

Attachment G
Transportation Technical Memorandum

East Link Extension Transportation Analysis on Potential Refinements

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1. Introduction

This technical memorandum describes the potential refinements to the East Link Extension. The structure of this memorandum follows the presentation of transportation analysis and impacts provided in Chapter 3 of the East Link Final Environmental Impact Statement (Final EIS; Sound Transit et al, 2011). This memorandum also compares the function of the potential refinements with the overall range of impacts disclosed in the Final EIS as well as the impacts of the “Selected Alternative”, which are Preferred Alternatives B2M and C9T from the Final EIS with the East Main Station Design Option. Overall, the analysis of the potential refinements concludes that there are no substantial changes in impacts from the Final EIS. The performance of arterials and local streets (discussed below in Section 6) is expected to change slightly, and construction impacts on arterials and local streets would be slightly greater than with the Selected Alternative, but the impacts of the potential refinements would be within the range of impacts of the Final EIS alternatives.

The potential refinements include:

- Shift Bellevue Way Option
- 112th Road Over Rail Option
 - SE 4th Emergency Access Suboption (with Bellefield Access Variation)
 - SE 4th Open Suboption
 - Rail Under SE 4th Suboption
- Optimized Selected Alternative Station Option
- NE 6th Station Option

2. Methodology and Assumptions

The analysis performed for the potential refinements was conducted consistent with the Final EIS (see Appendix H1 of the Final EIS). However, the analysis was only conducted for the 2030 horizon analysis year and only considered the areas where changes in impacts could potentially occur. Similar to the Final EIS, the traffic operational analysis was only conducted for the PM peak hour because the AM peak hour was not analyzed.

3. Regional Travel

The potential refinements would not change the impacts to regional travel disclosed in the Final EIS. Region wide vehicle miles traveled (VMT) and vehicle hours traveled (VHT) would decrease by about 0.20 percent, with most of the reductions occurring in the AM and PM peak periods. This is a reduction of slightly less than 230,000 VMT and 10,000 hours of travel each day in year 2030.

4. Transit

4.1 Operations

Project wide estimated ridership for the Final EIS alternatives in 2030 ranged between 48,500 and 51,000, with between 9,500 and 13,500 daily boardings over Segments B and C. The Selected Alternative is estimated to have

50,000 project wide riders and 12,500 daily boardings within Segments B and C with 6,000 boardings at the Bellevue Transit Center Station. The Optimized Selected Alternative moves the north entrance west of 110th Avenue NE, closer to the Bellevue Transit Center. The location of station entrances east of 110th Avenue NE with the NE 6th Station Option would make pedestrian access slightly longer to downtown destinations, and its tighter curves would slightly increase light rail travel time. These factors are too small to model the impact on ridership.

The northbound left-turn pocket into the Bellevue Transit Center at the intersection of NE 6th Street and 110th Avenue NE would be removed with the Optimized Selected Alternative Station Option. However, this lane is currently restricted to transit use and only one bus route (King County Metro route #241) currently uses it for rider service. Buses that use this lane would either be rerouted or there would be an option to allow transit-only turn movement to occur in the existing through lane.

4.2 Construction

All Final EIS alternatives would require lane closures on Bellevue Way SE and 112th Avenue SE and in downtown Bellevue for construction, which would affect transit reliability on routes that use these roads. For the Selected Alternative, only one lane of Bellevue Way SE and 112th Avenue SE likely would be closed for most of the civil construction period. Constructing the Shift Bellevue Way and 112th Road Over Rail Options likely would require more lane closures on both of those two arterials than the Selected Alternative. As the Shift Bellevue Way Option would shift Bellevue Way SE to the west and the 112th Road Over Rail Option would raise 112th Avenue SE, multiple lanes could be closed, which would result in a greater disturbance to transit, but still within the range of impacts of other alternatives disclosed in the Final EIS that travelled along these two streets. Periodic night-time or weekend closures might be needed on the section of 112th Avenue SE being reconstructed.

In downtown Bellevue, as considered in the Final EIS, constructing the Selected Alternative would require a staged partial closure of the Bellevue Transit Center. Affected bus routes would be rerouted and likely would have stops along 106th and 108th Avenues NE and/or be relocated to a nearby off-street location(s). This impact would be similar for the Optimized Selected Alternative Station Option. However, constructing the NE 6th Station Option would likely have fewer impacts on the operations at the Bellevue Transit Center because the transit center would remain open and most of the construction would occur south of NE 6th Street, where many routes enter and exit the Bellevue Transit Center. Construction south of NE 6th Street likely would have minimal affect on transit routes as there is only one existing bus route identified on 110th Avenue NE that proceeds into the Bellevue Transit Center.

4.3 Potential Mitigation

No changes in mitigation during construction or operations are proposed with any of the potential refinements.

5. Highway Operations and Safety

5.1 Operations

The potential refinements would not change the impacts to highway operations and safety disclosed in the Final EIS. Similar to the Selected Alternative, the Shift Bellevue Way Option would preserve both the westbound high-occupancy vehicle (HOV) on-ramp and eastbound HOV off-ramps at the Interstate 90 (I-90) and Bellevue Way SE interchange by exiting the center roadway on a new elevated structure over the westbound mainline.

5.2 Construction

All Segment C alternatives in the Final EIS and the two downtown Bellevue options (the NE 6th Station and Optimized Selected Alternative Station Options) would close multiple lanes of Interstate 405 (I-405), likely at night or on weekends depending on the construction method of the elevated structure over I-405, potentially causing drivers to detour and take alternative routes. I-405 impacts due to the Selected Alternative would occur adjacent to the NE 6th Street direct-access ramps and NE 8th Street ramps to and from the south. The NE 6th Station Option would cross I-405 south of the NE 6th Street ramps and construction activities would occur farther south from the NE 8th Street ramps than the Selected Alternative, thereby reducing impacts (i.e., temporary closures) to the NE 8th Street ramps. I-405 lane closures with both downtown Bellevue options would remain the same as all Segment C alternatives in the Final EIS.

5.3 Potential Mitigation

No changes in mitigation during construction or operations are proposed with any of the potential refinements.

6. Arterials and Local Streets

6.1 Operations

6.1.1 Traffic Control, Property Access, and Circulation

The potential refinements would not have any at-grade crossings between I-90 and downtown Bellevue, except for the SE 4th Open Suboption that maintains vehicle access at SE 4th Street. This is a reduction from the three at-grade crossings along 112th Avenue SE (at SE 15th, SE 8th, and SE 6th Street intersections) with the Selected Alternative. With the Shift Bellevue Way Option, traffic circulation and property access along Bellevue Way SE would be similar to the Selected Alternative.

With the 112th Road Over Rail Option, access at the 112th Avenue SE and SE 15th intersection would be right-in/right-out on the west and east approaches and left-turns would be prohibited, except for emergency vehicles. The left-turns into and out of the Bellefield Residential Park would be relocated to their southern driveway on 112th Avenue SE, which is just south of SE 15th Street, except for with the Bellefield Access Variation of the SE 4th Emergency Access Suboption. Left turns from the Bellefield Office Park would use SE 8th Street; the office park's other access location. The access changes with the 112th Road Over Rail Options would not cause any new intersections to fail or operate substantially worse than the Selected Alternative. U-turns would be allowed at 112th Avenue SE and Main Street to replace lost left turns.

SE 1st Street also would be closed with the 112th Road Over Rail Option, and SE 4th Street would be closed with the SE 4th Emergency Access Suboption; re-circulating traffic into and out of the Surrey Downs neighborhood to 108th Avenue SE with this suboption. The Bellefield Access Variation to this suboption would provide access to the Surrey Downs neighborhood through the Bellefield Residential Park (a new road from SE 15th Street to 111th Place SE). With the SE 4th Open Suboption, left-turns at SE 4th Street would be prohibited, but U-turn would be provided at Main Street to replace this left turn. The Rail Under SE 4th Suboption would maintain all existing turning movements at SE 4th Street, with approximately 50 vehicles turning into and 50 vehicles turning out of the Surrey Downs neighborhood during the PM peak hour.

With the Optimized Selected Alternative Station Option, the left-turn lane into the Bellevue Transit Center at 110th Avenue NE and NE 6th Street would be removed. However, this lane is currently restricted to transit use and only one bus route (King County Metro route #241) currently uses it for rider service. Buses that use this lane would either be rerouted or there would be an option to allow transit-only turn movement to occur in the existing through lane.

6.1.2 Operations and Level of Service

With the potential refinements, intersections in Segments B and C would generally operate with a similar level of service (LOS) as with the Selected Alternative. Within Segments B and C, the number of intersections that would fail LOS standards due to the project ranges from zero to seven intersections for all alternatives in the Final EIS. The potential refinements are not expected to have any additional intersections falling below the City of Bellevue LOS standards. Slight variations in vehicle delay are experienced between the potential refinements and the Selected Alternative; which is due to minor traffic pattern and access changes and some differences in roadway improvements. Even so, no additional intersections beyond what is documented in the Final EIS are expected to fall below the City of Bellevue's LOS standards with the potential refinements. Tables 1 through 4 summarize the intersection LOS for the potential refinements at selected study area intersections in Segments B and C that exhibited changes in vehicle delay. The results are provided for the three 112th Road Over Rail suboptions (Tables 1 through 3) and NE 6th Station Option (Table 4). The Shift Bellevue Way Option and Optimized Selected Alternative Station Option would have similar intersection results as the Selected Alternative.

The NE 6th Station Option potential refinements would eliminate the slight intersection delay impact at NE 4th Street and 108th Avenue NE with the Selected Alternative given that neither a station entrance nor any drop-off/pick-up activity are included near this intersection with the NE 6th Station Option. There would also be no

impacts related to eliminating the northbound left-turn pocket into the Bellevue Transit Center at 110th Avenue NE and NE 6th Street with the Optimized Selected Alternative Station Option.

Safety and operational roadway improvements that were incorporated into the Selected Alternative include a northbound right-turn pocket at the intersections of 112th Avenue SE at SE 8th Street and 112th Avenue SE at SE 15th Street and northbound and southbound left-turn pockets at the SE 6th Street and 112th Avenue SE intersection. These improvements would not be required with the 112th Road Over Rail Option because this option is grade separated at these locations. A southbound right-turn pocket would be provided at SE 4th Street and 112th Avenue SE in the SE 4th Open Suboption. A U-turn would be provided along 112th to provide access with the SE 4th Open Suboption.

6.1.3 Traffic Safety

All proposed refinement options, except for the SE 4th Open Suboption of the 112th Road Over Rail Option, would have zero at-grade roadway crossings with the light rail tracks, thereby eliminating the potential for vehicle and pedestrian conflicts. The SE 4th Open Suboption would maintain vehicle access at SE 4th Street and 112th Avenue SE intersection, thereby creating one at-grade crossing; however, this is two fewer at-grade crossings than the Selected Alternative. There are no safety concerns with the Shift Bellevue Way or the Bellevue Transit Center Station Options. The Shift Bellevue Way would be separated from traffic and the Bellevue Transit Center Options operations would be primarily underground and there are no at-grade conflicts with the light rail.

6.1.4 Parking

There are no effects on on-street parking for the Shift Bellevue Way or the Bellevue Transit Center Station Options. The 112th Road over Rail Suboption would each remove off-street parking in the Surrey Downs Parking lot, which serves both the park users and the District Court. This is similar to the Selected Alternative that realigned SE 4th Street through the parking lot. Parking would be redesigned to preserve and replace as many stalls as possible and other mitigation would be developed in cooperation with the City of Bellevue in the updating the Surrey Downs Park Master Plan. The potential refinements would not remove any on-street parking and would remove a similar number of off-street parking spaces except at Bellevue City Hall, where slightly less than 200 spaces would be removed with the NE 6th Station Option. This would be more spaces than with the Selected Alternative, but it would be mitigated as agreed to in the Sound Transit-City of Bellevue November 2011 Memorandum of Understanding (City of Bellevue and Sound Transit, 2011).

The Selected Alternative would remove up to 405 off-street parking spaces in properties along Bellevue Way SE and 112th Avenue SE and in downtown Bellevue with zero on-street spaces. Off-street parking spaces include approximately 105 vehicles and 20 motorcycles spaces in the Bellevue City Hall parking garage. This is fewer than the approximately 200 spaces that would be removed with the NE 6th Station Option.

6.2 Construction

Impacts from the potential refinements would be within the range of impacts for the Final EIS alternatives. The Shift Bellevue Way and 112th Road Over Rail Options likely would require multiple lane closures on Bellevue Way SE and 112th Avenue SE, which would be similar to Final EIS alternatives, but they would maintain at least one lane in each direction throughout the construction period. This would be within the range of impacts for the Final EIS alternatives, but it would have greater impact than the Selected Alternative. The Selected Alternative likely would require one lane along the east side of Bellevue Way SE and 112th Avenue SE to be closed for most of the civil construction period in addition to other potential lane closures that would be dictated by construction activity.

Access to the Bellefield Residential Park would be limited to its southern access point while the realigned Bellefield Park Drive is being constructed as part of the 112th Road Over Rail Option. Access to the Bellefield Office Park would be limited to SE 8th Street while the realigned SE 15th Street is being constructed.

Similar to the Selected Alternative, constructing the downtown Bellevue potential refinements likely would close one eastbound lane on Main Street between 110th Avenue NE and 112th Avenue NE, but more or fewer lanes could be closed for short periods. Along 110th Avenue NE, all lanes between Main and NE 6th Streets would be

closed. Access to properties that have access only on 110th Avenue NE would be maintained with the exception of Abella business garage access (residential garage access would remain open). Abella business garage closure would require mitigation by providing parking elsewhere. Streets crossing 110th Avenue NE would remain open, so traffic on Main, 2nd, 3rd, 4th, and 6th Streets could cross 110th Avenue NE. Emergency and service access would also be maintained to all properties around the construction areas. The Selected Alternative would require similar closures, but it might only close some lanes at times instead of all lanes on 110th Avenue NE.

The diversion resulting from closure of 110th during construction of the potential refinements in downtown Bellevue would likely increase congestion on parallel streets, such as 106th, 108th, and 112th Avenues NE. This would create similar traffic impacts to the Selected Alternative and cause up to two additional intersections on these parallel streets between Main and NE 8th Streets to operate at LOS F, compared with the no-build condition. This is one fewer intersection compared to the Selected Alternative. Overall, intersection results are similar even with the closure of 110th Avenue NE to through traffic because high-volume driveways along 110th Avenue would continue to remain open. The reduction of one LOS F intersection with the construction of the potential refinements is due to traffic pattern changes. The intersection of 112th Avenue NE and NE 2nd Street is expected to operate at LOS F with the Selected Alternative construction condition. This is because vehicles exiting properties on the eastside of 110th Avenue NE are limited to a right turn to NE 2nd Street, with most vehicles going to 112th Avenue NE. These intersection LOS results are provided in Table 5.

Constructing the Selected Alternative along NE 6th Street would partially close the street between 110th Avenue NE and I-405, whereas with the location of the Bellevue Transit Center Station in the NE 6th Station Option, there would likely be less impact on NE 6th Street because the station and alignment would be constructed south of the street.

The “cut and cover” technique, which excavates from the surface down, is proposed for construction of the tunnel along 110th Avenue for the Selected Alternative and the two options. However, Sound Transit is considering an alternative to the cut and cover technique for tunneling in downtown Bellevue, called “sequential excavation method” (SEM), for the NE 6th Station Option. This approach was considered in the Final EIS analysis but not for the Selected Alternative tunnel on 110th Avenue, which would use cut and cover construction. Compared to the cut and cover technique, the SEM approach reduces restrictions on pedestrian/vehicle access to buildings. A cut and cover approach could affect 110th Avenue between Main and NE 6th for approximately 3 ½ to 4 years, while the SEM approach would reduce tunnel construction to about 3 years and reduce surface impacts to limited areas on 110th Avenue NE and at the tunnel portals. The SEM approach would have about 60 percent less excavation, less truck hauling and therefore fewer truck trips. In addition, stockpiling excavated material at the portal(s) and at the staging area at 110th/NE 2nd Place would allow for trucking/hauling during convenient hours.

6.3 Potential Mitigation

Mitigation measures during construction or operations are the same as in the Final EIS with any of the potential refinements. Closure of the business garage access to the Abella property during construction would require replacement parking.

7. Nonmotorized Facilities

7.1 Operations

None of the potential refinements (with the exception of the SE 4th Open Suboption) would have any at-grade crossings outside of the station areas between I-90 and downtown Bellevue; this would eliminate the potential for nonmotorized conflicts with trains. At the East Main Station, the Selected Alternative and potential refinements would have two pedestrian crossings. In addition, a signalized pedestrian crossing across 112th Avenue SE between SE 4th Street and Main Street would be provided to allow pedestrians to access the station from the kiss-and-ride area. Overall, impacts from the potential refinements would be within the range of impacts for the Final EIS alternatives.

With the Shift Bellevue Way Option, the sidewalk on the eastside of Bellevue Way SE north of the South Bellevue Station would be replaced with a 14-foot multi-use path that would connect the South Bellevue Station to Bellevue Way SE and 112th Avenue SE to the north. This path would provide nonmotorized users with an off-

street pathway that is wider than the existing sidewalk along Bellevue Way SE. No impacts would occur with this option to the I-90 Multiuse Regional Trail, Mercer Slough Nature Park trail system, the Periphery Loop Trail, or any other nonmotorized facilities along Bellevue Way SE.

The Selected Alternative evaluated an option to close the east approach at SE 15th Street to the Bellefield Office Park, which would recirculate nonmotorized traffic entering or exiting the office park to the intersection of 114th Avenue SE and SE 8th Street. With the 112th Road Over Rail Option, SE 15th Street would be relocated, maintaining nonmotorized access to the Bellefield Office Park. Because the 112th Road Over Rail Option is located primarily on the west side of 112th Avenue SE, pedestrian access between the Surrey Downs neighborhood and 112th Avenue SE would be limited to two locations: one near the East Main Station south of SE 1st Street and one at SE 4th Street, except with the SE 4th Emergency Access Suboption where pedestrian access would be removed at SE 4th Street. Nonmotorized access to 112th Avenue SE would be closed at the stairway located south of the Surrey Downs Park and the two park entrances. Pedestrian access to Surrey Downs Park would be provided via a new park entrance from SE 4th Street or from 111 Avenue SE at either the north or south end of the park.

The pedestrian and bicycle access to Lincoln Plaza would be maintained, whereas with the Selected Alternative, the pedestrian and bicycle access to Lincoln Plaza on the east side of 112th Avenue SE would be closed to avoid a conflict with the proposed at-grade light rail crossing. This impact was minimized with an access available within 300 feet of the existing driveway on SE 8th Street.

Both the Selected Alternative and the two downtown Bellevue options (the NE 6th Station and Optimized Selected Alternative Station Options) would provide pedestrian access between the Bellevue Transit Center Station and the existing Bellevue Transit Center. For the Optimized Selected Alternative Station Option, the station entrance west of 110th Avenue NE would be closer to the Bellevue Transit Center than with the Selected Alternative, thereby improving the pedestrian connection to the Bellevue Transit Center Station. Improved crosswalks and wayfinding along 110th Avenue NE and 112th Avenue NE could be constructed to facilitate access to the NE 6th Station. With the NE 6th Station Option, the crosswalk at NE 6th Street would not need to be lengthened because the tunnel portal would be on the south side of the road.

Similar to the Selected Alternative, the Overlake Village Station and Overlake Transit Center Station pedestrian bridges would provide a direct connection to the State Route (SR) 520 multiuse trail and general nonmotorized access from the north side of SR 520.

7.2 Construction

Construction impacts would be within the range of impacts for the Final EIS alternatives and similar to the Selected Alternative, including closing the sidewalk on the eastern side of Bellevue Way SE to construct the Shift Bellevue Way Option and closing the sidewalk on one side of 112th Avenue SE to build the 112th Road Over Rail Option. Access to the Mercer Slough Nature Park would be limited to south of the South Bellevue Park and Ride.

The Selected Alternative considered an option to close 110th Avenue SE, just as for the Bellevue Transit Center Station Options. Also, similar to the Selected Alternative, sidewalks along 112th Avenue, Main Street, 110th Avenue NE, and NE 6th Street likely would remain open on one side during construction with the two downtown Bellevue options (the NE 6th Station and Optimized Selected Alternative Station Options). Pedestrian connections would be maintained at intersections to the extent possible. Pedestrian access to buildings would also be maintained.

Sound Transit is considering an alternative to the “cut and cover technique” called the “sequential excavation method” (SEM). Compared to the cut and cover technique, the SEM approach avoids some disruption to traffic on surface streets and reduces impacts to utilities. SEM is an approach where the tunnel is excavated from a single portal at Main Street and would require extended construction hours. Even with SEM, portions of the tunnel work would still require some cut-and-cover and therefore not all construction impacts on traffic can be avoided using this method.

A detour and possible temporary closure of the SR 520 multiuse trail would be required during construction of the pedestrian bridges, including lowering the trail by about 5 feet. This impact would be mitigated similar to other trail closures and is within the range of impacts of the Final EIS.

7.3 Potential Mitigation

No changes in mitigation during construction or operations are proposed with any of the potential refinements.

8. Freight Mobility and Access

The potential refinements would not change the impacts to freight mobility and access disclosed in the Final EIS. The East Link Extension would have an overall beneficial impact on trucks traveling on I-90, regardless of alternative.

9. Navigable Waterways

The potential refinements would not change the impacts to navigable waterways disclosed in the Final EIS as impacts to navigability are not anticipated.

10. Cumulative Impacts

The transportation analysis is a cumulative analysis based on the results of traffic and ridership modeling that incorporates past, funded, and approved future actions, as well as projected growth that would result from development in the region.

Following those assumptions, the City of Bellevue is proposing a High Occupancy Vehicle (HOV) Southbound Lane between 112th Avenue SE and the South Bellevue Park-n-Ride (where the HOV lane already exists to I-90). This is a new proposal since the publication of the Final EIS. As part of the East Link Selected Alternative, an HOV lane would be created in the eastern-most southbound lane of Bellevue Way SE between the South Bellevue Station and I-90, as described in the Final EIS. Providing this HOV lane from the South Bellevue Station north to the Bellevue Way SE “Y” with 112th Avenue SE would improve traffic operations compared with what is already provided in the Final EIS and this technical memorandum by providing additional capacity on Bellevue Way SE; also, it would not create any further transportation impacts not already disclosed. Intersection LOS results along Bellevue Way SE with a southbound HOV are provided in Table 6. A more detailed traffic analysis for the HOV lane will be conducted by the City of Bellevue.

11. References

City of Bellevue and Sound Transit. 2011. *Umbrella Memorandum of Understanding for Intergovernmental Cooperation between the City of Bellevue and the Central Puget Sound Regional Transit Authority for the East Link Project*. Prepared for the City of Bellevue, Bellevue, Washington and the Central Puget Sound Regional Transit Authority, Seattle, Washington. November 15.

Sound Transit, FTA, and WSDOT. 2011. *East Link Light Rail Transit Project Final Environmental Impact Statement*. Central Puget Sound Regional Transit Authority, Federal Transit Administration, and Washington State Department of Transportation. July.

ATTACHMENT A

Intersection Level of Service (LOS) Tables

TABLE 1

Future 2030 PM Peak-Hour Intersection LOS for SE 4th Emergency Access Suboption of the 112th Road Over Rail Option

Intersection	2030					
	No-Build Condition		Selected Alternative		Potential Refinements	
	LOS	Delay	LOS	Delay	LOS	Delay
112th Avenue SE and Bellevue Way SE	C	26	C	31	C	30
112th Avenue SE and SE 8th Street	C	22	C	25	C	28
SE 8th Street and 114th Avenue SE	B	19	C	20	C	23
Bellevue Way SE and 108th Avenue SE	B	18	B	20	C	23
112th Avenue SE and SE 15th Street ¹	F	135	B	12	A	5
112th Avenue SE and SE 6th Street	C	27	C	34	B	19
112th Avenue and Main Street	F	187	F	189	F	188
110th Avenue and Main Street	B	18	B	19	C	21
108th Avenue and Main Street	C	32	C	34	D	38

¹ This intersection is unsignalized in the no-build condition, signalized in the Selected Alternative and unsignalized with right-in/right-out movements with the 112th Road Over Rail Option.

Delay is measured by average seconds of delay per vehicle.

Bold type text indicates where intersections fail to meet City of Bellevue LOS standard of LOS E

TABLE 2

Future 2030 PM Peak-Hour Intersection LOS for SE 4th Open Suboption of the 112th Road Over Rail Option

Intersection	2030					
	No-Build Condition		Selected Alternative		Potential Refinements	
	LOS	Delay	LOS	Delay	LOS	Delay
112th Avenue SE and Bellevue Way SE	C	26	C	31	C	32
112th Avenue SE and SE 8th Street	C	22	C	25	C	28
SE 8th Street and 114th Avenue SE	B	19	C	20	C	23
Bellevue Way SE and 108th Avenue SE	B	18	B	20	C	20
112th Avenue SE and SE 15th Street ¹	F	135	B	12	A	5
112th Avenue SE and SE 6th Street	C	27	C	34	B	19
112th Avenue and Main Street	F	187	F	189	F	191
110th Avenue and Main Street	B	18	B	19	C	21
108th Avenue and Main Street	C	32	C	34	D	35

¹ This intersection is unsignalized in the no-build condition, signalized in the Selected Alternative and unsignalized with right-in/right-out movements with the 112th Road Over Rail Option.

Delay is measured by average seconds of delay per vehicle.

Bold type text indicates where intersections fail to meet City of Bellevue LOS standard of LOS E

TABLE 3

Future 2030 PM Peak-Hour Intersection LOS for Rail Under SE 4th Suboption of the 112th Road Over Rail Option

Intersection	2030					
	No-Build Condition		Selected Alternative		Potential Refinements	
	LOS	Delay	LOS	Delay	LOS	Delay
112th Avenue SE and Bellevue Way SE	C	26	C	31	C	32
112th Avenue SE and SE 8th Street	C	22	C	25	C	29
SE 8th Street and 114th Avenue SE (Bellefield Business Park)	B	19	C	20	C	22
Bellevue Way SE and 108th Avenue SE	B	18	B	20	C	20
112th Avenue SE and SE 15th Street ¹	F	135	B	12	A	5
112th Avenue SE and SE 6th Street	C	27	C	34	B	18
112th Avenue and Main Street	F	187	F	189	F	191
110th Avenue and Main Street	B	18	B	19	C	21
108th Avenue and Main Street	C	32	C	34	C	34

¹ This intersection is unsignalized in the no-build condition, signalized in the Selected Alternative and unsignalized with right-in/right-out movements with the 112th Road Over Rail Option.

Delay is measured by average seconds of delay per vehicle.

Bold type text indicates where intersections fail to meet City of Bellevue LOS standard of LOS E

TABLE 4

Future 2030 PM Peak-Hour Intersection LOS for NE 6th Station Option

Intersection	No-Build Condition		Selected Alternative		Potential Refinements	
	LOS	Delay	LOS	Delay	LOS	Delay
112th Avenue NE & NE 8th Street/I-405 SB Ramp	F	119	F	119	F	120
112th Avenue NE and NE 6th Street	C	27	C	35	D	38
112th Avenue NE and NE 4th Street	E	58	E	55	E	58
110th Avenue NE and NE 8th Street	F	120	F	124	F	126
110th Avenue NE and NE 6th Street	C	29	E	79	C	33
110th Avenue NE and NE 4th Street	E	63	E	59	E	62
108th Avenue NE and NE 8th Street	E	66	E	80	E	70
108th Avenue NE and NE 6th Street	C	24	C	24	C	22
108th Avenue NE and NE 4th Street	F	96	F	104	F	101

Delay is measured by average seconds of delay per vehicle.

Bold type text indicates where intersections fail to meet City of Bellevue LOS standard of LOS E

TABLE 5
2020 PM Peak-Hour Intersection LOS – Downtown Bellevue Construction

Intersection	2020					
	No-Build		Selected Alternative Construction Method		Optimized Selected Alternative Station and NE 6th Station Construction Method	
	LOS	Delay	LOS	Delay	LOS	Delay
112th Avenue NE & NE 8th Street/I-405 SB Ramp	F	89	F	127	F	128
112th Avenue NE & NE 6th Street	C	23	C	24	D	40
112th Avenue NE & NE 4th Street	D	48	F	114	F	99
112th Avenue NE & NE 2nd Street	C	34	F	121	D	50
112th Avenue & Main Street	F	117	F	206	F	211
110th Avenue NE & NE 8th Street	E	72	C	28	C	29
110th Avenue NE & NE 6th Street	B	18	E	61	D	43
110th Avenue NE & NE 4th Street	E	57	D	52	C	21
110th Avenue NE & NE 2nd Street	E	62	D	49	A	7
110th Avenue & Main Street	B	16	A	4	A	2
108th Avenue NE & NE 8th Street	D	38	E	66	E	66
108th Avenue NE & NE 6th Street	C	23	C	28	C	33
108th Avenue NE & NE 4th Street	E	68	F	100	F	105
108th Avenue NE & NE 2nd Street	C	32	D	43	D	41
108th Avenue & Main Street	C	24	E	64	E	55
106th Avenue NE & NE 8th Street	D	46	D	44	D	47
106th Avenue NE & NE 6th Street	C	21	D	43	D	37
106th Avenue NE & NE 4th Street	D	54	E	63	E	71
106th Avenue NE & NE 2nd Street	C	22	D	37	D	39
106th Avenue & Main Street	C	30	C	34	C	35

Delay is measured by average seconds of delay per vehicle.

Bold type text indicates where intersections fail to meet City of Bellevue LOS standard of LOS E

TABLE 6

Future 2030 PM Peak-Hour Intersection LOS for Shift Bellevue Way Option with Southbound HOV Lane

Intersection	2030					
	No-Build Condition		Selected Alternative		Potential refinements ¹	
	LOS	Delay	LOS	Delay	LOS	Delay
Bellevue Way SE and SE 30th Street	F	>300	A	7	A	7
Bellevue Way SE and South Bellevue P&R (S)	C	28	D	41	B	14
Bellevue Way SE and 112th Avenue SE/South Bellevue Park-and-Ride	D	55	D	51	C	23
Bellevue Way SE and South Bellevue P&R (N)	B	10	B	12	B	12
112th Avenue SE and Bellevue Way SE	C	26	C	31	D	36
Bellevue Way SE and 108th Avenue SE	B	18	B	20	C	21

¹ The traffic results for the Shift Bellevue Way Option would be similar to the Selected Alternative. The Potential refinements assume a southbound HOV lane is build on Bellevue Way between 112th Avenue SE and the South Bellevue Station.

Delay is measured by average seconds of delay per vehicle.

Bold type text indicates where intersections fail to meet agency LOS standards: Bellevue and WSDOT are LOS E.