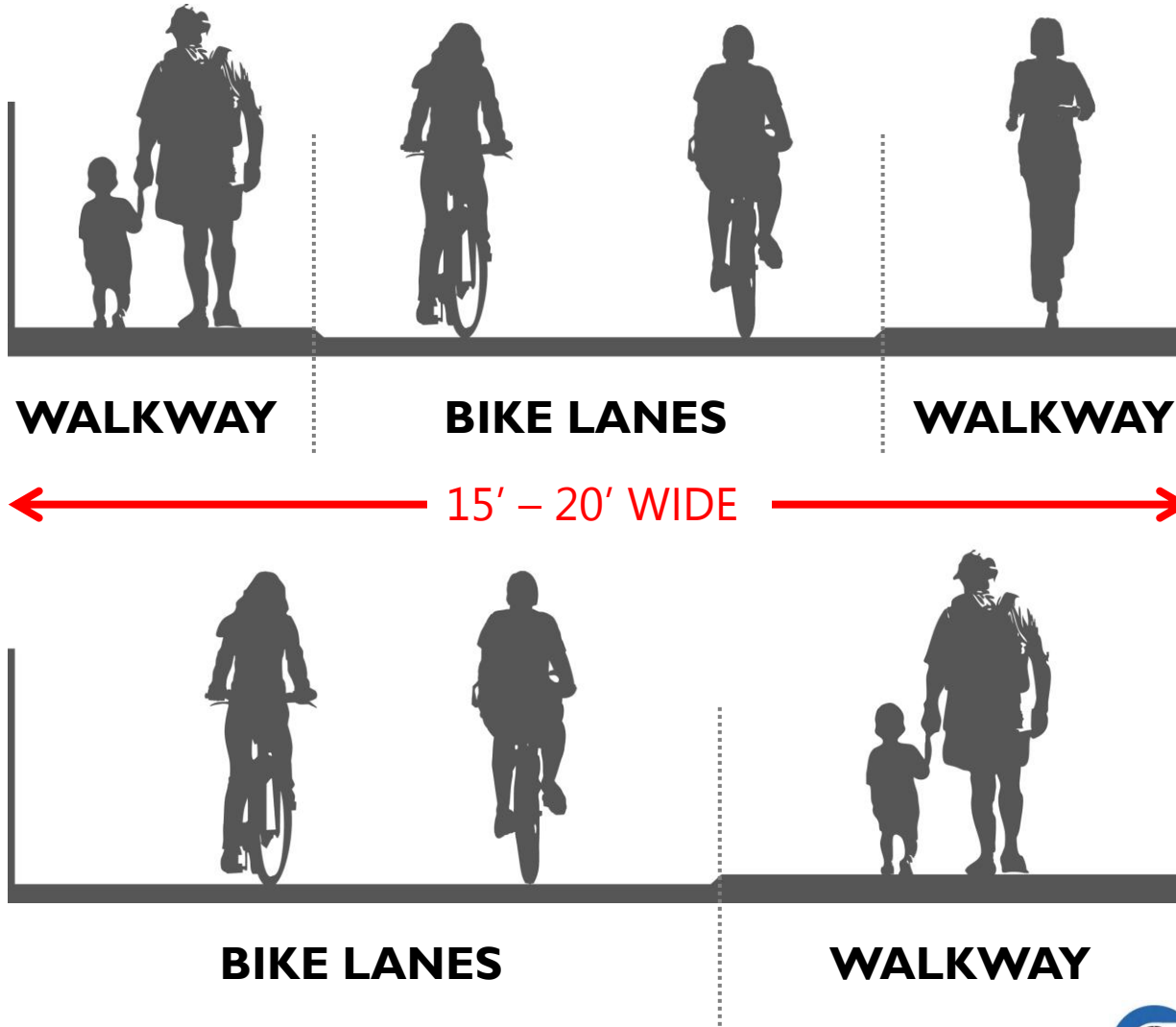
PRIMARY SPAN
+17.5' clear height beneath

**CONNECTION TO
SOUND TRANSIT STATION**
@ ~20' above grade

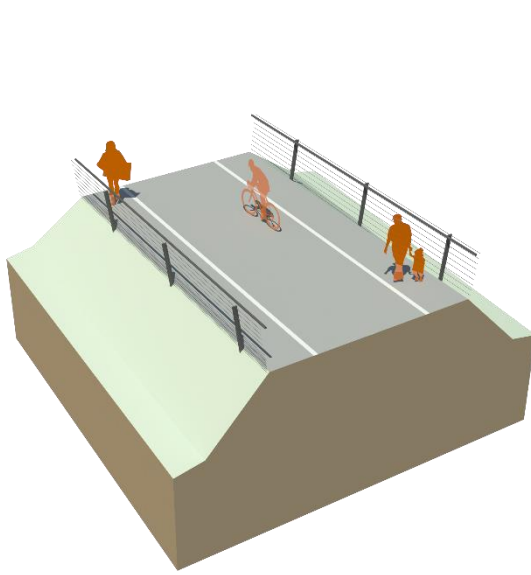
WEST APPROACH
+35' elevation gain

EAST APPROACH
+45' elevation gain

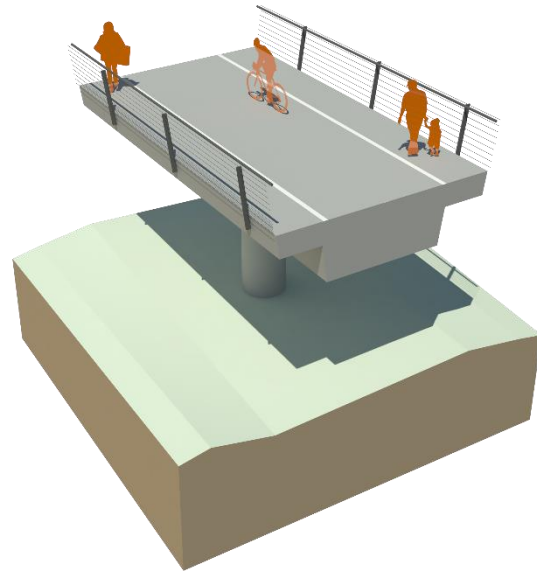
Bridge Components: **Pathway Elements**



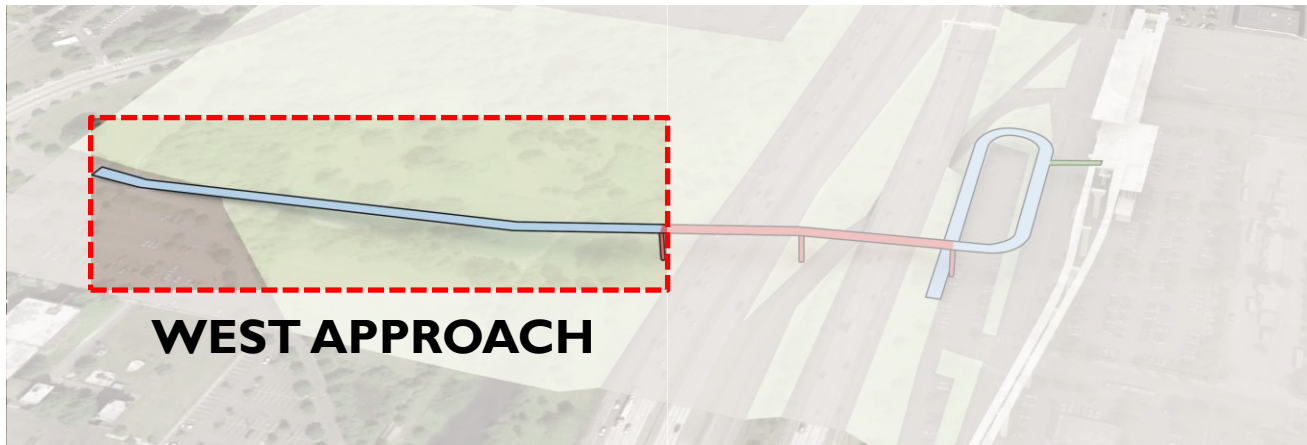
Bridge Components: **West Approach**



AT-GRADE APPROACH

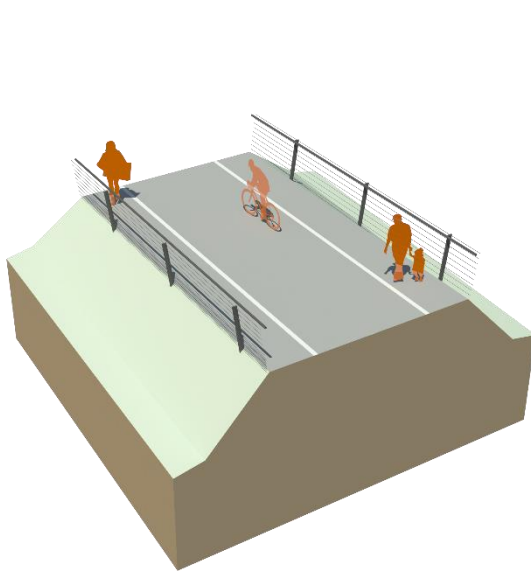


ELEVATED APPROACH

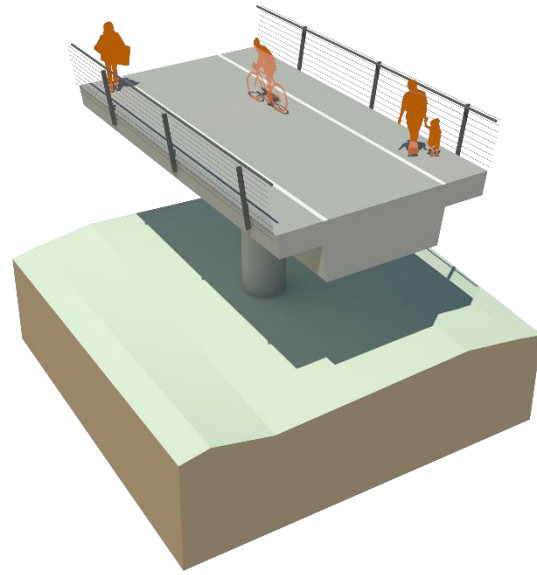


WEST APPROACH

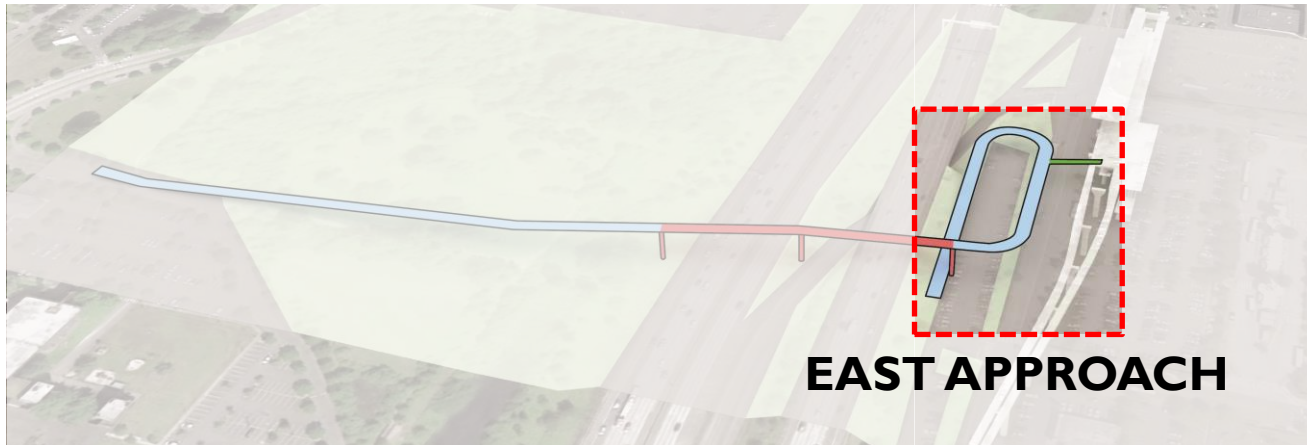
Bridge Components: **East Approach**



AT-GRADE APPROACH

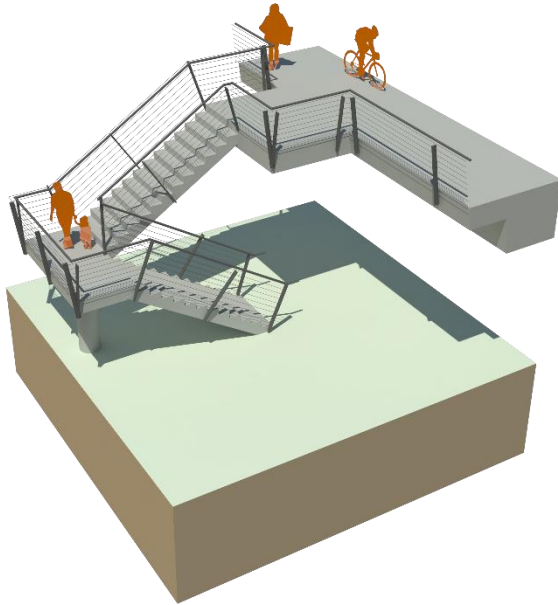


ELEVATED APPROACH

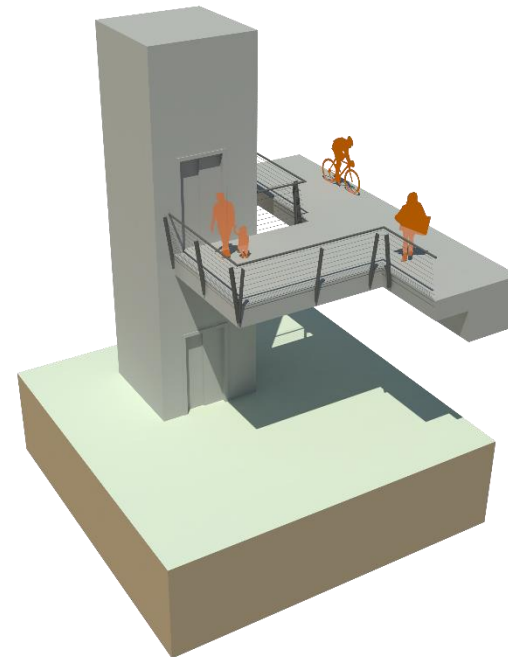


EAST APPROACH

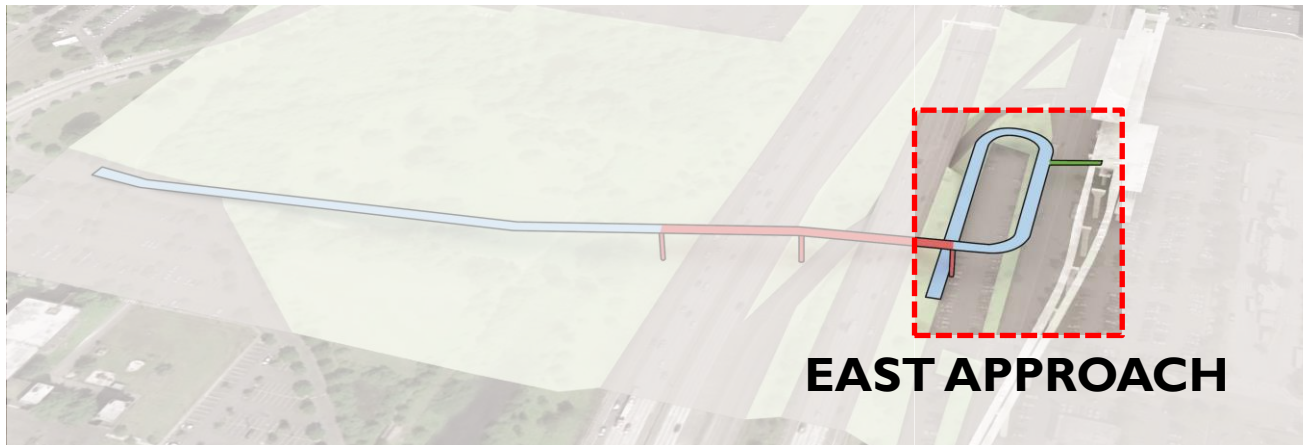
Bridge Components: **East Approach**



STAIRS

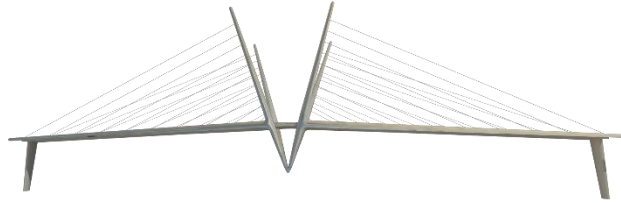


ELEVATOR



EAST APPROACH

Bridge Components: **Primary Span**



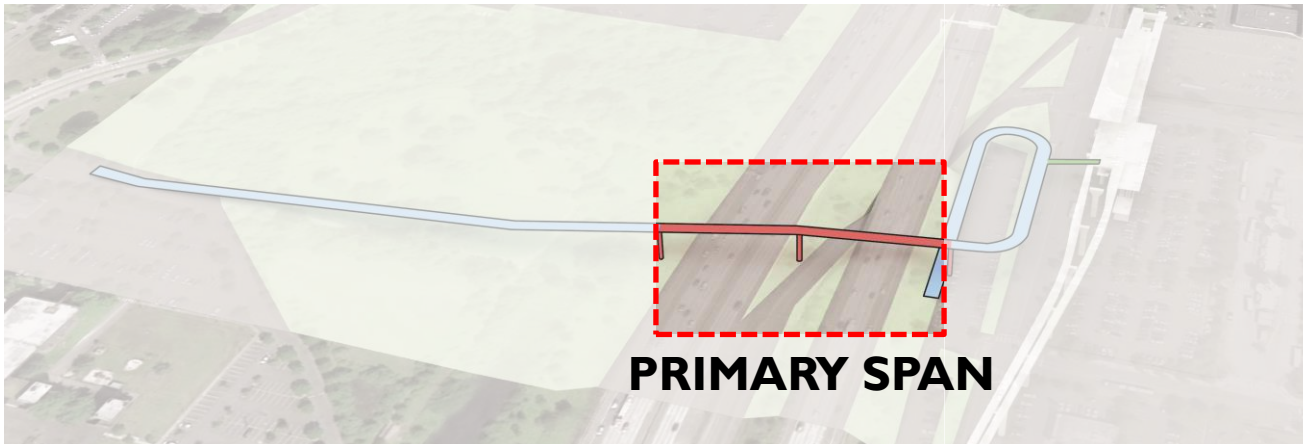
CABLE STAY



TIED ARCH



TUBE / TRUSS



PRIMARY SPAN

Primary Span Types: **Cable Stay**



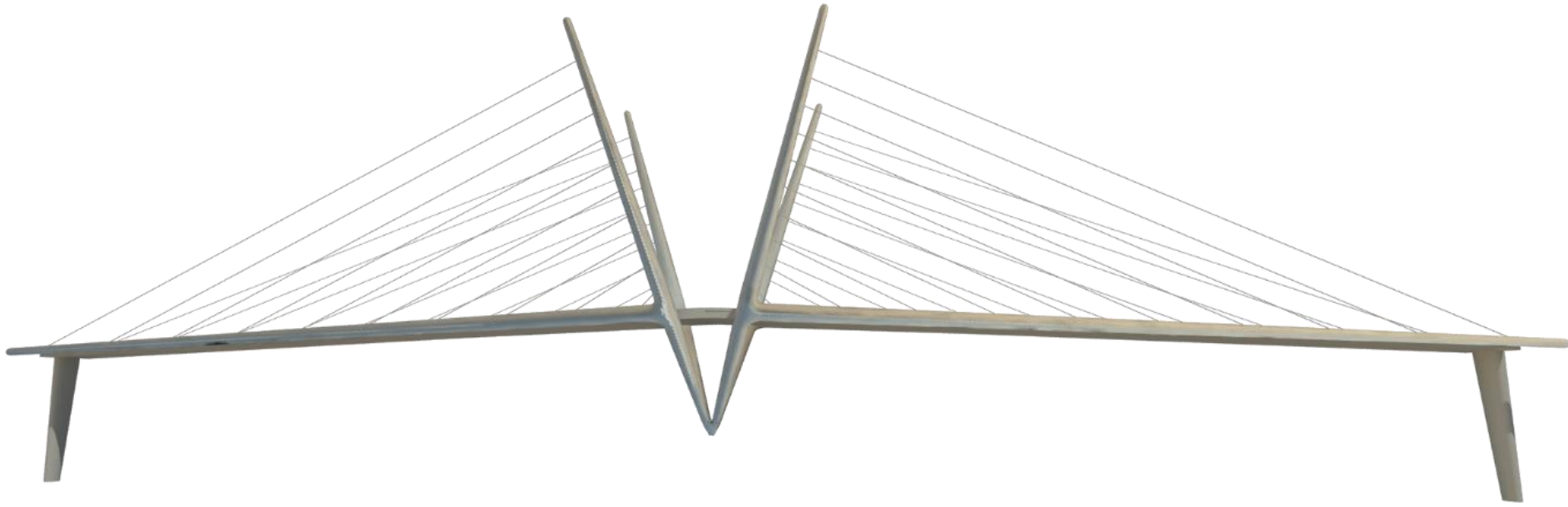
Primary Span Types: **Cable Stay**



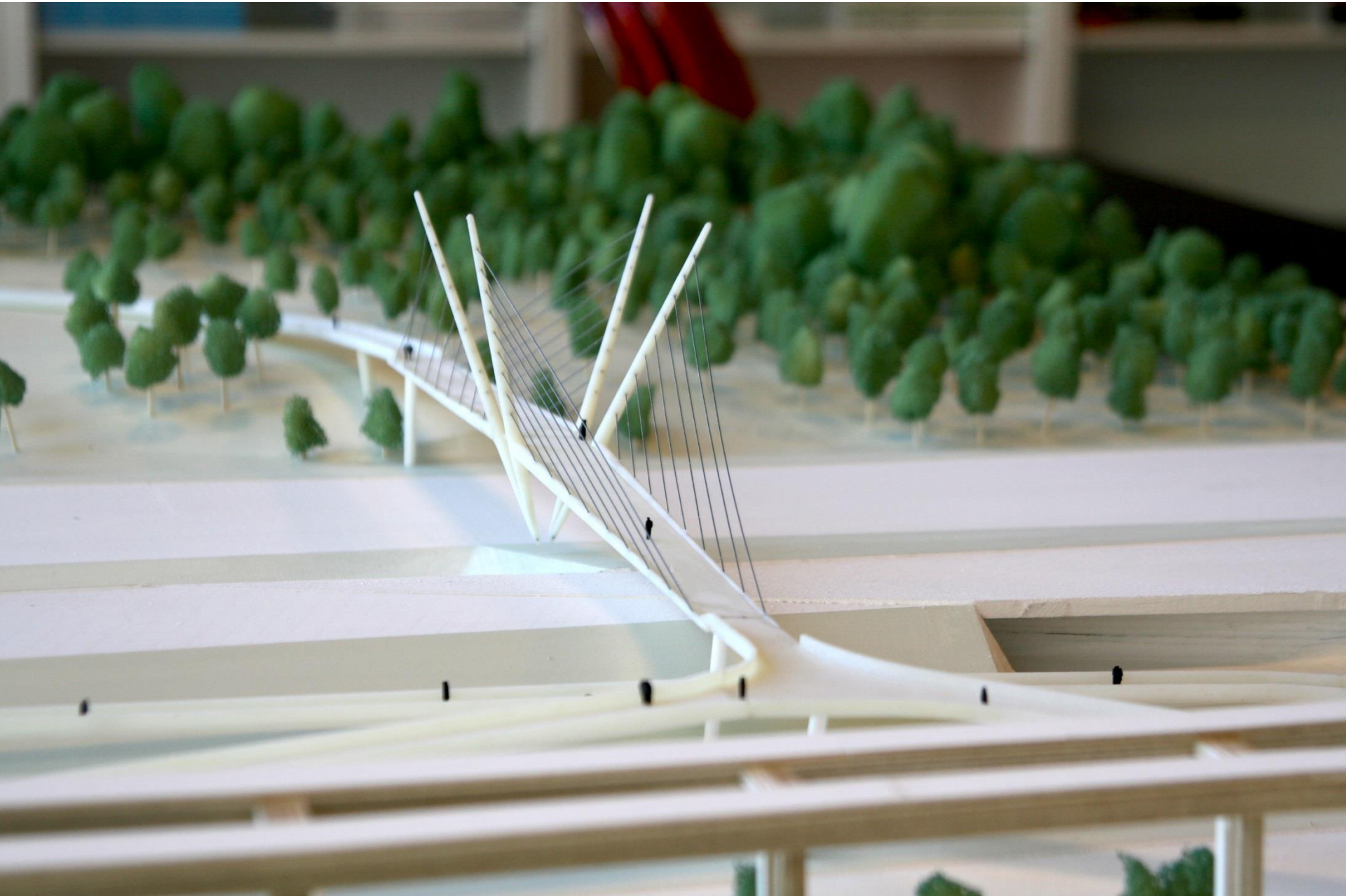
Primary Span Types: **Cable Stay**



Primary Span Types: **Cable Stay**



Preliminary Design Concept: **Cable Stay**



Preliminary Design Concept: **Cable Stay**



VIEW FROM NORTHEAST

Preliminary Design Concept: **Cable Stay**



VIEW FROM NE 100TH ST AND 1ST AVE N.

Preliminary Design Concept: **Cable Stay**



VIEW FROM SPAN

Primary Span Types: **Tied Arch**



Primary Span Types: **Tied Arch**



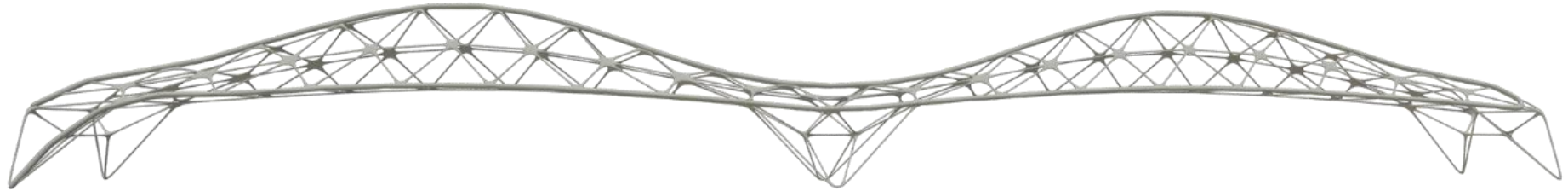
Primary Span Types: **Tied Arch**



Primary Span Types: **Tied Arch**



Preliminary Design Concept: **Tied Arch**



Preliminary Design Concept: **Tied Arch**



Preliminary Design Concept: **Tied Arch**



VIEW FROM NORTHEAST

Preliminary Design Concept: **Tied Arch**



VIEW FROM NE 100TH ST AND 1ST AVE N.

Preliminary Design Concept: **Tied Arch**



VIEW FROM SPAN

Primary Span Types: **Tube / Truss**



Primary Span Types: **Tube / Truss**



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Primary Span Types: **Tube / Truss**



Primary Span Types: **Tube / Truss**



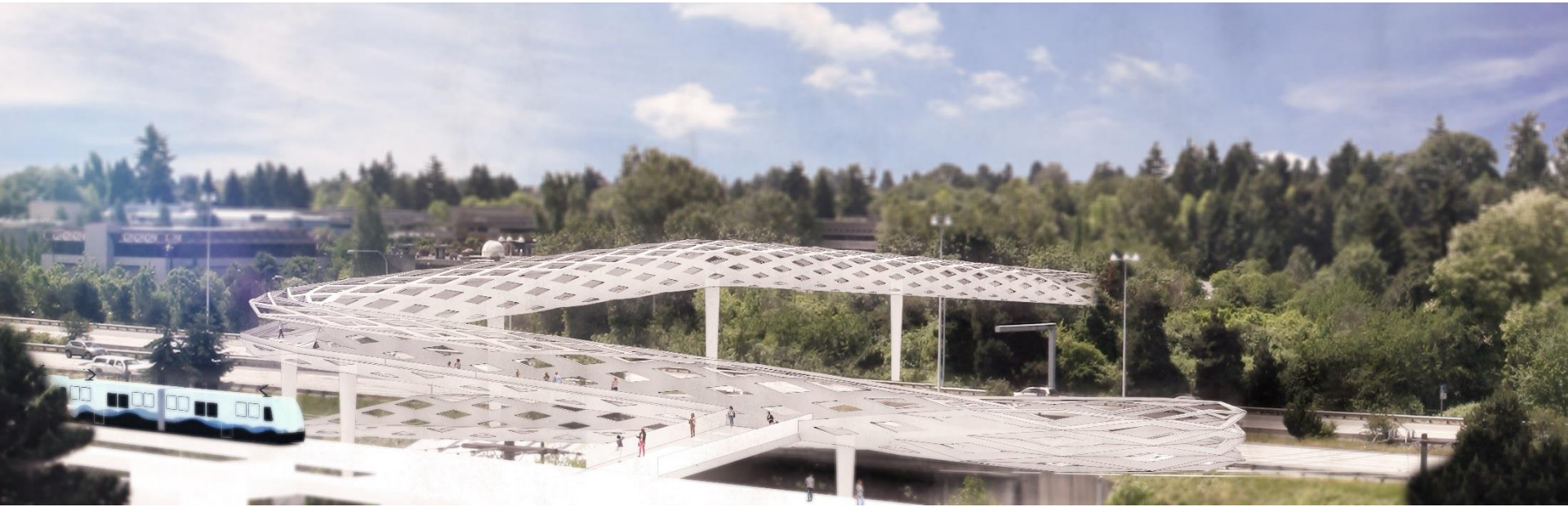
Preliminary Design Concept: **Tube / Truss**



Preliminary Design Concept: **Tube / Truss**



Preliminary Design Concept: **Tube / Truss**



VIEW FROM NORTHEAST

Preliminary Design Concept: **Tube / Truss**



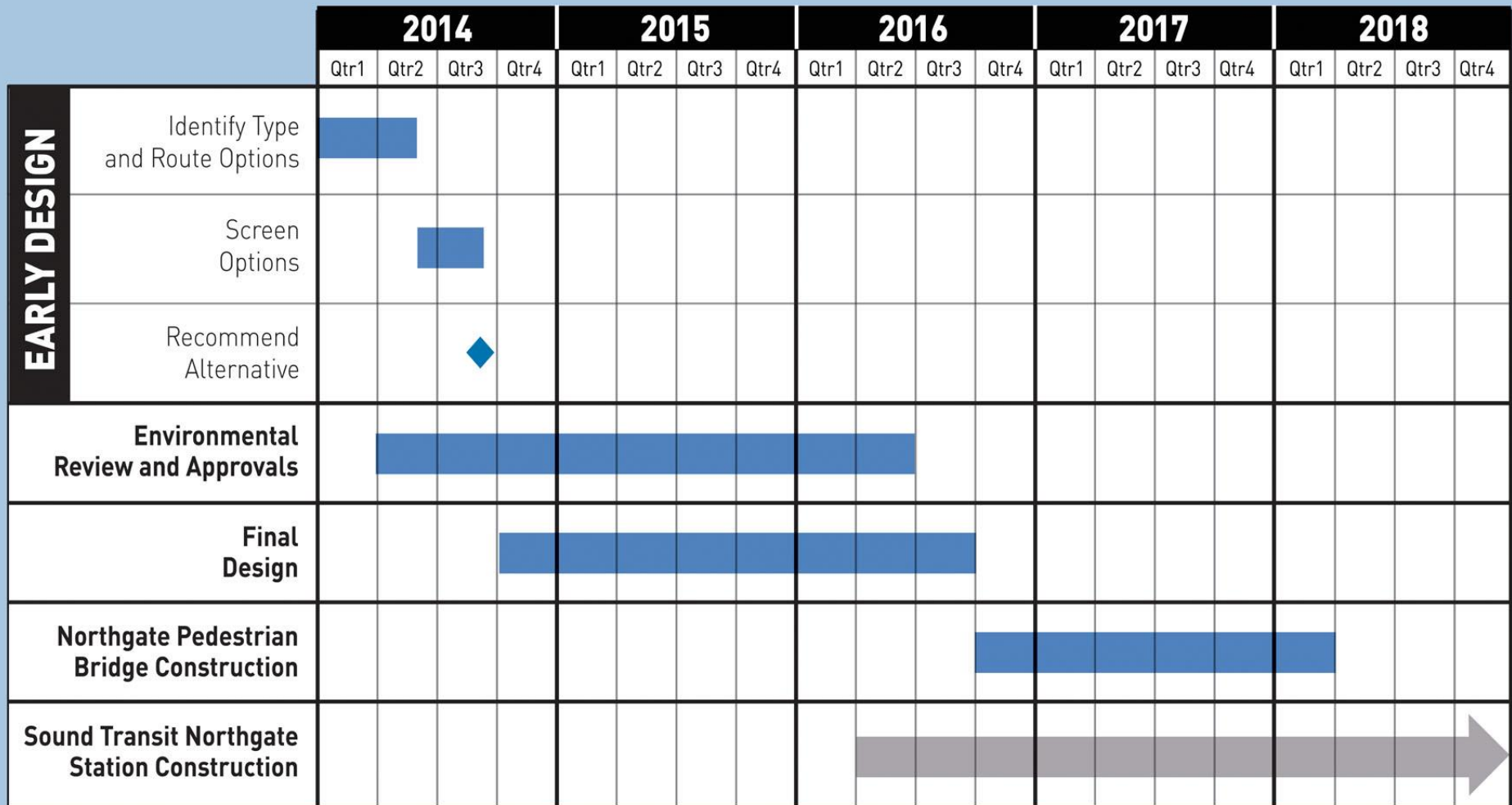
VIEW FROM NE 100TH ST AND 1ST AVE N.

Preliminary Design Concept: **Tube / Truss**



VIEW FROM WITHIN WEST APPROACH

Project Timeline



Project Funding & TIGER Grant

- Funding is provided by \$5 million contributions from SDOT and Sound Transit. An additional \$15 million is required fully fund the project.
- SDOT is seeking additional funding through a Federal TIGER Grant application.
 - The TIGER Grant application is available on our website.

Outreach Activities

- Held community briefings throughout the spring
- Open House – tonight!
- Another round of briefings will be held once a final recommendation is made in the fall



Next Steps

- Keep in touch!
- Join our email list – sign up at welcome table
- Check out our website:
www.seattle.gov/transportation/northgatepedbridge.htm

Questions?



Thanks!

<http://www.seattle.gov/transportation>



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