

Transportation

KEY FINDINGS



Table 4-1. Transportation Characteristics in Substation Study Area

Roadway	Functional Class ¹	ADT ²	Transit Characteristics ³	Nonmotorized Characteristics ⁴	On-Street Parking ⁵
Denny Way, Minor Ave North – Stewart Street	Principal Arterial	21,980	Bus stop on north side, adjacent to site. Metro Route 8	Sidewalks, both sides. No marked bicycle facilities.	None.
Minor Avenue, John Street – Denny Way	Local Access	1,200	No transit routes.	Sidewalks, both sides. No marked bicycle facilities.	Both sides. East side is included in RPZ 24.
John Street, Minor Avenue North – Yale Avenue North	Local Access	2,960 ⁶	No transit routes.	Sidewalks, both sides. No marked bicycle facilities.	Both sides. South side between Minor and Pontius Avenues is located in RPZ 24.
Yale Avenue North, John Street – Stewart Street	Local Access	1,270	No transit routes.	Sidewalks, both sides. No marked bicycle facilities.	Both sides.
Pontius Avenue North, John Street – Denny Way	Local Access	930	No transit routes.	Sidewalks, both sides. No marked bicycle facilities.	Both sides. West side is located in RPZ 24.

ADT = average daily traffic

¹ Source: City of Seattle, 2003a; City of Seattle, 2003b

² Source: City of Seattle 2012a

³ Source: King County Metro, 2013; Sound Transit, 2013b; Community Transit 2013

⁴ Source for bicycle facility information: City of Seattle, 2011a

⁵ Source: City of Seattle, 2013

⁶ ADT for this location is not included in the City of Seattle counts. ADT was estimated based on PM peak hours counts conducted in the area by Heffron Transportation.

- During construction roadway lanes and sidewalks temporarily narrowed or closed — could disrupt traffic flow and access, reduce on-street parking and require detours
- Full or partial closure of Denny Way for 4–6 weeks
- Closures would be coordinated with SDOT to minimize disruption
- Construction of TL 1 and TL 3 would affect on-ramps and off-ramps to I-5 — would be restricted to off-peak times
- Temporary closures of Downtown Seattle Transit Tunnel for TL 2 installation could be significant
- Pontius Ave N would be permanent closed for SA 2 or SA 3 — minimal impact to traffic or pedestrians, but would eliminate on-street parking
- All roads and sidewalks would be restored during construction
- Project would generate very little traffic
- Only minor transportation impacts expected when operational



Transportation

VACATION OF PONTIUS AVENUE NORTH

EXISTING TRAFFIC VOLUMES P.M. PEAK HOUR

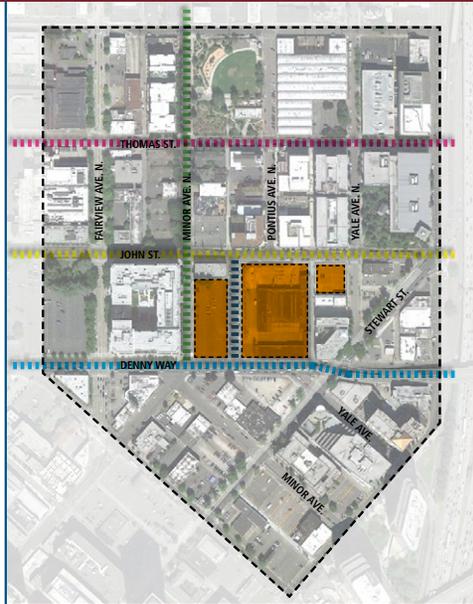


Table 5-3. Public Parking Lots within 800 Feet of the Substation

Parking Lot Location	Approximate Number of Spaces
210 Minor Avenue North	46
205-235 Minor Avenue North	51
122 Boren Avenue North	129
Fairview Avenue North and Thomas Street	21
Fairview Avenue North and Harrison Street	41
330 Yale Avenue North	24
2014 Fairview Avenue	19
Boren Avenue North and Denny Way	79
1901 Minor Avenue	100
Stewart Street and Minor Avenue	117
1100 Howell Street	86
1124 Howell Street	54

Source: Heffron Transportation, 2013c.

- With SA 2 or SA 3, vacation of Pontius Avenue North adjacent to the substation site would permanently remove approximately 37 on-street parking spaces
- Elimination of on-street parking spaces along Pontius Avenue North would reduce parking supply in the South Lake Union neighborhood
- This loss of parking would be considered a moderate impact given the availability of parking and transit options in the area
- No adverse impact on vehicle circulation or traffic patterns because this segment of Pontius Avenue North does not provide continuity in the street grid



Transportation

IMPACTS AND MITIGATION

Transmission Line Alternatives

TL 1

CONSTRUCTION IMPACTS

Transmission line installation would require temporary:

- Roadway lane, bicycle lane, and sidewalk closures
- Traffic disruption at I-5 ramps in downtown Seattle
- Roadway, alley and driveway intersection disruptions
- Bus stop closures or relocations
- Elimination of on-street parking
- Generation of construction truck and worker commute trips

Crossing of rail yard in SODO would require coordination with BNSF and Sound Transit; if overhead, installation would require short-term suspension of rail traffic while the line is installed. If bored underground, the design would require engineering to ensure installation would not undermine tracks.

CONSTRUCTION MITIGATION

- Implement maintenance of traffic plans.
- For principal arterials and freeway ramps requiring closures, conduct work at night and/or on weekends.
- Obtain and comply with appropriate street use permit(s) from SDOT.
- Coordinate with SDOT on construction-generated haul routes and schedule.
- Prohibit construction work during winter holidays in streets or sidewalks located in the downtown retail core.
- Provide manual traffic control when construction occurs through an intersection.
- Manage construction across driveways by staging the work, use of flaggers, and coordination with property owners.
- Prior to trenching through intersections with in-pavement sensors for traffic light control, possibly install alternate detection equipment such as camera detectors. Install sensors or permanent cameras as part of restoration.
- Coordinate with transit providers to temporarily close or relocate bus stop(s).
- To the extent possible, locate duct banks to avoid construction impacts with overhead bus trolley lines, but, if needed, work with King County Metro Power Distribution to either temporarily relocate or deactivate trolley lines during construction.
- Prohibit work that would disrupt traffic during the designated holiday moratorium.
- Coordinate construction timing with other ongoing construction.
- Work with SDOT to establish a construction outreach team and work closely with affected residents and business owners to minimize construction impacts.

OPERATIONAL IMPACTS

No impacts.

OPERATIONAL MITIGATION

None required.

TL 2

- Similar to TL1, except no disruption at I-5 ramps.
- Nighttime DSTT closures would be required and would result in moderate impact to maintenance and training activities.
- 3 to 4 DSTT closures on weekend days would also be required and would result in moderate impact to transit users and minor impacts on roadway traffic operations as tunnel buses would be detoured to surface streets.

- Same as TL1, except that coordination with Sound Transit and King County would be required for DSTT use.
- DSTT closure on weekends would occur during non-event weekends.
- **Weekend tunnel closures would likely require supplemental bus service for surface routes during closures.**

TL 3

Similar to TL 1 except no disruption at I-90 ramps and fewer disruptions at I-5 ramps.

Same as TL1.

NO ACTION ALTERNATIVE (TL Component)

No impacts.

Broad Street Substation Inductor Options, Distribution System and No Action Alternative

BI 1 Broad Street Inductor Option 1	BI 2 Broad Street Inductor Option 2	Distribution System	No Action (BI and Distrib. System)
CONSTRUCTION IMPACTS Generation of construction truck and worker commute trips would have a minor impact.	Same as BI 1.	Similar to TL 1, except no freeway ramp impacts.	Same as BI 1.
CONSTRUCTION MITIGATION None required.	None required.	Same as for TL 1.	
OPERATIONAL IMPACTS Some of Broad Street would be vacated, but no significant impacts since road already closed by SDOT.	Same as BI 1.	No impacts.	Same as BI 1.
OPERATIONAL MITIGATION None required.	None required.	None required.	

No impacts.

None required.

No impacts.

None required.

No impacts.

