

Everett Link Extension



***ELG Meeting
July 11, 2022***

Agenda

Topic	Time
Introductions and meeting objectives	10 min
Schedule updates	10 min
Level 2 evaluation and criteria	30 min
Introduction to station planning and design	35 min
Elected Leadership Group discussion	30 min
Next steps	5 min

Meeting expectations



WE'RE COMMITTED TO STARTING ON TIME AND ENDING ON TIME



MEETING FACILITATOR WILL GUIDE DISCUSSION



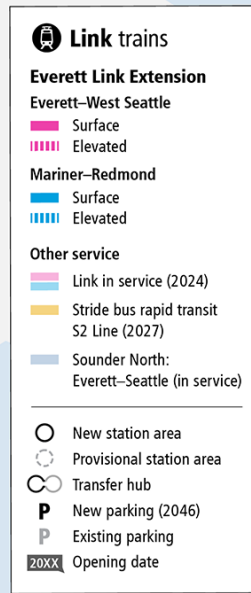
WE'RE CREATING SPACES FOR ALL VOICES TO BE HEARD



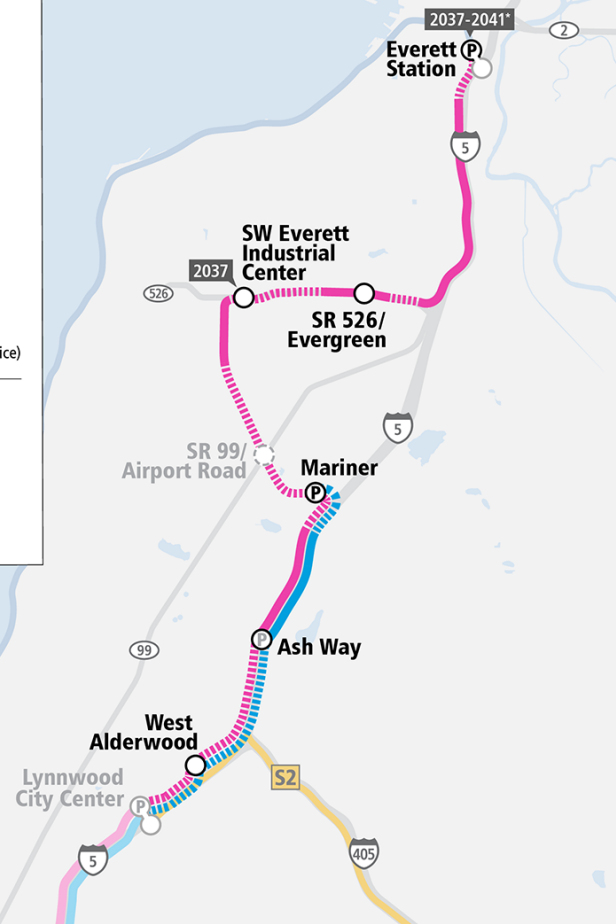
TAKE ADVANTAGE OF THE "RAISE HAND" FEATURE



PLACE MICROPHONES ON MUTE WHEN NOT TALKING



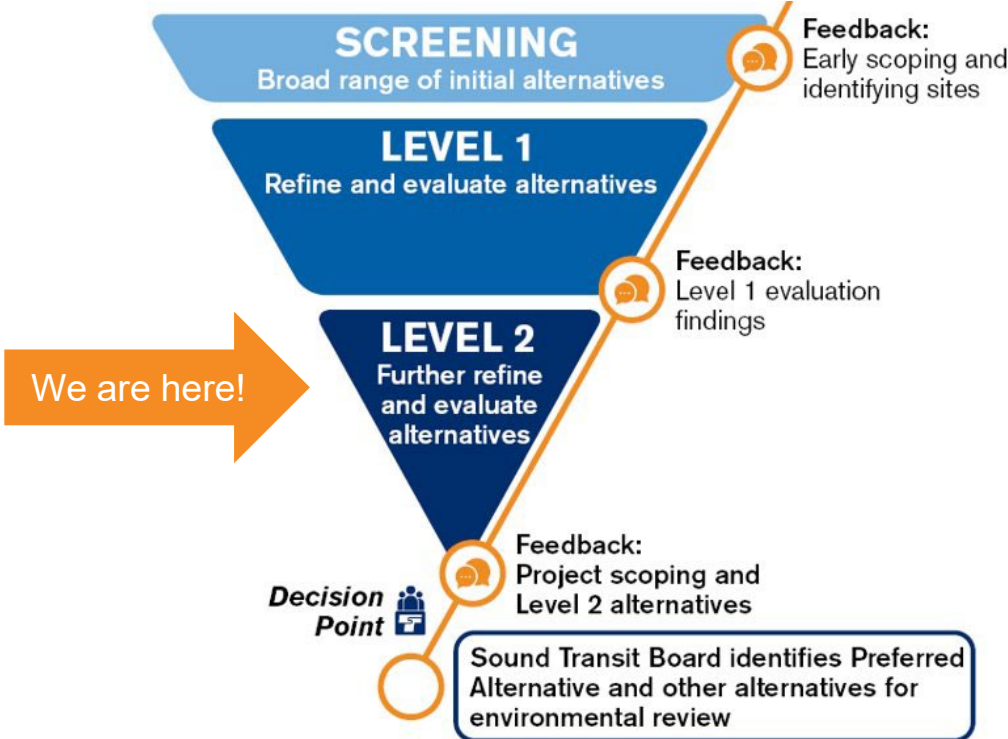
Puget Sound



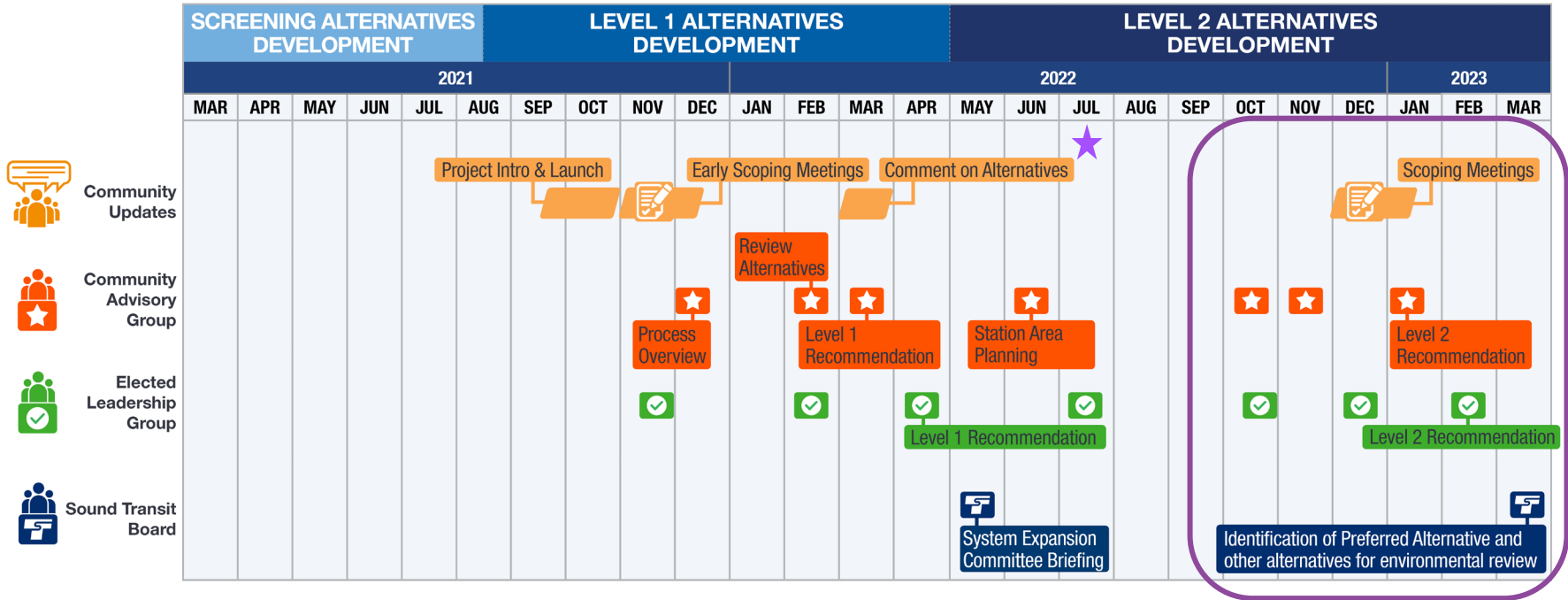
*Dates reflect an affordable schedule based on current financial projections and cost estimates, and a target schedule. See project timeline and milestones for more details.

Schedule updates

Alternatives development process



Community engagement & collaboration



Level 2 Evaluation

New alternatives from early scoping

What we've been doing:

- Reviewing all early scoping (public) comments
- Developing draft alternatives from those comments, considering technical challenges and opportunities

Where we are now:

- Sharing new alternatives that will be evaluated in Level 2

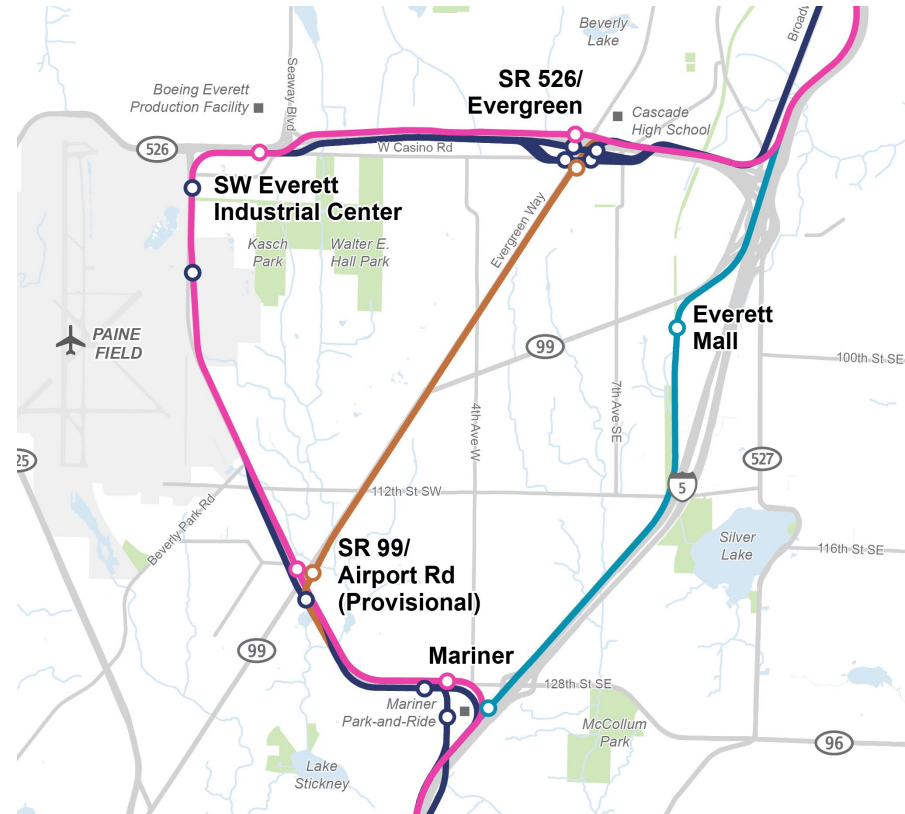
New alternatives from early scoping

I-5 / Interurban Trail

- *Alignment:* along I-5
- *Stations:* new option at Everett Mall and additional station option at Mariner

SR 99 / Evergreen Way

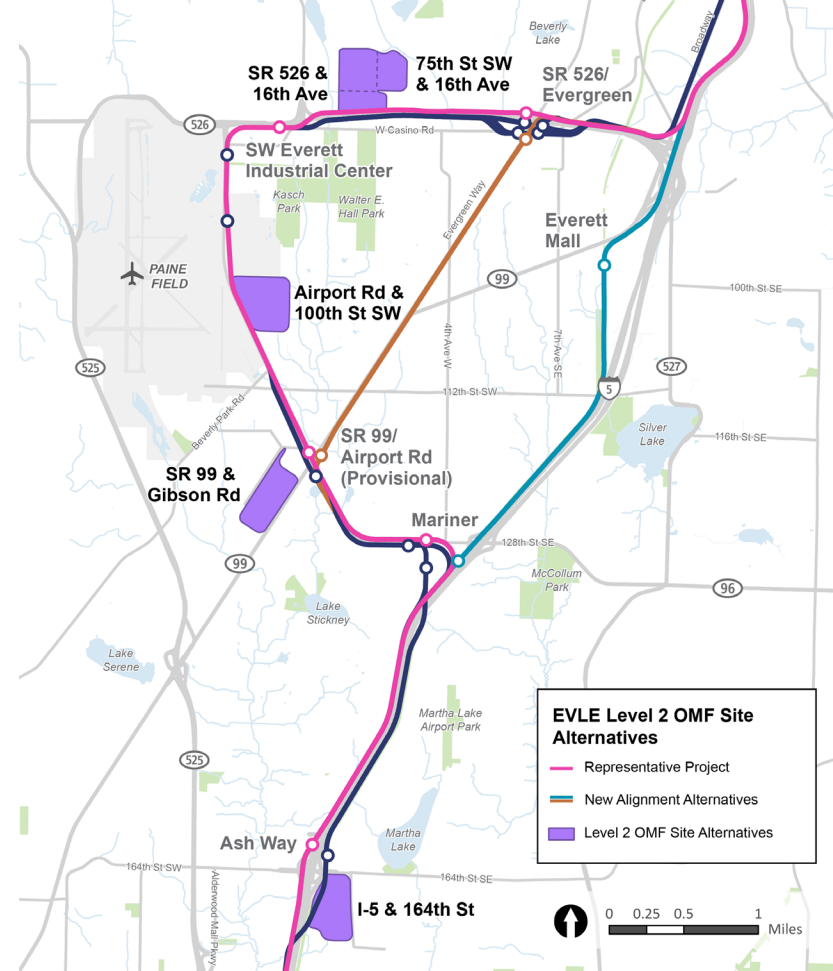
- *Alignment:* along SR 99 & Evergreen Way
- *Stations:* additional station options at SR 99/Airport Rd and SR 526/Evergreen



OMF Sites for New Alternatives

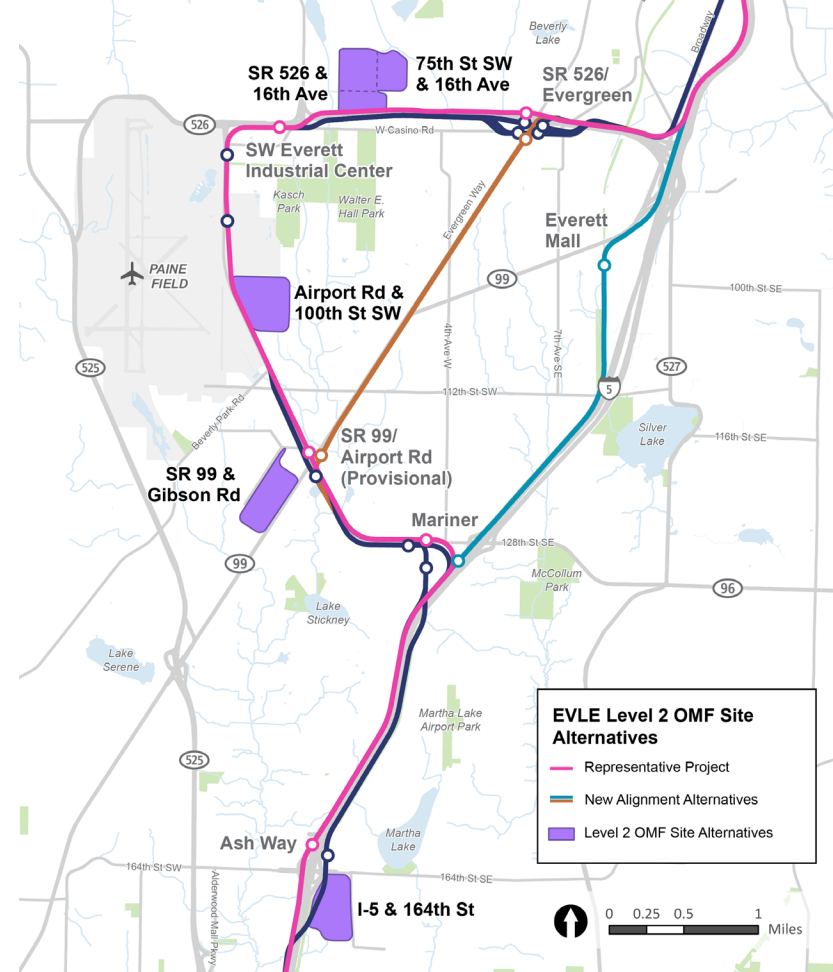
Potential OMF sites

- An OMF is required for any extension north.
- Identification of potential OMF North sites to support new alternatives suggested in early scoping.



Initial CAG feedback to new alternatives

- Appreciate Sound Transit responding to community interest in other alternatives.
- Concern about new alignments not serving populations near SW Everett Industrial Center and/or SR99 and Evergreen.
- Interest in options that provide service more quickly and at lower cost.

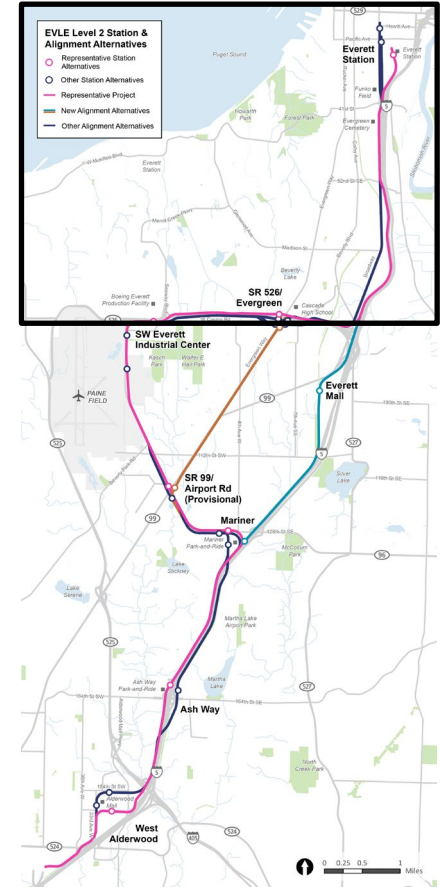
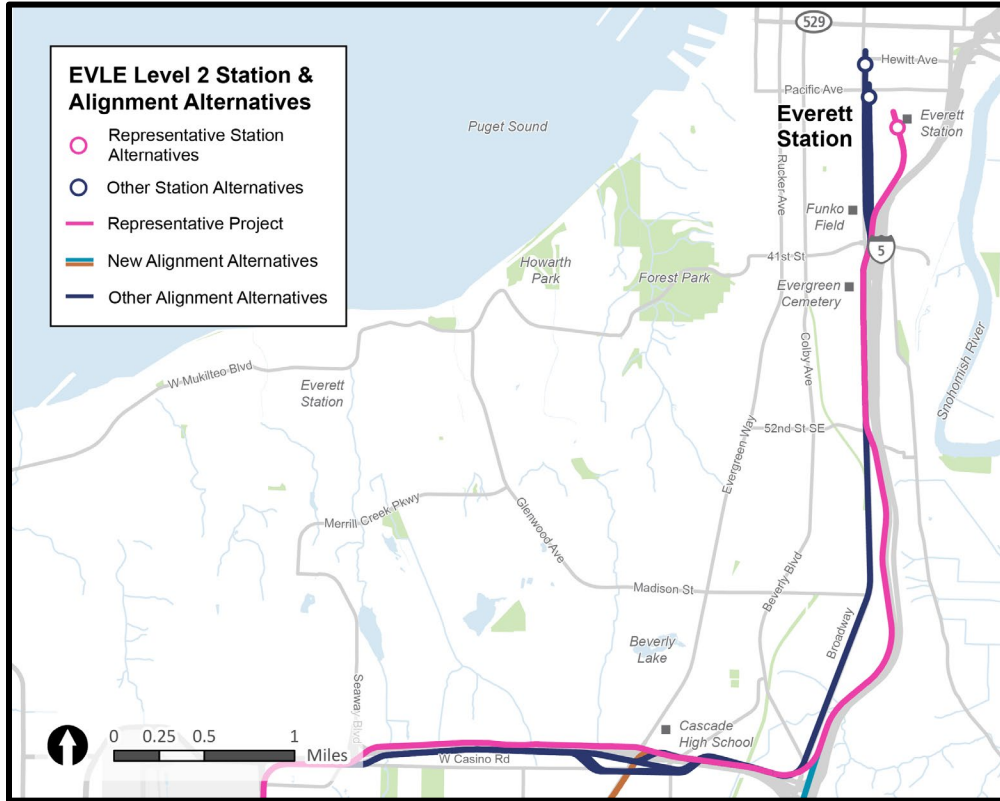


Level 2 evaluation

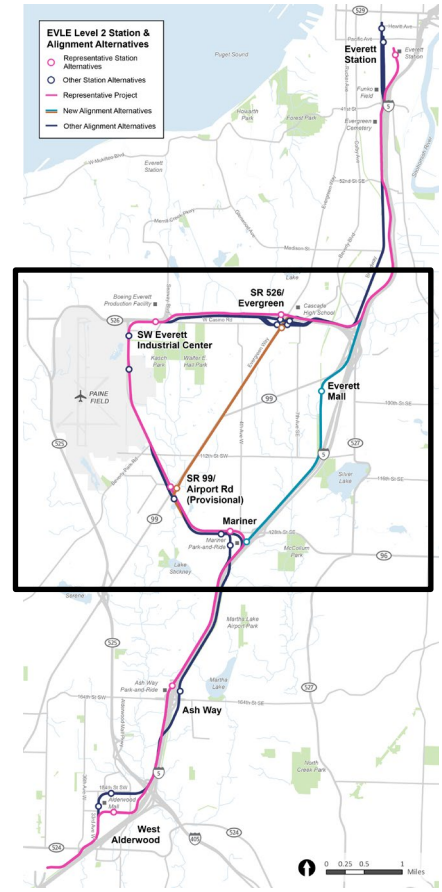
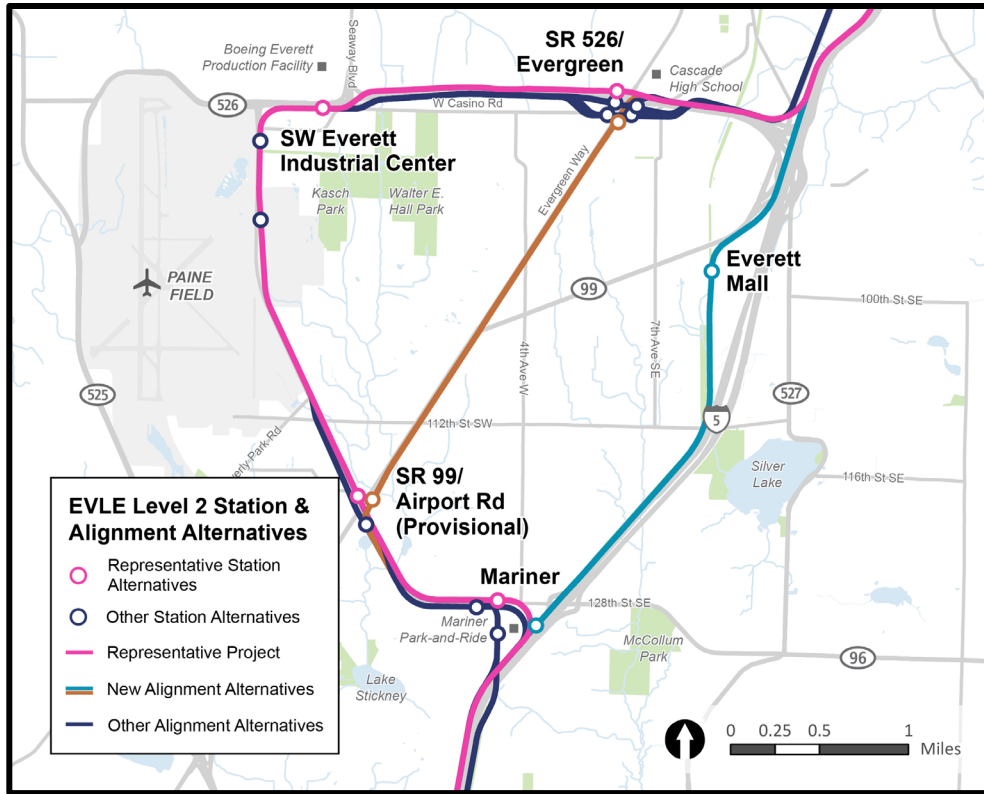
Evaluating Station, Alignment and OMF Alternatives

- Evaluate the performance of station and alignment alternatives at three different scales:
 1. Individual **stations** and small parts of surrounding alignment
 2. Three larger alignment **sections**: North, Central and South
 3. **End-to-end** alignments
- Evaluate OMF layouts, site impacts and connections to main alignment

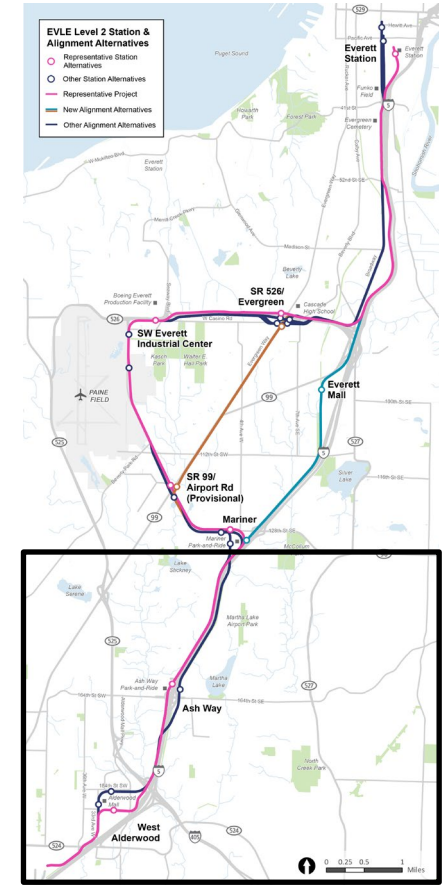
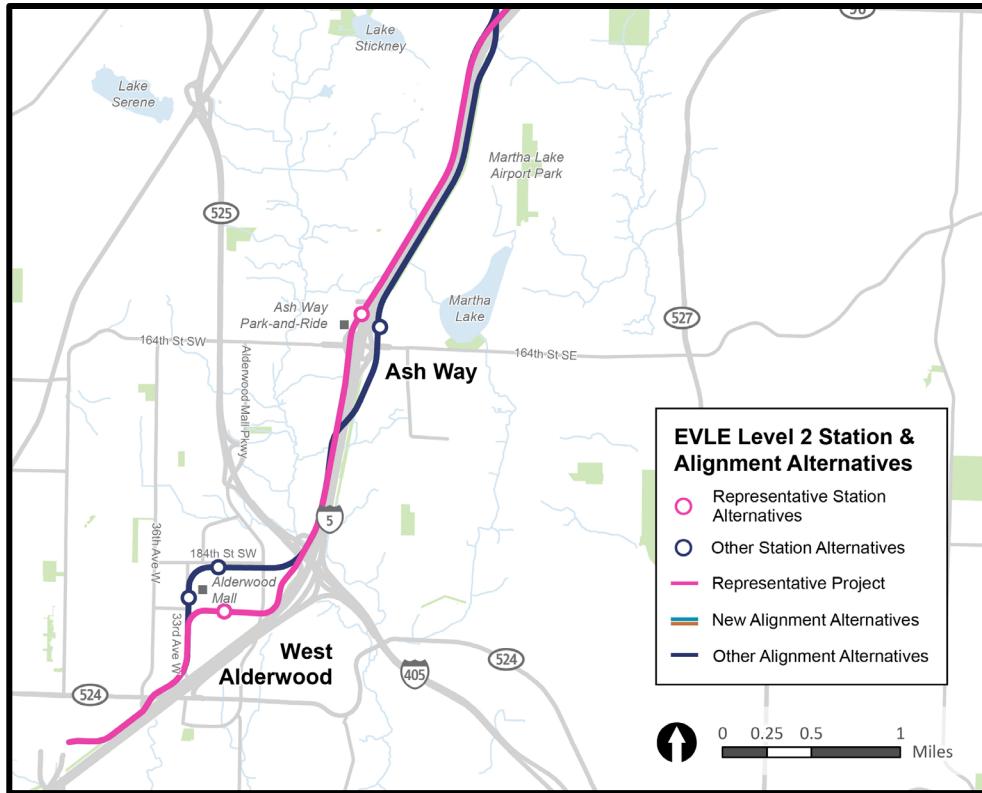
North Section



Central Section



South Section



Key criteria for Level 2 evaluation

- Ridership forecast
- Comparative costs between alternatives
- Transit-oriented development potential
- Service to community facilities & growth centers
- Potential burdens on residences and businesses
- Construction challenges
- Equity

Example Level 2 Criteria & Measures

Purpose & Need Statement

Connect regional centers as described in **adopted regional and local** land use, transportation, and economic development **plans** and Sound Transit's Regional Transit Long-Range Plan.



Evaluation Criteria

Consistency with Adopted Transportation Plans **Station**

Proximity to Jobs and Housing **Station**
Section

Proximity to PSRC Designated Centers **End-to-end**

Evaluation Measures

Alignment with adopted transportation plans including transportation elements, subarea plans and long-range plans from local transit agencies

2040 forecast population and jobs within the 10-minute walkshed of station alternatives

Proximity to regional growth centers and manufacturing/industrial centers

***Introduction to station
planning and design***

Station planning and design

Why

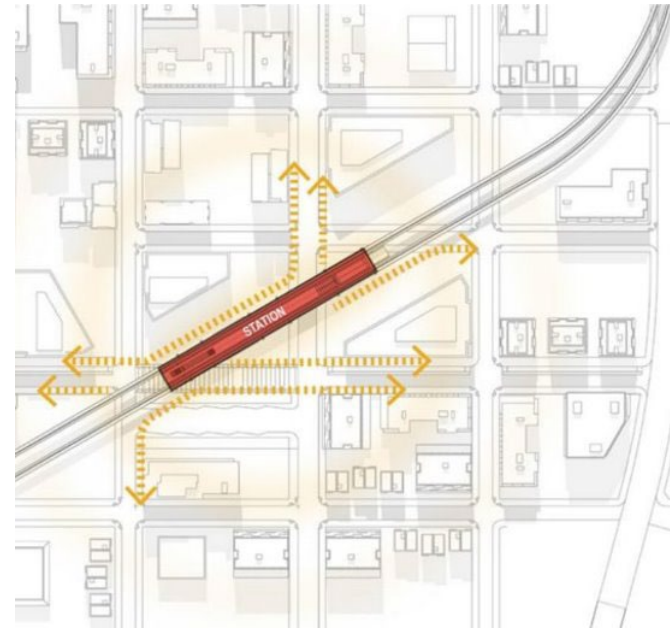
- Coordination with transit agencies and local jurisdictions
- Informs Level 2 analysis

Today's meeting

- Understand terminology and graphics
- Components of a station and layout

Next two meetings

- Initial design concepts
- Trade-offs



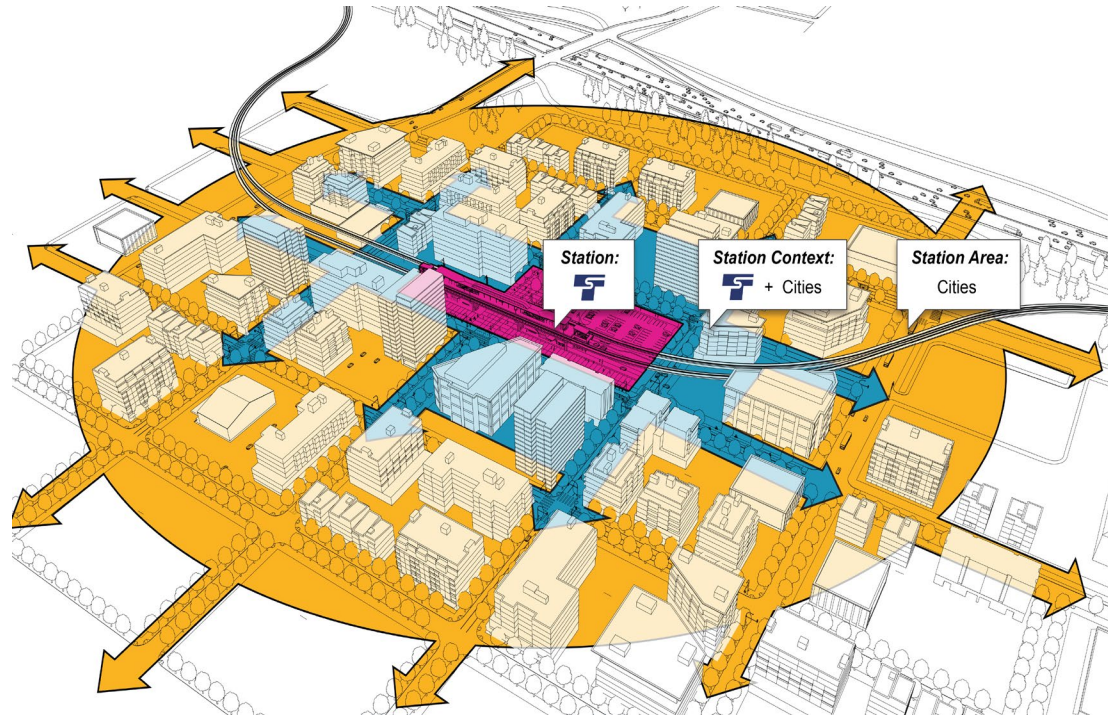
Station area planning

We need to consider:

ST Link Station

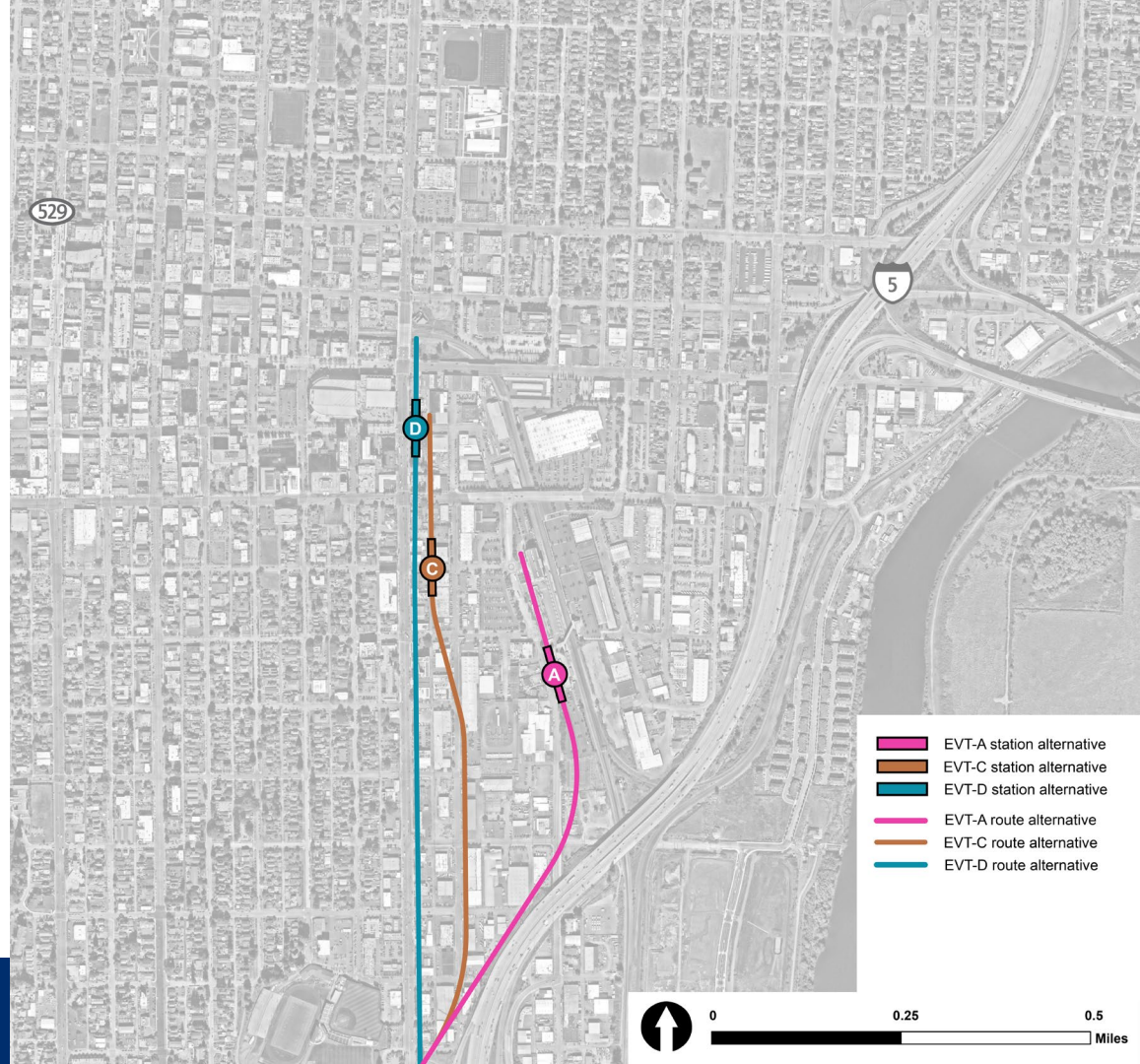
Station Context: area immediately adjacent to and/or surrounding the station

Station Area: 10-minute walkshed or ½-mile radius of the station



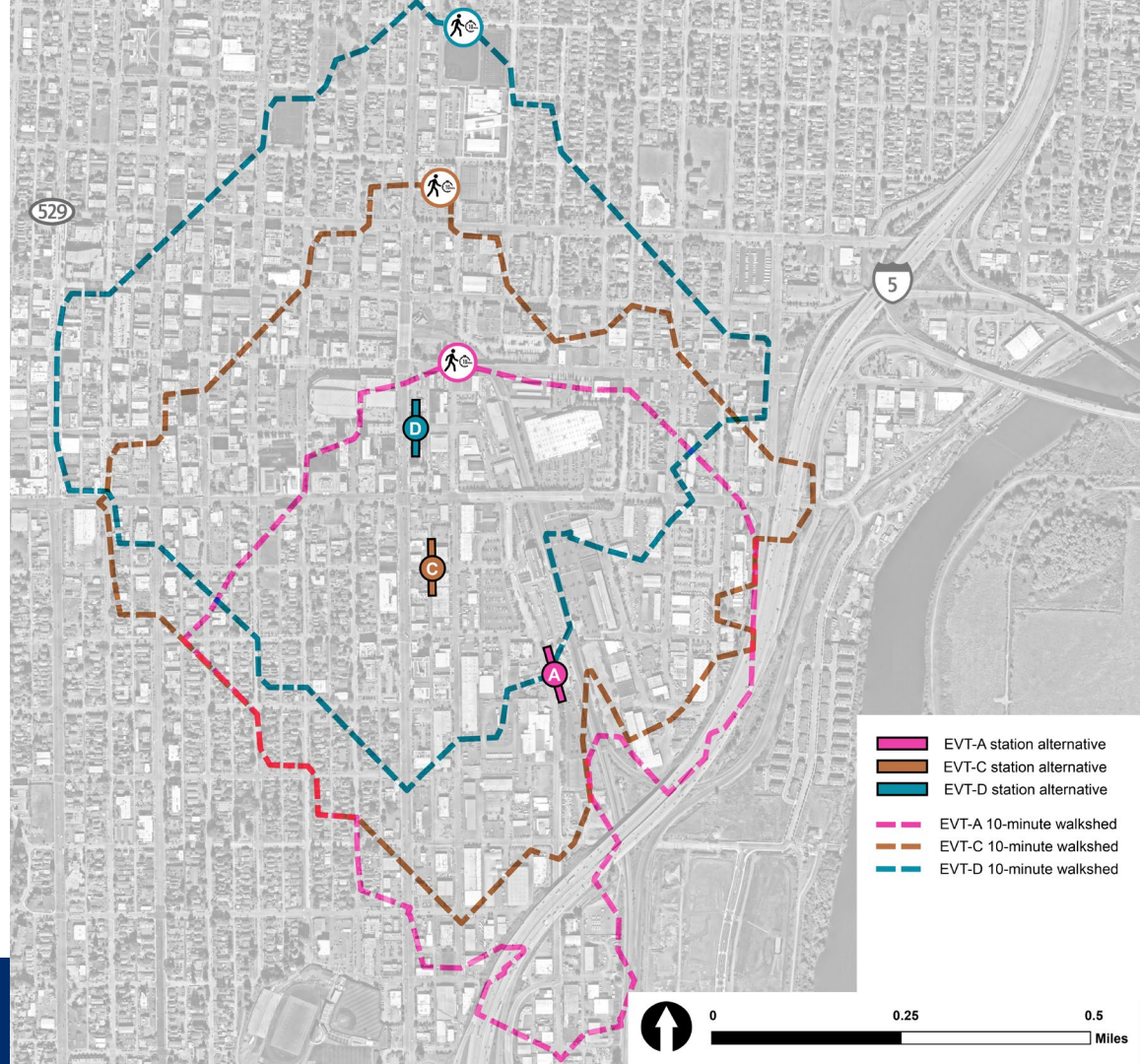
Station areas

- 10-minute walksheds
- Key transit routes
- Existing bike facilities



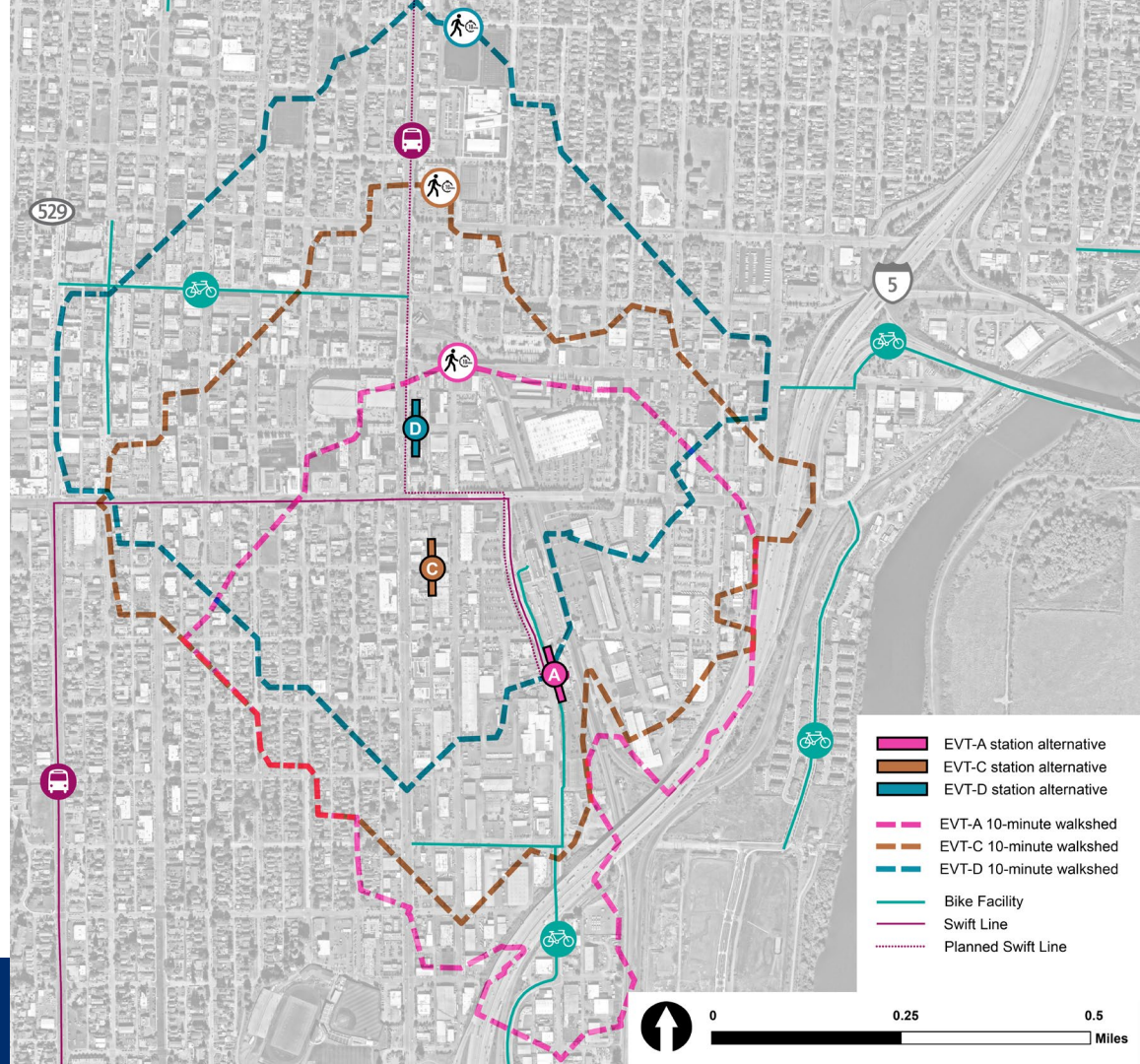
Station areas

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Station areas

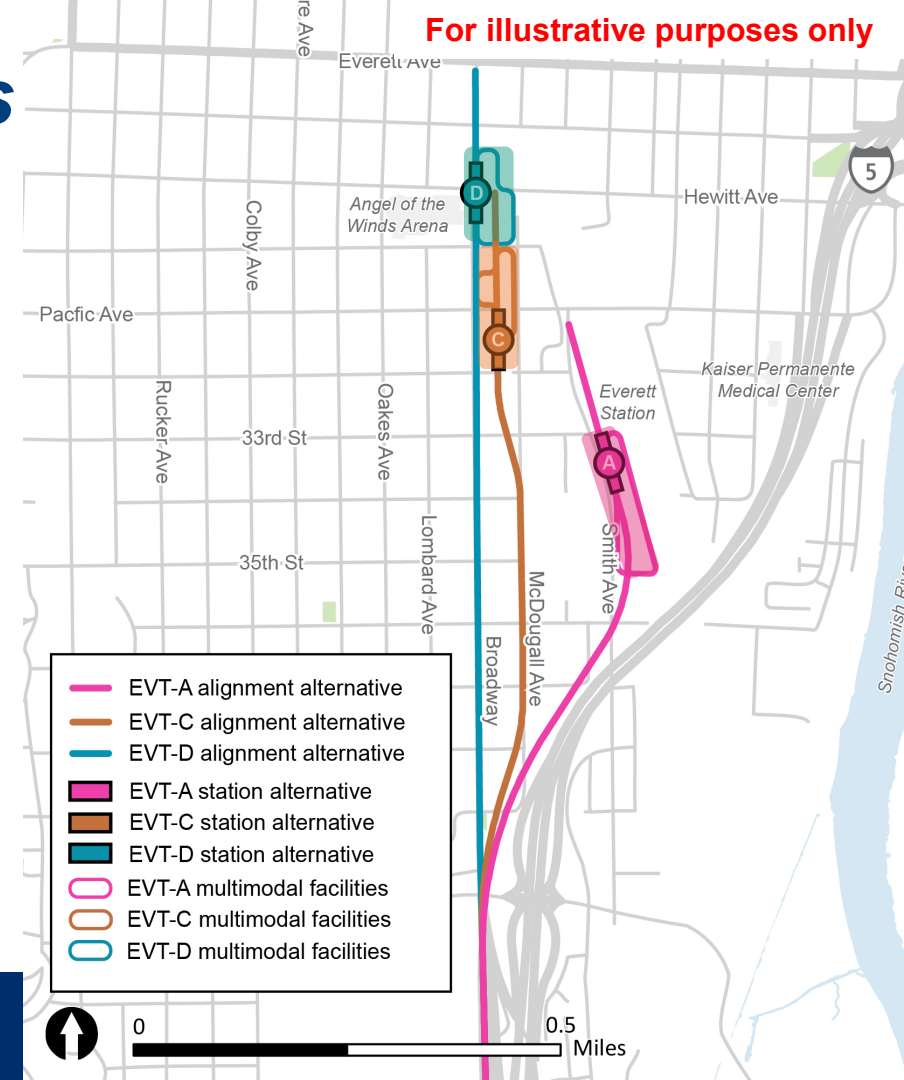
- 10-minute walksheds
- **Key transit routes**
- **Existing bike facilities**



Station design concepts

Elements

- Kiss-and-ride
- Bus layover and connection
- Pedestrian and bike facilities
- Circulation
- Parking



Station site concept plans

Concepts include space requirements for station elements



Level 1 concept example

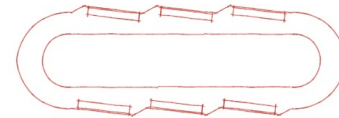
- Station platform/entries & alignment



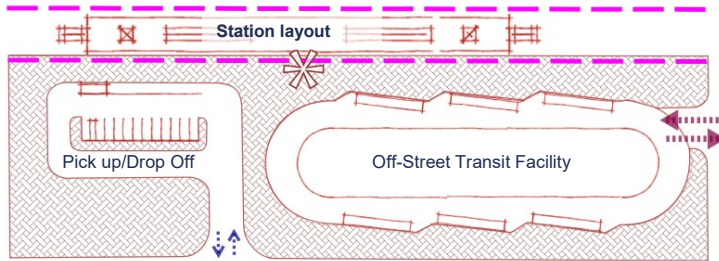
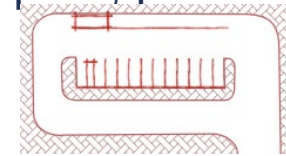
- Transit plaza/site elements



- Bus drop-off and layover spaces

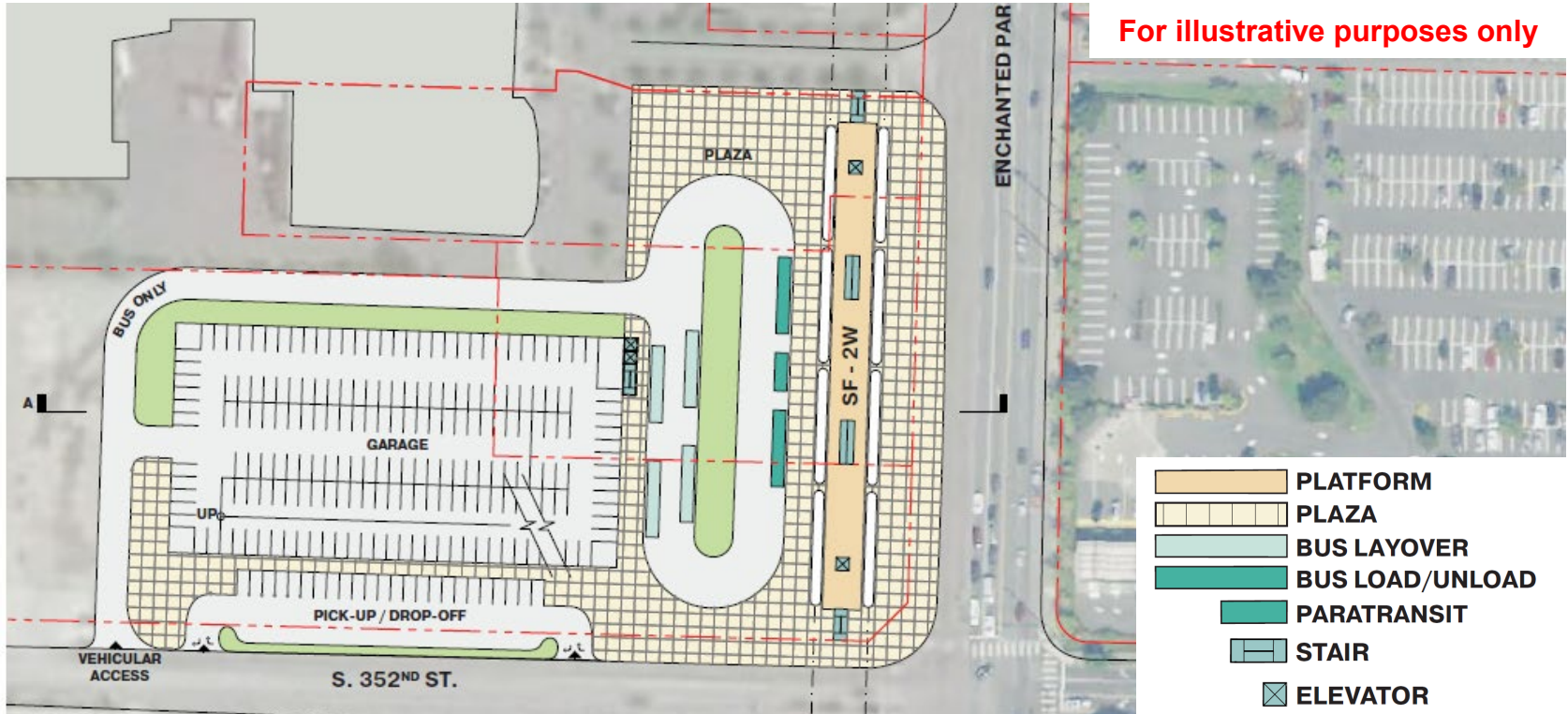


- Pick-up/drop-off, paratransit, etc.



Level 2 concept example

Example of a 2D site layout

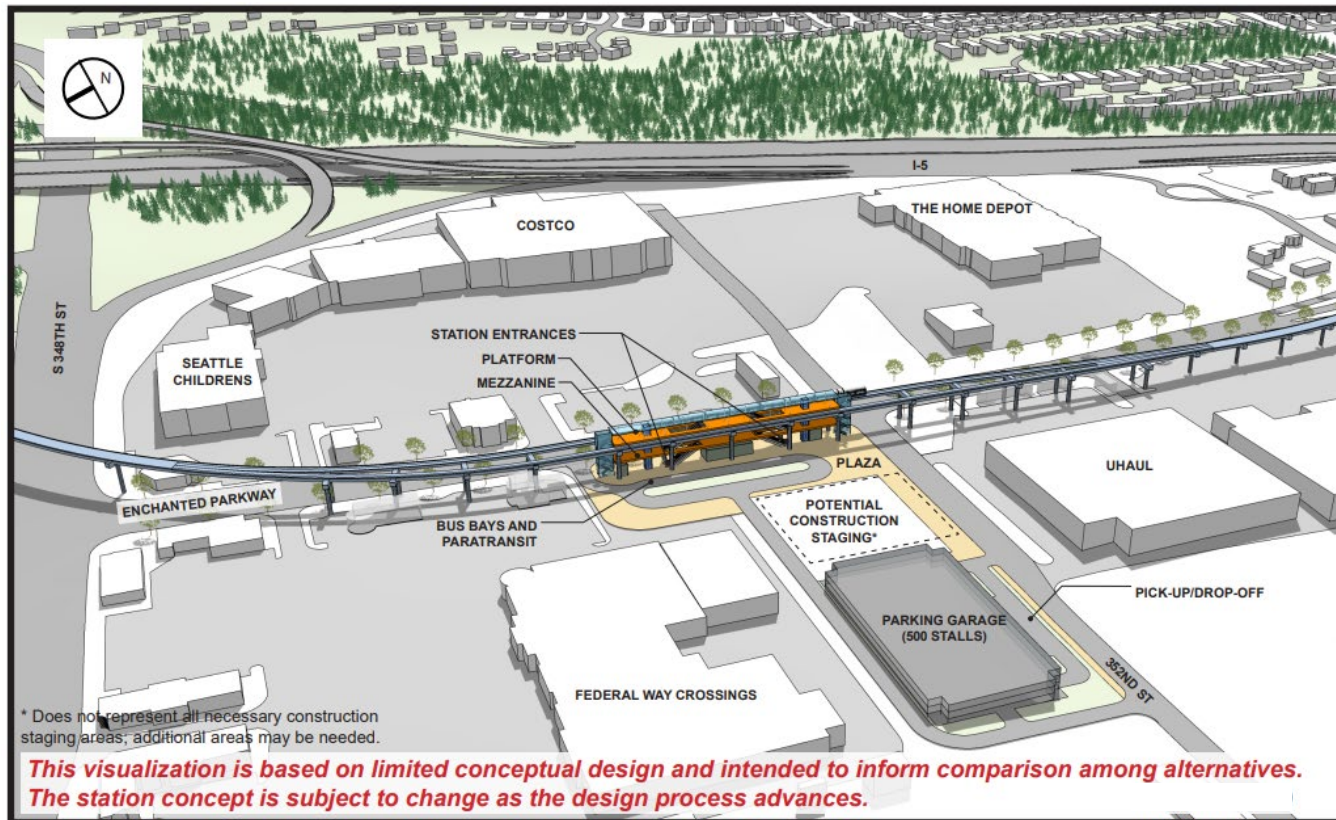


For illustrative purposes only

- PLATFORM
- PLAZA
- BUS LAYOVER
- BUS LOAD/UNLOAD
- PARATRANSIT
- STAIR
- ELEVATOR
- ESCALATOR / STAIR

SOUTH FEDERAL WAY STATION

Example of 3D Visualizations



SOUTH FEDERAL WAY STATION

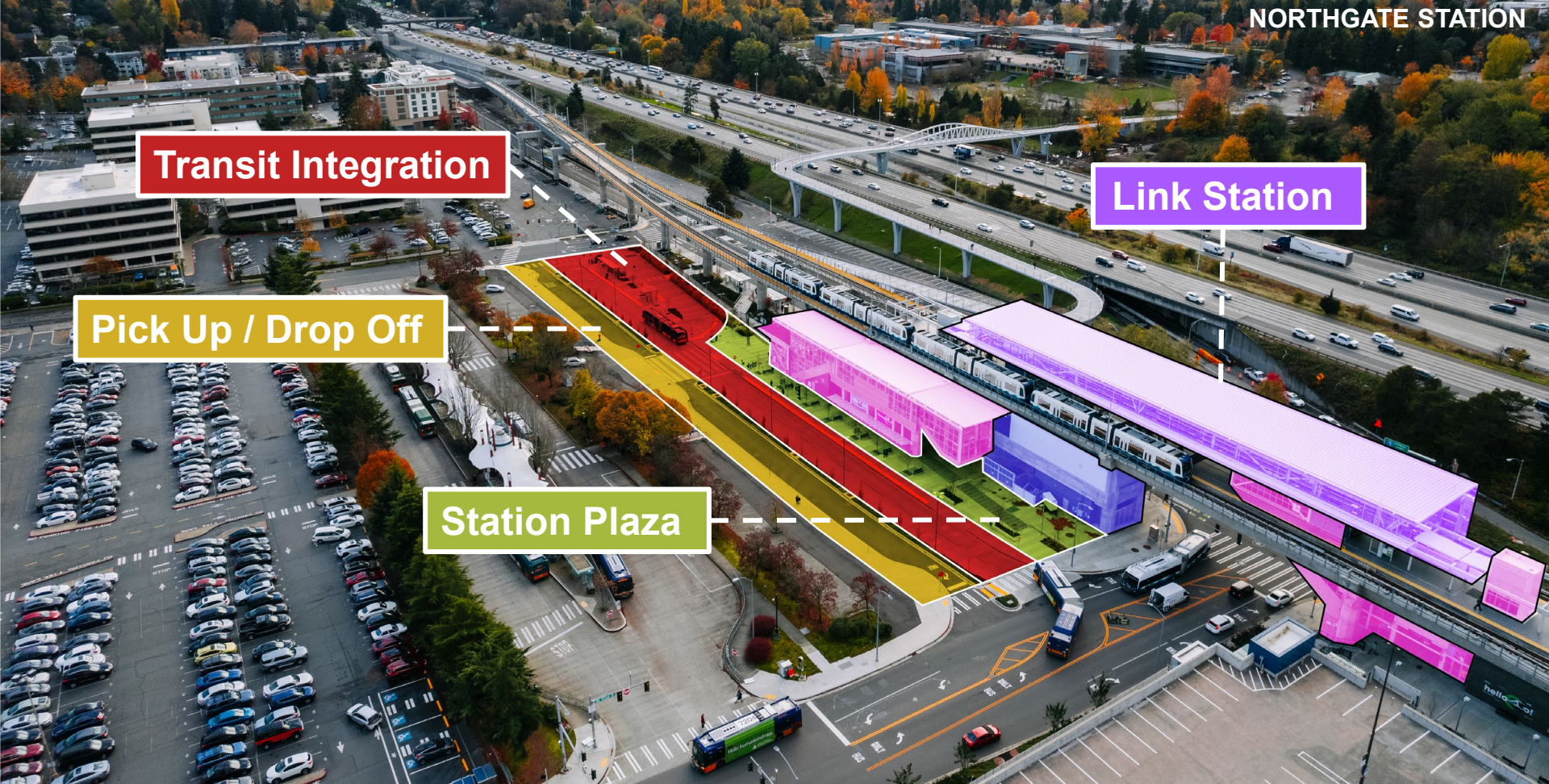


Transit Integration

Link Station

Pick Up / Drop Off

Station Plaza



Transit integration

Develop & incorporate assumptions for Level 2 alternatives based on transit partners inputs

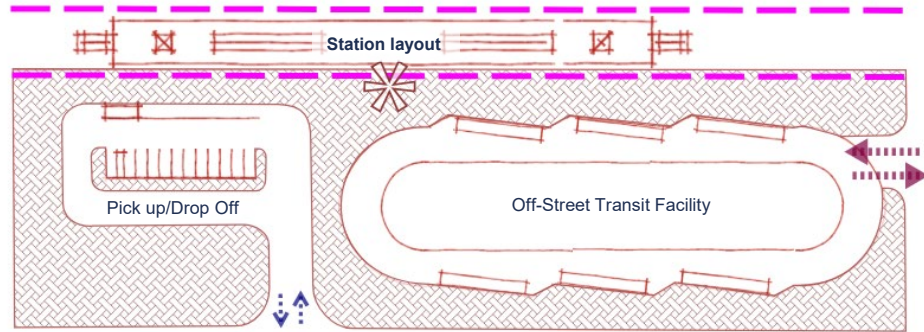
- ✓ Transit routes
- ✓ Bus layover needs
- ✓ Connections



Level 2 evaluation of station designs

- Next meetings: 2D design concepts for station alternatives and preliminary findings from analysis
- Remember that designs are conceptual and will be refined
- Design concepts are used to evaluate alternatives against Level 2 criteria

Questions?



Level 2 concept example

Next Steps

Schedule look ahead

Month	Activity
<i>Oct and Dec</i>	ELG meetings to review station designs; preliminary findings and results of analysis; updates on new alternatives
<i>Dec</i>	Public scoping period to provide comment on Level 2 alternatives
<i>Jan</i>	CAG meeting to provide recommendations to ELG
<i>Feb/Mar</i>	ELG recommends to ST Board preferred alternative and other alternatives to move into environmental review
<i>Mar/Apr</i>	ST Board decision

Thank you



 [soundtransit.org](https://www.soundtransit.org)



Appendix

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Provide **high quality, rapid, reliable, accessible and efficient light rail transit service** to communities in the project corridor as defined through the local planning process and reflected in the Sound Transit 3 Plan.



Evaluation Criteria

Transit Service
Reliability

Section

End-to-end

Compatibility with
Potential Extensions

North
Section

Evaluation Measures

Comparative travel time on alignment sections based on track configuration

Potential for future expansion based on previous investment studies

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Improve regional mobility by increasing connectivity and capacity in the EVLE corridor from the Lynnwood Transit Center to the Everett Station area to meet projected transit demand.



Community Services & Facilities

Station

Community assets such as cultural uses, medical clinics and hospitals, grocery stores, charitable uses and parks accessible from station alternatives

Modal Integration

Station

Quality and capacity of transit transfers and connectivity with High-Capacity Transit

Quality of access for transit vehicles

Planned level of bus service

Transit Demand

End-to-end

Forecasted average daily ridership

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Connect regional centers as described in adopted regional and local land use, transportation, and economic development plans and Sound Transit's Regional Transit Long-Range Plan.



Consistency with Adopted Transportation Plans

Station

Alignment with adopted transportation plans including transportation elements, subarea plans and long-range plans from local transit agencies

Proximity to Jobs and Housing

Station

Section

2040 forecast population and jobs within the 10-minute walkshed of station alternatives

Proximity to PSRC Designated Centers

End-to-end

Proximity to regional growth centers and manufacturing/industrial centers

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Implement a system that is **technically and financially feasible to build, operate, and maintain.**



Technical Feasibility

Station

Constructability risks including geotechnical and access challenges and conflicts with utilities, infrastructure and existing buildings

Right-of-Way constraints and available publicly owned right-of-way

Consideration of operational and maintenance elements

Constructability constraints including MOT and access

Financial Feasibility

Section

End-to-end

Conceptual cost comparison and ability to meet or advance target schedule

Ability to meet or advance project delivery date

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Expand mobility for the corridor and region's residents, including explicit consideration for transit-dependent, low-income and minority populations.



Opportunities for Minority, Low-Income, and LEP populations

Station

Section

Existing minority population within a 10-minute walk

Existing low-income population within a 10-minute walk

Existing population with low English proficiency within a 10-minute walk

Low Wage and Minority Employment

Station

Section

Low-wage jobs within a 10-minute walk

Jobs that employ minority workers within a 10-minute walk

Opportunities for Youth and Senior Populations, Zero-Car Households and People with a Disability

Station

Section

Existing population with a disability within a 10-minute walk

Existing zero-car households within a 10-minute walk

Existing youth (<18) population within a 10-minute walk

Existing senior (65+) population within a 10-minute walk

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Expand mobility for the corridor and region's residents, including explicit consideration for **transit-dependent, low-income and minority populations**.



Proximity to Affordable Housing

Station

Section

Subsidized affordable units within a 10-minute walk

Proximity to Culturally and Income Specific Community Facilities

Station

Culturally and income specific services within a 10-minute walk

Existing Low-Income Transit Ridership

Station

Section

ORCA Lift (reduced fare for 200% federal poverty level) ridership near station alternatives

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Encourage **equitable and sustainable growth in station areas** through support of **transit-oriented development** and **multimodal integration** in a manner that is consistent with local land use plans and policies, including Sound Transit's Equitable Transit Oriented Development Policy and Sustainability Plan.



Station Area Land Use Plan Consistency

Station

Consistency with local land use plans, zoning and future land use

Potential for Transit Oriented Development

Station

Development Capacity within the station area in terms of residential units and non-residential square footage from the Land Use Planning Development Opportunities work

Qualitative assessment of comparative potential for joint development opportunities

Capacity for additional residential units and jobs within a 10-minute walk based on the Buildable Lands Report

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Encourage **convenient, safe, and equitable non-motorized access** to stations, such as **bicycle and pedestrian connections**, consistent with Sound Transit's System Access Policy and Equity and Inclusion Policy.



Evaluation Criteria

Quality of Pedestrian Connections

Station

Quality of Bike Connections

Station

Evaluation Measures

Qualitative evaluation the pedestrian environment including the quality of existing and funded pedestrian infrastructure and major barriers

Qualitative evaluation of existing and funded bike infrastructure and major barriers to bike circulation.

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built, and social environments **through sustainable and equitable practices.**



Evaluation Criteria

Built Environment & Social Resources

Station

Evaluation Measures

Known historic resources within 150 feet of track centerlines and station facilities or within any anticipated property acquisitions

Known archaeological resources within 150 feet of track centerlines and station facilities or within any anticipated property acquisitions

Recreational resources within 150 feet of track centerlines and station facilities or within any anticipated property acquisitions

Sites with known contamination within 150 feet of track centerlines and station facilities or within any anticipated property acquisitions

Sensitive noise/vibration receptors within 350 feet of track centerlines and station facilities or within any anticipated property acquisitions

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built, and social environments through sustainable and equitable practices.



Evaluation Criteria

Built Environment
& Social Resources

Station

Section

Burdens to Historically
Underserved
Communities

Station

Section

Evaluation Measures

Potential full acquisitions based on limits of right-of-way and facility extents and potential construction staging areas.

Potential partial acquisitions based on limits of right-of-way and facility extents and potential construction staging areas.

Potential full and partial acquisitions in census block groups with high minority and low-income population based on limits of right-of-way and facility extents and construction staging considerations.

Potential full and partial acquisitions of affordable housing and community facilities

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built, and social environments **through sustainable and equitable practices.**



Evaluation Criteria

Natural Environment

Station

Evaluation Measures

Wetlands, streams and waterbodies within 150 feet of track centerlines and station facilities or within anticipated property acquisitions

Fish passage barriers within 150 feet of track centerlines and station facilities or within anticipated property acquisitions

Floodplains within 150 feet of track centerlines and station facilities or within anticipated property acquisitions

ESA-listed species habitat within 150 feet of track centerlines and station facilities or within anticipated property acquisitions

Level 2 Criteria & Measures

Stations and Alignments

Purpose & Need Statement

Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built, and social environments **through sustainable and equitable practices.**



Evaluation Criteria

Natural Environment

Station

Potential Traffic Effects

Station

Evaluation Measures

Other habitat areas within 150 feet of track centerlines and station facilities or within anticipated property acquisitions.

Geological hazards within 150 feet of track centerlines and station facilities or within anticipated property acquisitions.

Other natural resources within 150 feet of track centerlines and station facilities or within anticipated property acquisitions.

Qualitative evaluation of potential for vehicle conflicts and congestion based on access to station alternatives by car and characteristics of the surrounding roadway network

Level 2 Criteria & Measures

OMF North

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Implement a system that is **technically and financially feasible to build, operate, and maintain.**



Topography and Site Grading

Suitability of site topography and extent of earthworks required for development as an OMF

Geological Conditions

Geotechnical conditions of site and potential for geotechnical risks

Site Drainage

Requirements for stormwater management

Property Impacts

Number of parcels and number of property owners and the potential for relocation challenges

Property Value

Property value for each OMF North site alternative (total cost)

Level 2 Criteria & Measures

OMF North

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Implement a system that is **technically and financially feasible to build, operate, and maintain.**



Conceptual Capital Cost Estimate

Estimate of capital cost differential between OMF site alternatives

Total Cost of Ownership

Relative operating costs for each site alternative

Site Permitting and Approval Challenges

Potential permitting and/or approval challenges that could have impacts to overall costs/schedule for delivery of the facility

Level 2 Criteria & Measures

OMF North

Purpose & Need Statement

Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built, and social environments **through sustainable and equitable practices.**



Evaluation Criteria

Built Environment & Social Resources

Burden on Historically Underserved Communities

Natural Environment Resources

Public Infrastructure and Facilities

Utilities and Roadways

Evaluation Measures

Identify social resources, parks and recreation areas, historic and archaeological resources, hazardous waste sites, noise and vibration sensitive receptors

Potential burden on historically underserved communities

Identify extent of impacts to geologic hazard areas, floodplains, wetlands and streams and fish and wildlife habitat conservation areas

Impacts to existing or proposed public facilities

Impacts to existing utilities and roadways

Level 2 Criteria & Measures

OMF North

Purpose & Need Statement

Evaluation Criteria

Evaluation Measures

Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built, and social environments **through sustainable and equitable practices.**



Zoning and Land Use

Suitability of current and anticipated future zoning/land use for use as an OMF site

Adjacent Zoning and Land Use

Suitability of current and anticipated future zoning/land use for adjacent land for consistency with an OMF site

Residential Displacements

Number of potential residential displacements

Employment Displacements

Number of potential business and employee displacements

Level 2 Criteria & Measures

OMF North

Purpose & Need Statement

Provide an operations and maintenance facility with the capacity to receive test, commission, store, maintain and deploy vehicles to support the intended level of service for system-wide light rail system expansion.



Evaluation Criteria

Site Layout
(Site Configuration)

Access for Light Rail Vehicle
Deliveries

Lead Track Connections
Geometry

Evaluation Measures

Suitability of site shape to meet programmatic requirements of OMF North

Ability for site to accommodate LRV delivery truck access. Assess complexity of site access

Assess the complexity of lead track connection geometry

Level 2 Criteria & Measures

OMF North

Purpose & Need Statement

Develop an operations and maintenance facility that **supports efficient and reliable light rail service** and **minimizes system operating costs**.



Evaluation Criteria

Operational Efficiency & Performance

Lead Track Connections Operations

Compatibility with Potential Interim Terminus

Evaluation Measures

Site location relative to operational efficiency performance and maintenance windows

Operational performance of lead tracks and vehicle movements/connections to the site

Proximity and compatibility of the site location to the potential interim terminus (Southwest Industrial Center)