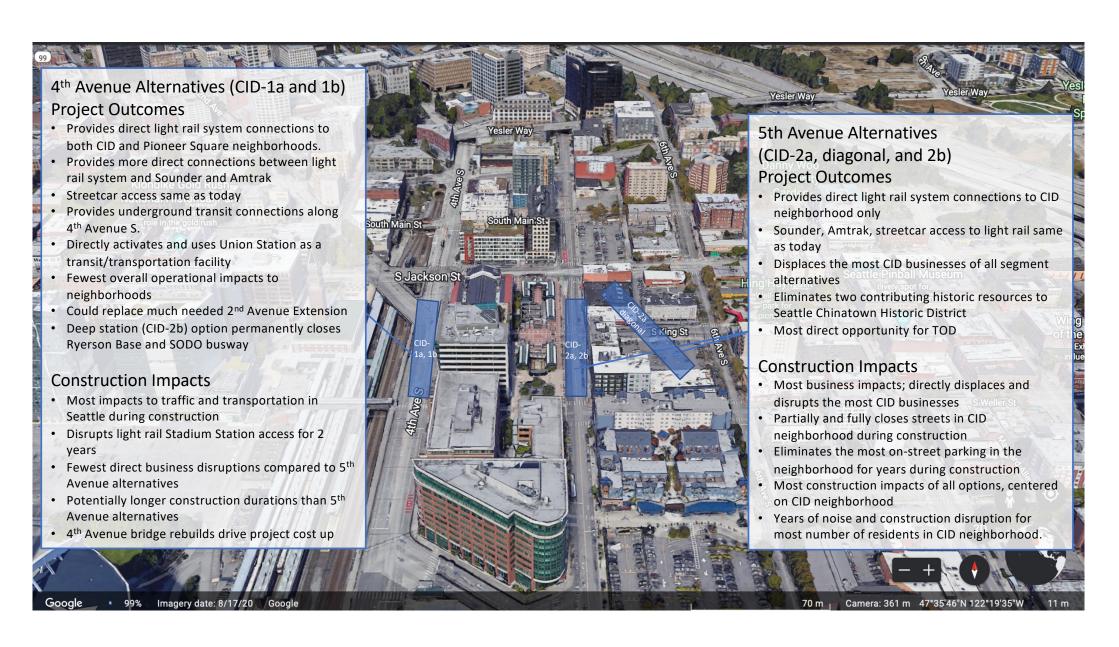
ST WSBLE Draft EIS

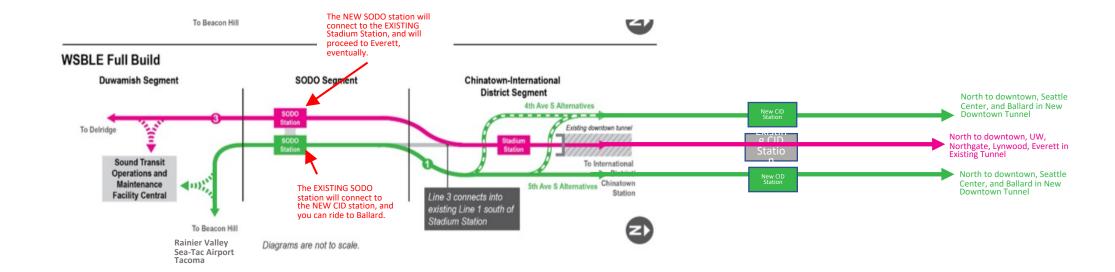
CID-Segment
Alternatives and Impacts Summary
March 2022

Top Line Findings of HSD Consultant Review

(Findings presented through a neighborhood-centric lens)



WSBLE and Existing Light Rail

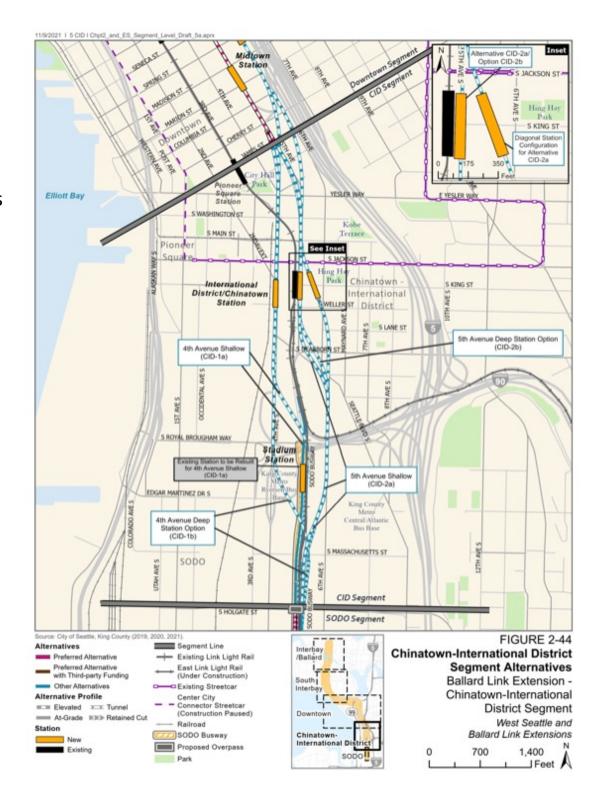


Size, scale, and location of stations is illustrative only. Meant to orient the reader to where the stations will take you to.

Page 2-4 | West Seattle and Ballard Link Extensions Draft EIS January 2022

West Seattle and Ballard Link Extension Project Alignments— CID Segment Definition

- Segment extends from S. Holgate Street to James St., and includes sections of SODO, Pioneer Square, and Chinatown International District neighborhoods, and Stadium District
- Pioneer Square (PSQ hereafter)
- Chinatown International District (CID, hereafter)



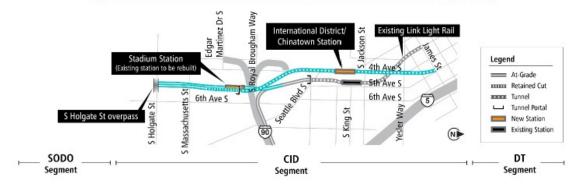
West Seattle and Ballard Link Extension Project Alignments – CID Segment

Pioneer Square neighborhood- PSQ Chinatown International District neighborhood- CID

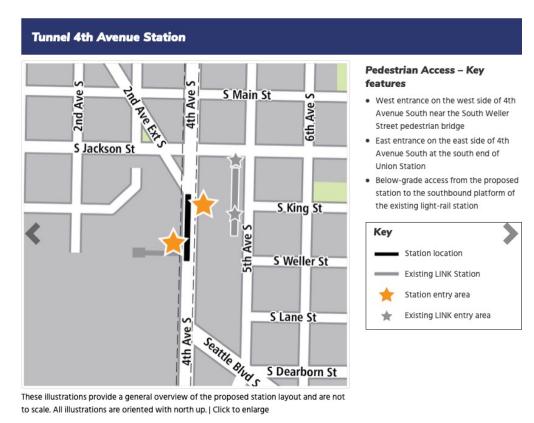
	4 th Avenue Alignments		5 th Avenue Alignments		
	CID-1a (shallow station)	CID-1b (deep station)	CID-2a (shallow station)	CID-2a diagonal (shallow, diagonal station configuration)	CID-2b (deep station)
Direct Connection to Neighborhood	PSQ and CID	PSQ and CID	CID	CID	CID
Station depth (in feet, depth is approximate)	80	190	90	115	180
Number of station entrances (does not include emergency egress)	2	2	1	1	1
Light rail connections to Sounder/Amtrak	New more direct at Weller St.	New more direct at Weller St.	Same as today	Same as today	Same as today
Light rail connections to Streetcar	3 blocks to PSQ station 1-2 blocks to CID	3 blocks to PSQ station 1-2 blocks to CID	Same as today	Same as today	Same as today
Connections to Downtown and SODO Alternatives	Connects to all DT and SODO options	Connects to SODO- 1b and DT-1	Connects to all DT and SODO options	Connects to all DT and SODO options	Connects to SODO- 1b and DT-1

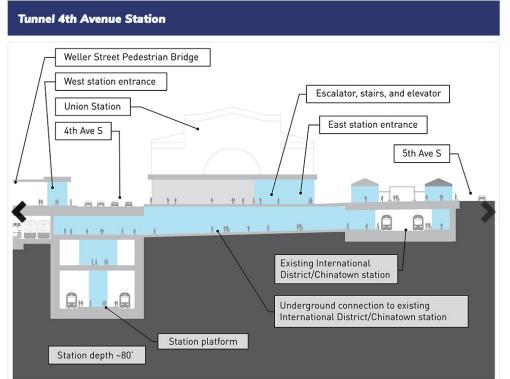
CID-1a 4th Avenue Shallow Station

Figure 2-45. Plan and Profile for 4th Avenue Shallow Alternative (CID-1a)*



- Provides direct light rail access to Pioneer Square on west side of 4th Avenue S, and to CID on east side of 4th Avenue S.
- Provides grade-separated crossing for pedestrians and non-motorized users underneath 4th Avenue S (entrance near Weller Street Bridge)
- Provides direct connection to light rail for Amtrak and Sounder users
- Uses Union Station building for transit/transportation use





This station cross-section is looking north. Cross-sections are not to scale and are for discussion purposes only to show conceptual differences between elevated station alternatives. All details and measurements are approximate. I Click to enlarge

now tob

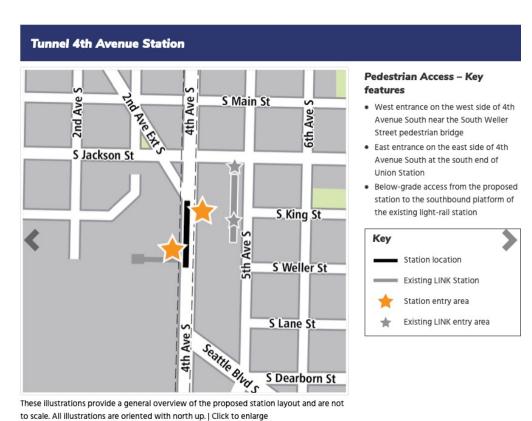
CID-1b 4th Avenue Deep Station

Figure 2-46. Plan and Profile for 4th Avenue Deep Station Option (CID-1b)*



- Legend

 At-Grade
 Retained Cut
 Tunnel
 Tunnel Portal
 New Station
 Existing Station
- Provides direct light rail access to Pioneer Square on west side of 4th Avenue S, and to CID on east side of 4th Ave S.
- Provides grade-separated crossing for pedestrians and non-motorized users underneath 4th Avenue S (entrance near Weller Street Bridge)
- Provides direct connection to light rail for Amtrak and Sounder users
- Uses Union Station building for transit/transportation use
- Requires elevators to access new station for all users



Weller Street Pedestrian Bridge
West station entrance
Union Station
4th Ave S

Existing International
District/Chinatown station

Underground connection to existing
International District/Chinatown station

Elevator access only
to Station platform

Station depth ~190'

This station cross-section is looking north. Cross-sections are not to scale and are for discussion purposes only to show conceptual differences between elevated station alternatives. All details and measurements are approximate. | Click to enlarge

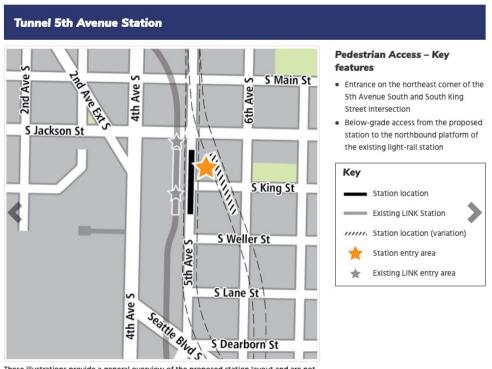
ST WSBLE CID Segment Summary 3/8/22

CID-2a 5th Avenue Shallow Station

Figure 2-47. Plan and Profile for 5th Avenue Shallow Alternative (CID-2a)



- Same station entrance and surface configurations for ALL 5th Avenue (CID-2a, diagonal, and CID-2b) Alignments/Options
- Provides direct light rail access to CID at 5th Ave S and King St. (One entrance)
- Provides grade-separated crossing (underground) for pedestrians and non-motorized users underneath 5th Avenue
- Provides more direct TOD opportunity within CID neighborhood



These illustrations provide a general overview of the proposed station layout and are not to scale. All illustrations are oriented with north up. | Click to enlarge

Tunnel 5th Avenue Station

Station entrance

Existing building beyond

Existing linternational
District/Chinatown station

Sth Ave S

Northbound station platform

Southbound station platform

International District/Chinatown station

Station depth -90'

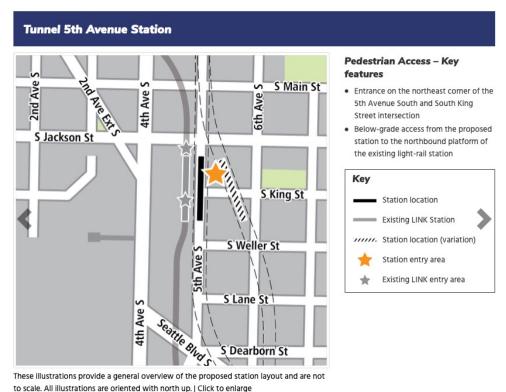
This station cross-section is looking north. Cross-sections are not to scale and are for discussion purposes only to show conceptual differences between elevated station alternatives. All details and measurements are approximate. | Click to enlarge

CID-2a 5th Avenue Shallow, Diagonal Station

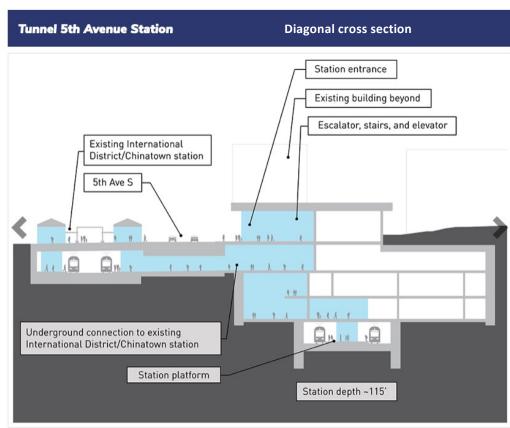
Figure 2-48. Plan and Profile for 5th Avenue Deep Station Option (CID-2b)



- Same station entrance and surface configurations for ALL 5th Avenue (CID-2a, diagonal, and CID-2b) Alignments/Options
- Station located in diagonal configuration spanning the blocks north and south of S. King St.
- Provides direct light rail access to CID at 5th Ave S and King St. (One entrance)
- Provides grade-separated crossing (underground) for pedestrians and non-motorized users underneath 5th Avenue
- Provides more direct TOD opportunity within CID neighborhood



ST WSBLE CID Segment Summary 3/8/22

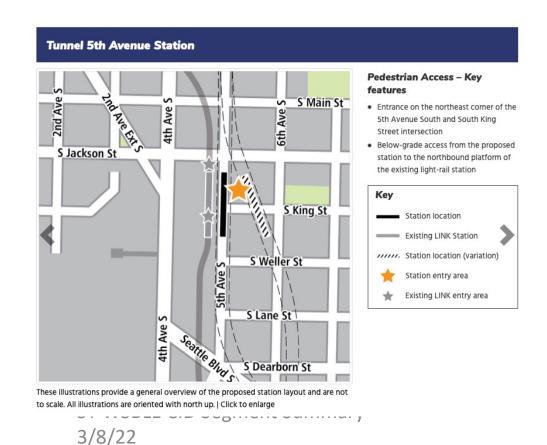


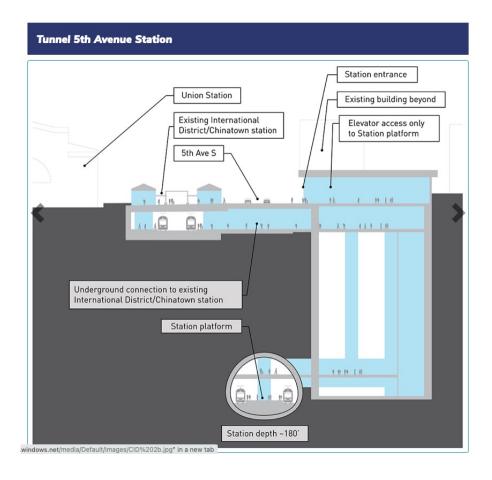
CID-2b 5th Avenue Deep Station

Figure 2-48. Plan and Profile for 5th Avenue Deep Station Option (CID-2b)

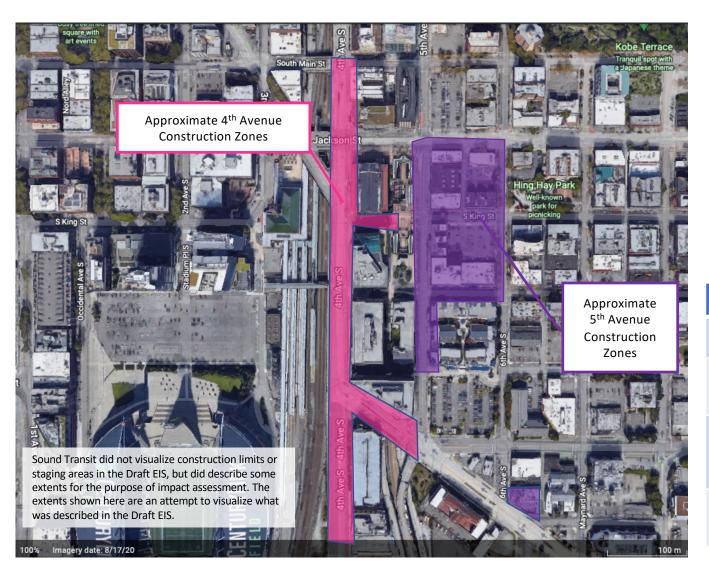


- Same station entrance and surface configurations for ALL 5th Avenue (CID-2a, diagonal, and CID-2b) Alignments/Options
- Provides direct light rail access to CID at 5th Ave S and King St. (One entrance)
- Provides grade-separated crossing (underground) for pedestrians and non-motorized users underneath 5th Avenue
- Provides more direct TOD opportunity within CID neighborhood
- Requires an elevator to access the station for all users





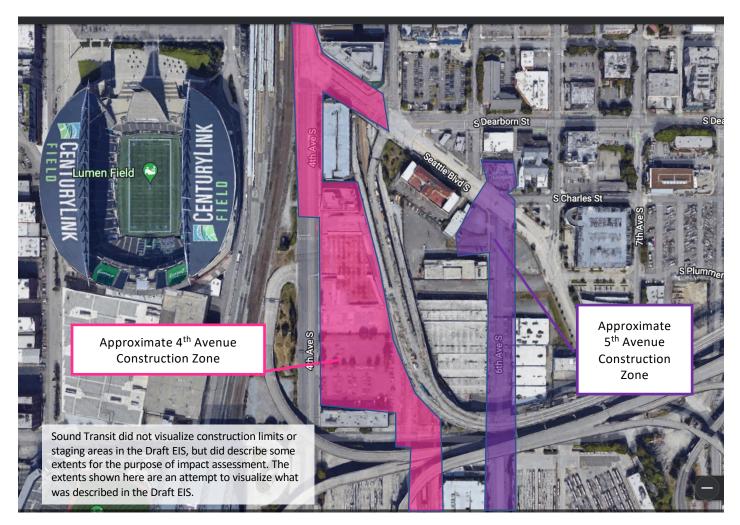
Chapter 2: Construction Approach- CID Segment



- Station construction durations range from 4-7 years
- Construction would occur on a 5- to 6-day work week
- Construction would occur primarily between the hours of 7am and 10pm
- Major construction activities generating truck traffic include station construction and tunneling.
- Construction truck volumes estimated for peak station construction and tunnelling activities ranges from 10 to 35 trucks per hour
- Cut and cover construction at all portals until excavation is deep enough for mining
- Tunnel construction and mining could occur 20-24 hours/day, 6-7 days/week
- Noise levels around station construction would be between 84 and 89 dBA at a distance of 50 feet

	4 th Avenue Alignments		5 th Avenue A		
	CID-1a	CID-1b	CID-2a	CID-2a diagonal	CID-2b
Segment construction duration	9-11* years	8-10 years	8-9 years	5-6 years	6.5-7.5 years
Station construction method	Excavation cut-and- cover	Mined	Excavation cut-and- cover	Excavation cut-and- cover	Mined
Station construction duration	4-6 years	6-7 years	4-6 years	4-6 years	6-7 years

Chapter 2: Construction Approach- CID Segment



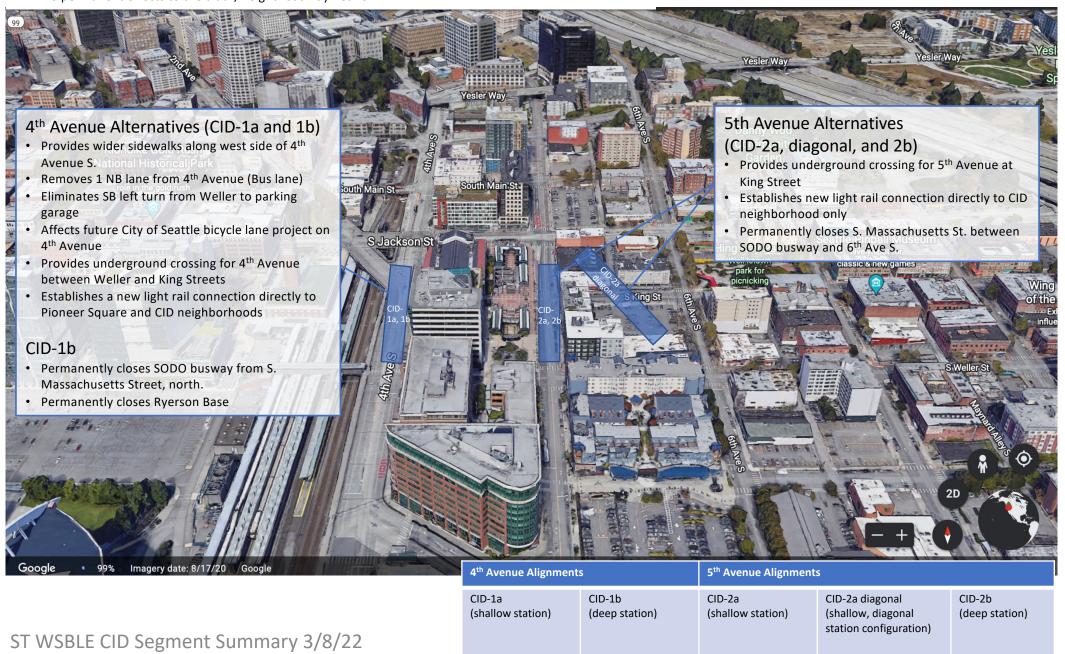
	4 th Avenue Alignments		5 th Avenue Align		
	CID-1a	CID-1b	CID-2a	CID-2a diagonal	CID-2b
Segment construction duration	9-11* years	8-10 years	8-9 years	5-6 years	6.5-7.5 years
Station construction method	Excavation, cut-and-cover	Mined	Excavation, cut-and-cover	Excavation, cut-and-cover	Mined
Station construction duration	4-6 years	6-7 years	4-6 years	4-6 years	6-7 years

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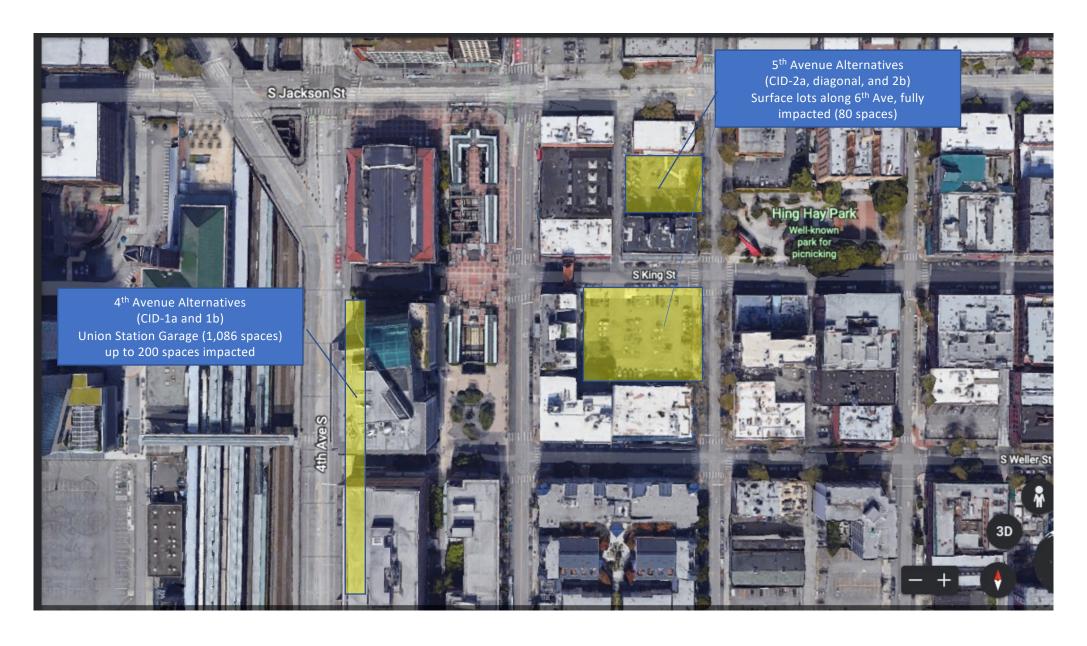
Transportation: Permanent Impacts

Impacts common to all alternatives in the CID Segment

- Provide direct underground transfers between light rail stations
- Converts curb space along 5th Avenue S. and King Street to passenger load (drop off/pick up) zones
- No permanent effects to the truck/freight roadway network



Transportation: Permanent Off-Street Parking Impacts



Transportation: Permanent On-Street Parking Impact Spaces

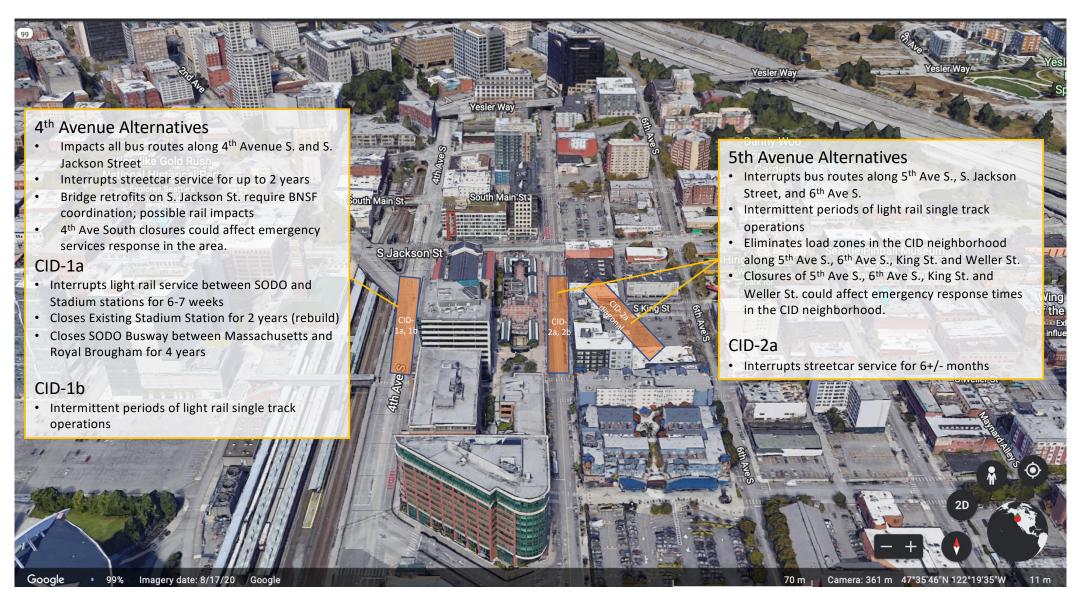


WSBLE Project CID Segment Permanent On-Street Parking Space Impacts						
4 th Avenue Alignmer	nts	5 th Avenue Alignments				
CID-1a (shallow station)	CID-1b (deep station)	CID-2a (shallow station)	CID-2a diagonal (shallow)	CID-2b (deep station)		
10-20	45-60	50-65	< 50-65	50-65		

Most permanent on-street parking impacts anticipated for CID Segment alternatives would occur south of Royal Brougham, along 5th Avenue S. and 6th Avenue S.

Transportation: Construction Impacts (Temporary)

See online maps for roadway extent and durations

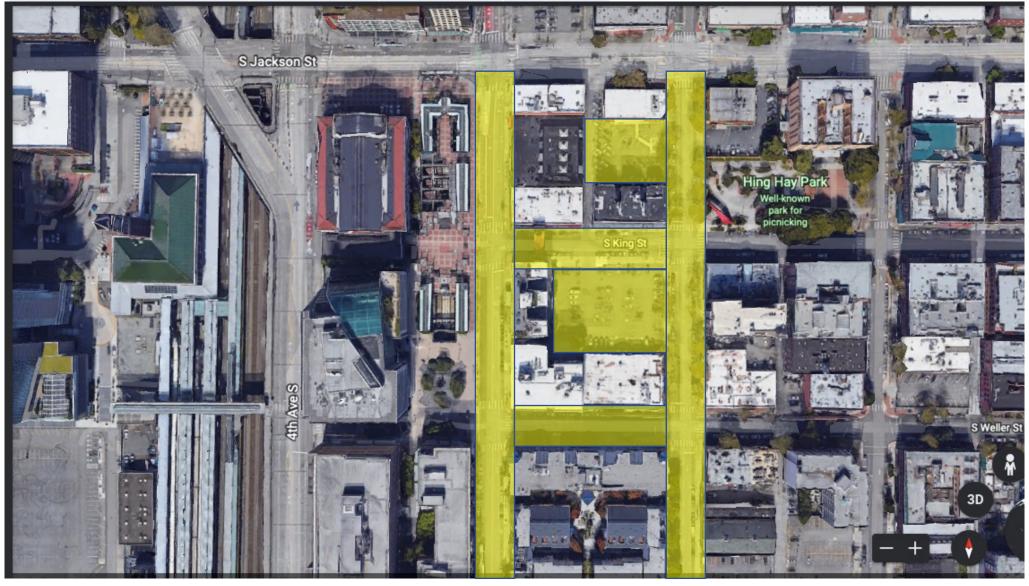


4 th Avenue Alignments		5 th Avenue Alignments			
CID-1a (shallow station)	CID-1b (deep station)	CID-2a (shallow station)	CID-2a diagonal (shallow, diagonal station configuration)	CID-2b (deep station)	

Transportation: Construction Parking Impacts

WSBLE Project CID Segment On-Street Parking Space Impacts during Construction						
4 th Avenue Alignmer	nts	5 th Avenue Alignments				
CID-1a (shallow station)	CID-1b (deep station)	CID-2a (shallow station)	CID-2a diagonal (shallow)	CID-2b (deep station)		

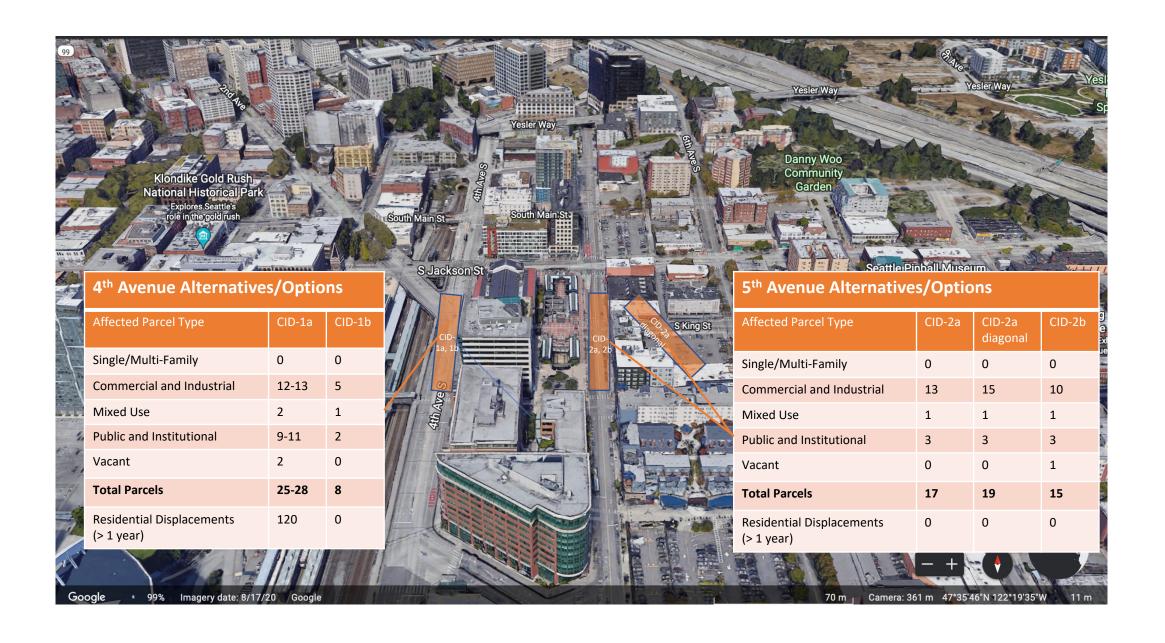
Potential Zone of Parking impacts for 5th Avenue Alternatives (CID-2a, 2a diagonal, 2b)



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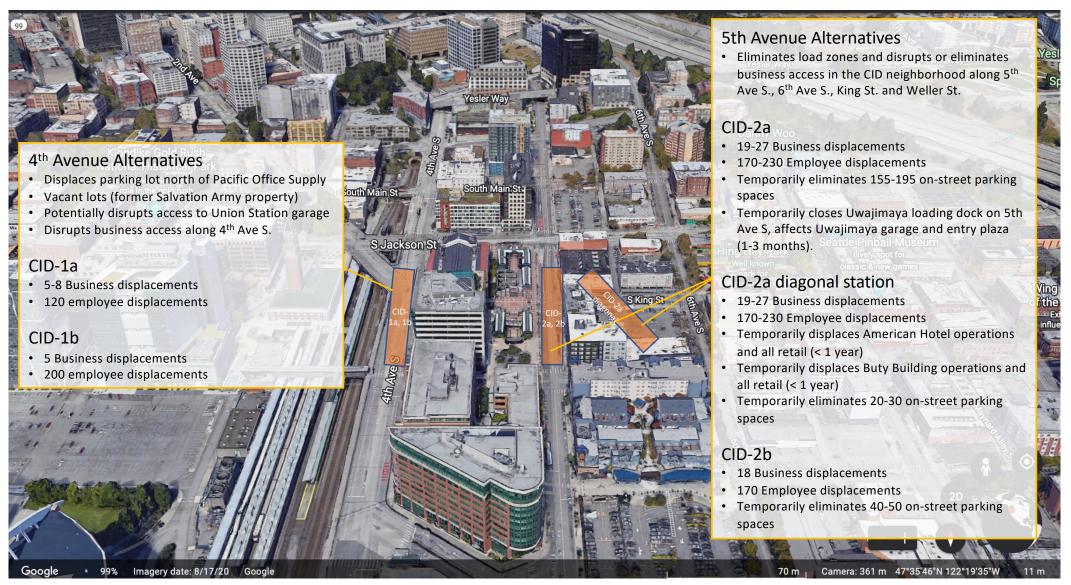
Affected Parcels (Full and partial parcel acquisitions)

See online maps for affected parcels



Economic: Permanent and Construction Impacts

See online maps for roadway extent and durations, and affected parcels

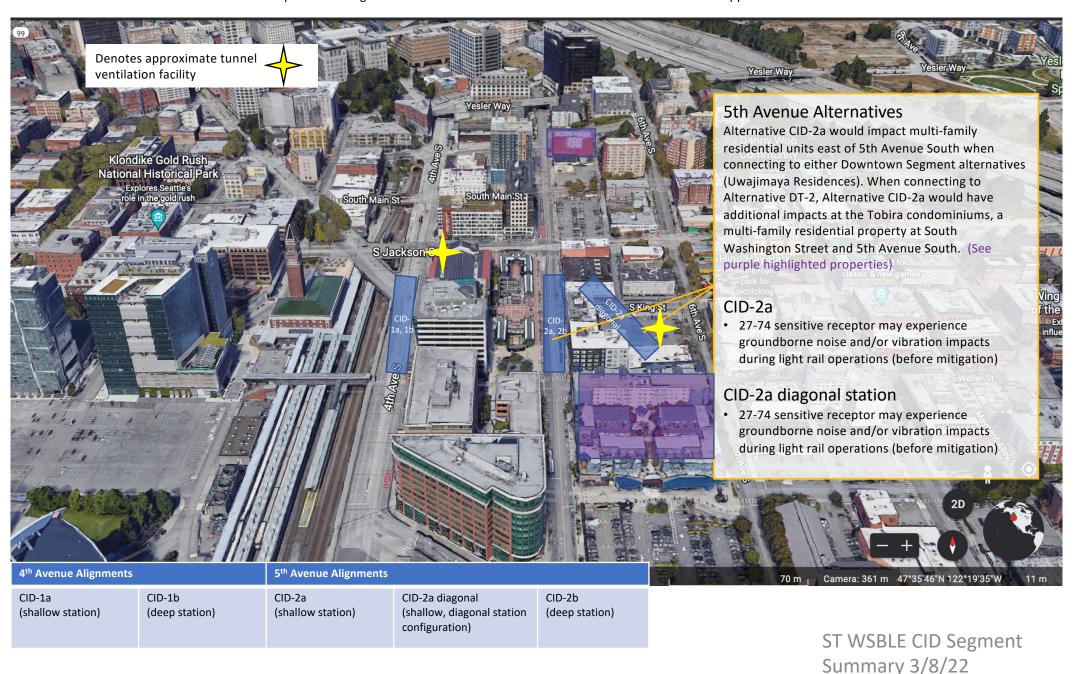


4 th Avenue Alignments		5 th Avenue Alignments			
CID-1a (shallow station)	CID-1b (deep station)	CID-2a (shallow station)	CID-2a diagonal (shallow, diagonal station configuration)	CID-2b (deep station)	

Noise and Vibration: Permanent Impacts

See online maps for affected parcels

No Operational Noise analysis was performed for the CID Segment because noise analysis was not required for proposed tunnel areas. There was no discussion in the document about the noise impacts resulting from tunnel ventilation facilities or other surface level tunnel support infrastructure.



Visual and Aesthetic Resources: Permanent Impacts

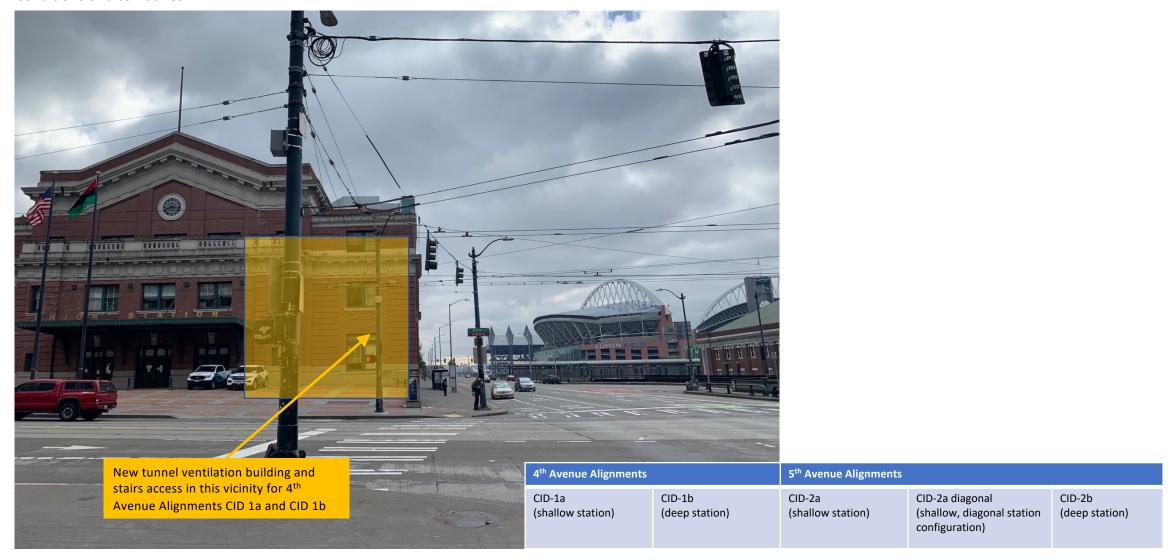
See online maps for affected parcels

• No Visual Quality analysis was performed for the CID Segment because it was not required for proposed tunnel areas. There was a brief mention of tunnel ventilation systems present near Union Station.



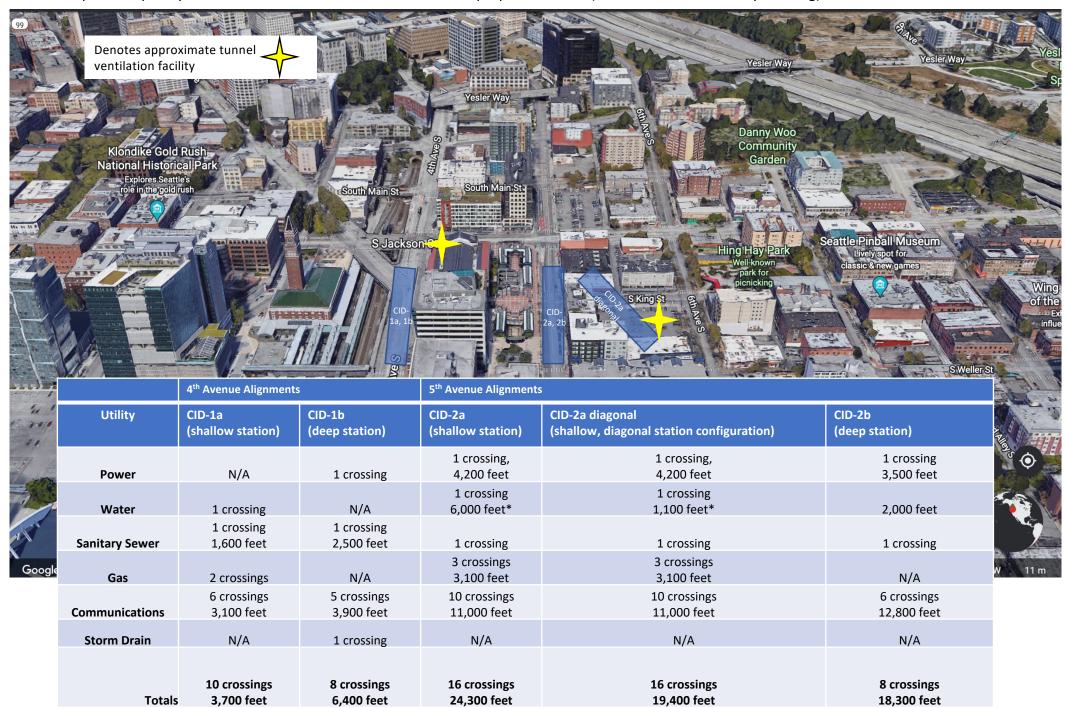
Visual and Aesthetic Resources

Draft EIS, p. 4.3.5-4: "The alternatives being considered in the Chinatown-International District Segment would be in tunnels accessed via station entrances on 4th Avenue South and 5th Avenue South. Other than stations and other facilities such as tunnel vents, these areas would not contain components above ground. ... Other facilities, such as the tunnel vents, would typically be less prominent than the station entrances but would also be designed to fit in the neighborhood in coordination with the City. These facilities would not change the visual quality of views towards them by sensitive viewers. *An exception is the tunnel vent in front of Union Station, which would be a prominent component of Alternative CID-1a* and Option CID-1b*. Any aesthetic and visual concerns related to the design of the stations and other facilities would be addressed during the community input and design review phases of the WSBLE Project. This segment is not considered further in this technical report, and KOPs were not used to depict existing conditions or alternatives."*



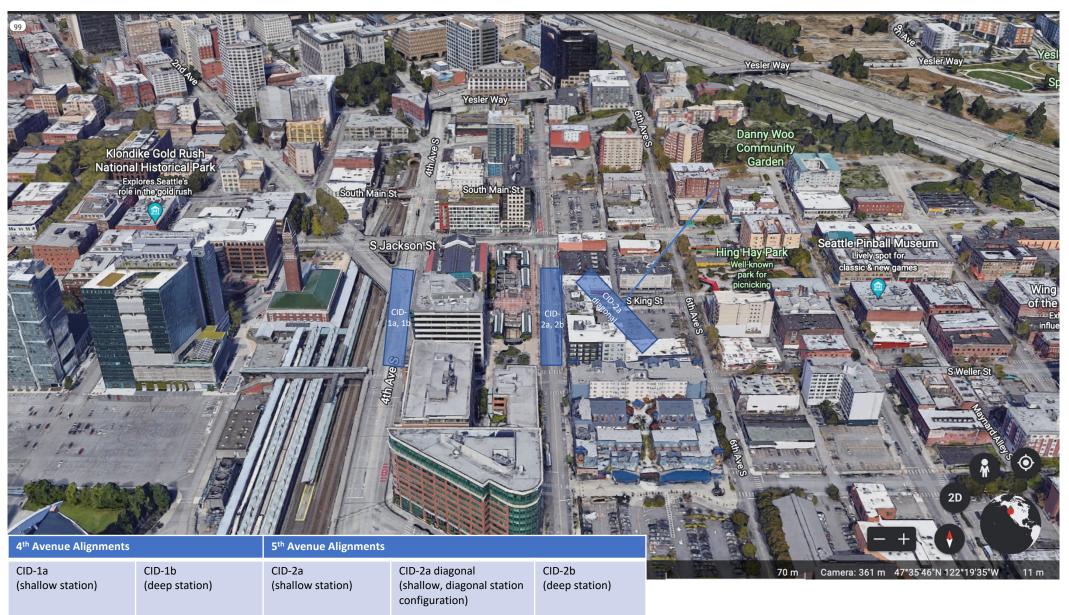
Utility Relocation Impacts

CID-2a would require relocating utilities in "Pigeon Alley" utility corridor. Diagonal station configuration would avoid closure of 5th Avenue South, but would require temporary relocation of businesses and tenants in two properties in CID (American Hotel and Buty Building)



Parks and Recreation: Permanent Impacts

Excerpted from Draft EIS Section 4.3.17.3.2: "There are 14 parks and recreational resources in the CID Segment study area. Sound Transit analyzed the potential long-term impacts of operation of the Ballard Link Extension Build Alternatives on parks and recreational resources in the study area. None of the Chinatown-International District Segment alternatives would have long-term impacts to parks and recreational resources."

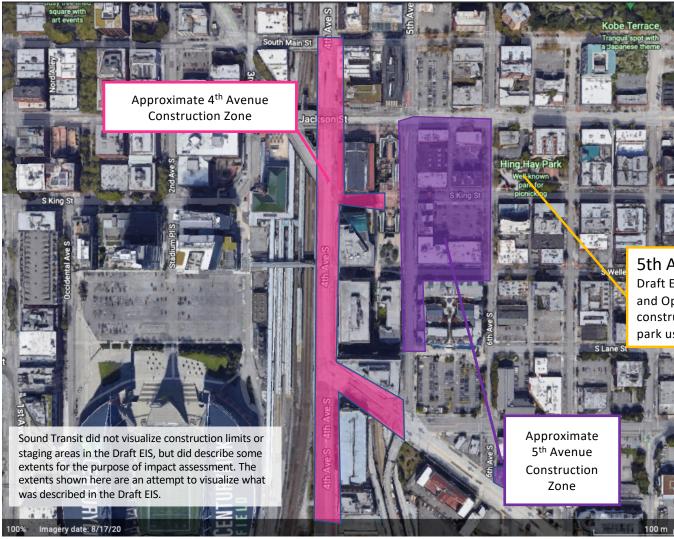


Parks and Recreation: Permanent Impacts

Excerpted from Draft EIS Section 4.3.17.3.2: "There are 14 parks and recreational resources in the CID Segment study area. Sound Transit analyzed the potential long-term impacts of operation of the Ballard Link Extension Build Alternatives on parks and recreational resources in the study area. None of the Chinatown-International District Segment alternatives would have long-term impacts to parks and recreational resources."



Parks and Recreation: Construction Impacts



- Station construction durations range from 4-7 years
- Construction would occur on a 5- to 6-day work week
- Construction would occur primarily between the hours of 7am and 10pm
- Major construction activities generating truck traffic include station construction and tunneling.
- Construction truck volumes estimated for peak station construction and tunnelling activities ranges from 10 to 35 trucks per hour
- Noise levels around station construction would be between 84 and 89 dBA at a distance of 50 feet
- Cut and cover construction at all portals until excavation is deep enough for mining
- Tunnel construction and mining could occur 20-24 hours/day, 6-7 days/week

5th Avenue Alternatives

Draft EIS Excerpt page 4.3.17-18: "All 5th Avenue Alternatives (CID-2a, 2a diagonal station, and Option CID-2b) would result in minor proximity effects to Hing Hay Park during construction on the west side of 6th Avenue South. Construction would also be visible to park users."

	4 th Avenue Alignments		5 th Avenue A		
	CID-1a	CID-1b	CID-2a	CID-2a diagonal	CID-2b
Segment construction duration	9-11* years	8-10 years	8-9 years	5-6 years	6.5-7.5 years
Station construction method	Excavation cut-and- cover	Mined	Excavation cut-and- cover	Excavation cut-and- cover	Mined
Station construction duration	4-6 years	6-7 years	4-6 years	4-6 years	6-7 years

Parks and Recreation: Construction Impacts

Draft EIS Excerpt page 4.3.17-18: "CID-2a, (2a Diagonal) and CID-2b would result in minor proximity effects to Hing Hay Park during construction on the west side of 6th Avenue South. **Construction would also be visible to park users"**

- Construction duration for 5th Avenue Alternatives and Options in the CID Segment ranges from 5-9 years
- Station construction durations range from 4-7 years
- Construction would occur on a 5- to 6-day work week
- Construction would occur primarily between the hours of 7am and 10pm
- Major construction activities generating truck traffic include station construction and tunneling.
- Construction truck volumes estimated for peak station construction and tunnelling activities ranges from 10 to 35 trucks per hour.



Historic Resource Impacts (Section 106 Consultation)

Excerpted from Historic and Archeological Resources Technical Report, p 10-6: "Although construction haul routes have not yet been identified, no construction hauling is anticipated to occur within the Pioneer Square-Skid Road National Historic District, outside of the immediate construction area within the area of potential effects. Minimal construction hauling is anticipated within the Seattle Chinatown Historic District and would only

occur when hauling trucks travel from the immediate construction site to Interstate 5."

	4 th Avenue Alternatives/Options		5 th Avenue Alteri		
Property or Resource	CID-1a	CID-1b	CID-2a	CID-2a diagonal	CID-2b
Pioneer Square-Skid Road National Historic District	Adversely affected: Construction Disruption	Adversely affected: Construction Disruption	Not Adversely Affected	Not Adversely Affected	Not Adversely Affected
Seattle Chinatown Historic District	Adversely Affected: Property Demolition and Construction Disruption	Adversely Affected: Property Demolition and Construction Disruption	Adversely Affected: Property Demolition and Construction Disruption	Adversely Affected: Property Demolition and Construction Disruption	Adversely Affected: Property Demolition and Construction Disruption
Union Station	Adversely Affected: Construction Disruption and Partial Property Acquisition	Adversely Affected: Construction Disruption and Partial Property Acquisition	Not Adversely Affected	Not Adversely Affected	Not Adversely Affected
Seattle First National Bank- International Branch	Not Adversely Affected	Not Adversely Affected	Adversely Affected: Property Demolition	Adversely Affected: Property Demolition	Adversely Affected: Property Demolition
Retail Stores (418 5 th Ave S.)	Not Adversely Affected	Not Adversely Affected	Adversely Affected: Property Demolition	Adversely Affected: Property Demolition	Adversely Affected: Property Demolition
Total Number of Adversely Affected Resources	3	3	3	3	3

Section 4f Use Determinations

There are two (2) parks/recreation resources, and 53 historic resources evaluated under Section 4f in the CID Segment.

	4 th Avenue Alternatives/Options		5 th Avenue Alterr		
Property or Resource	CID-1a	CID-1b	CID-2a	CID-2a diagonal	CID-2b
Pioneer Square-Skid Road National Historic District	No use	No Use	No Use	No Use	No Use
Seattle Chinatown Historic District	No Use	No Use	Use	Use	Use
Union Station	Use	Use	No Use	No Use	No Use
Seattle First National Bank- International Branch	No Use	No Use	Use	Use	Use
Retail Stores (418 5 th Ave S.)	No Use	No Use	Use	Use	Use
Total Number of Section 4f "Use" Determinations	1	1	3	3	3

CID Segment General Notes

- 4th Avenue rebuild extent north of Jackson is extensive; reasons unclear
- No operational noise analysis performed for segment
- No visual quality analysis performed for the segment
- Stadium events were not considered in transportation analysis

Pioneer Square Specific Notes

- No mention of Pioneer Square neighborhood in the Social Resource, Community Facilities, and Neighborhoods section
 - Non-profit service providers in Pioneer Square were discussed
- No substantive treatment of Pioneer Square in EJ analysis
- Stadium events were not considered in transportation analysis
- Historic Resources concludes "No construction hauling will occur within (PSQ) historic district."
- No discussion of areaways in any capacity (transportation nor historic resource)

Chinatown International District Specific Notes

- EJ analysis lacks information
- Stadium events were not considered in transportation analysis
- No operational noise analysis performed for segment
- No visual quality analysis performed for the segment
- Historic and eligible resource impacts unclear
- Substantial and long-term construction disruptions to neighborhood, businesses, and residents