

Chapter 9–Parking Supply

What is in this chapter?

This chapter describes the existing parking supply and the estimated parking demand and utilization to determine how the project could affect parking supply near the project site. This analysis addresses only those communities east of Lake Washington that surround the Medina to SR 202: Eastside Transit and HOV Project. These include Medina, Hunts Point, Clyde Hill, Yarrow Point, Kirkland, and Bellevue from NE Points Drive on the north to NE 28th Street on the south.

Exhibit 9-1 shows a map of these areas, parking lot locations, existing parking supply, and the potential effects of the Build Alternative. The following sections discuss the affected parking lots and the changes to each lot.

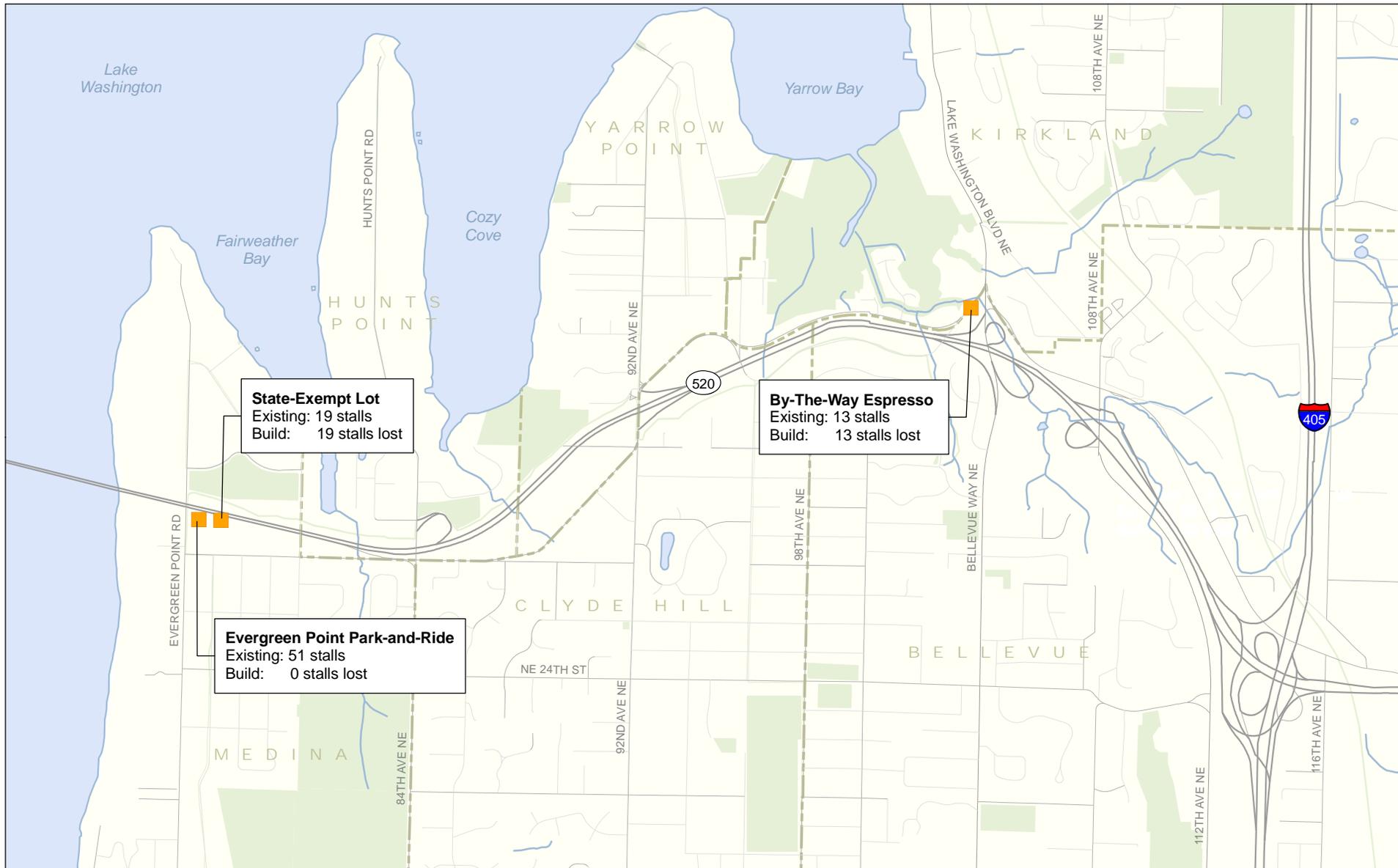
This parking analysis updates the SR 520 Draft EIS transportation discipline report. Updates are based on design refinements since the release of the Draft EIS. This analysis was performed by comparing the design footprint to aerial photography to determine changes, if any, to the previously determined parking effects.

How was parking supply information collected?

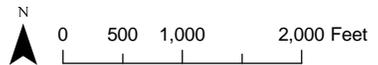
The SR 520 Draft EIS parking analysis considered existing supply, planning-level designs, field observations, and discussions with the project designers to estimate the number of affected parking spaces for the Build Alternative. The team collected supply-and-demand field data for each parking area expected to be affected. Parking demand was determined in the Draft EIS based on a survey in which parking utilization was measured hourly at each lot during the peak periods for a single weekday in February 2004.

The SR 520 Draft EIS parking analysis was updated to reflect the anticipated parking impacts resulting from construction of the Medina to SR 202: Eastside Transit and HOV Project. This update involved limited field verification, relying mostly upon data collected from previous efforts. Since this update includes a parking lot that was not identified in the Draft EIS, utilization field data were not available at that location.





■ Parking Area



Source: King County (2008) GIS Data (Streams, Streets, Water Bodies), CH2M HILL (2008) GIS Data (Parks).
Horizontal datum for all layers is NAD83(91); vertical datum for layers is NAVD88.

Exhibit 9-1. Potentially Affected Parking Areas
Medina to SR 202: Eastside Transit and HOV Project

How would the project affect parking in the corridor?

This section describes the existing parking spaces that would likely be affected by the Build Alternative and summarizes how the parking supply would be affected. Photo exhibits are included to provide an overall sense of the character of each parking area.

Three locations may be permanently affected by the Build Alternative. They are the Evergreen Point Park-and-Ride lot, the neighboring state-exempt parking lot that is only available to official state vehicles, and a lot associated with the By-the-Way Espresso stand and a vacant building. These lots are shown in Exhibit 9-1.

Exhibit 9-2 presents the parking supply, average number of spaces in use, estimated utilization rate, and the number of stalls expected to be affected by the Build Alternative.

Exhibit 9-2. Estimated Effects on Parking Supply in the Eastside Area

Location	Supply	Average Number of Spaces in Use	Utilization Rate	Affected Spaces
Evergreen Point Park-and-Ride Lot	51	46	90% ^a	0
State-Exempt Lot	19	1	5% ^a	19
By-the-Way Espresso & Closed Business	13	0	0% ^a	13

^a Utilization rate obtained by hourly field surveys in 2004.

Evergreen Point Park-and-Ride Lot (SR 520 and Evergreen Point Road, Medina)

Existing Conditions

This lot is east of Evergreen Point Road, just south of SR 520 in Medina, and currently contains 51 parking stalls. Sixteen of the parking stalls are on the north side of the lot and 35 are on the south side. According to King County Metro Park-and-Ride Utilization reports, demand at the lot averaged 46 spaces for the first 9 months of 2008, corresponding to a 90 percent use rate. However, use was higher in 2006, with utilization rates between 96 and 100 percent. Exhibit 9-3 shows a portion of the Evergreen Point Park-and-Ride lot.



Parking Effects

The Build Alternative is expected to maintain the existing number of parking spaces at a minimum, and may even provide additional spaces. Thus, there is no anticipated adverse long-term effect on parking at this location. Discussions are ongoing with the local community to determine whether additional spaces should be provided.

State-Exempt Lot (SR 520 near Evergreen Point Road, Medina)

Existing Conditions

This lot is on the east side of the Evergreen Point Park-and-Ride, just south of SR 520 in Medina. It is used only by State vehicles. Half of the parking stalls are on the north side of the lot and half are on the south side. The lot currently contains 19 parking stalls. Exhibit 9-4 shows the existing parking area, located beyond the metal-gate barrier, looking east.

Parking Effects

The Build Alternative is expected to eliminate the entire lot (all spaces). This is necessary to provide pedestrian access during construction to temporary bus stops east of this lot. Because the lot appears to be minimally used, the effect on parking supply would likely be negligible. Furthermore, current plans include a maintenance facility with a parking garage under the east bridge abutment. This facility would meet the parking needs currently served by this lot.

By-the-Way Espresso and Closed Business (Northeast Points Drive and Lake Washington Boulevard NE, Kirkland)

Existing Conditions

This lot is located south of Northeast Points Drive on the west side of Lake Washington Boulevard NE in Kirkland. The lot includes 13 parking stalls, with the By-the-Way Espresso stand located near the west end of the parking area and a closed business at the east end. Since the Draft EIS was published, this lot has been purchased. The building on the east end of the lot has been removed, though the espresso stand



Exhibit 9-3. Evergreen Point Park-and-Ride Lot



Exhibit 9-4. State-Exempt Lot—Looking East



continues to operate. Exhibit 9-5 shows the western section of the parking area, looking west.

Parking Effects

The lot has already been acquired and partially cleared. The Build Alternative will also require removal of the espresso stand. Current plans indicate use of this lot for drainage, so there would be no expected future demand for parking in this lot.

Bellevue College North Campus (Northup Way and 108th Avenue NE, Bellevue)

Existing Conditions

This lot, on the northwest corner of Northup Way and 108th Avenue NE in Bellevue, surrounds the north campus building of Bellevue College. The lot contains a total of 269 parking spaces, including parking under a portion of the building. Because this lot was not identified in the Draft EIS, demand and utilization rates were not previously estimated. Exhibit 9-6 shows a photograph of the parking lot looking west.

Parking Effects

The Build Alternative would include upgrades to Northup Way and 108th Avenue NE, which would encroach on the spaces in the southeast portion of this parking lot. It is expected that approximately 17 spaces on the south side would be affected. However, the parking spaces can be reconfigured to result in no net loss of parking at this site. The effects of the Build Alternative on parking at this site would be minor.



Exhibit 9-5. By-The-Way Espresso—Looking West



Exhibit 9-6. Bellevue College North Campus—Looking West



Chapter 10–Construction Effects

What is in this chapter?

This chapter identifies how construction of the Build Alternative would likely affect transportation in and near the project site. The results include effects to traffic on SR 520 and adjacent arterials, as well as potential effects to transit and nonmotorized facilities.

How were construction effects evaluated?

Transportation analysts used preliminary design and construction staging plans to evaluate the key construction activities that would affect traffic. The analysts conducted a quantitative analysis of local roadway operations using the Synchro traffic software described in Chapter 4. The local arterial traffic evaluation was based on base year 2008 traffic volumes during morning and afternoon peak-hour commute times.

Construction activities would not change freeway channelization from the existing configuration between 5 a.m. and 9 p.m. on weekdays. Because roadway configuration would not change and there would be no substantial reduction in traffic capacity, a quantitative analysis would have found no construction effects on freeway traffic. Therefore, this chapter describes only qualitative effects of freeway construction.

What assumptions were made about project construction?

Transportation analysts made assumptions regarding the following project elements:

- Construction phasing
- Freeway lane closures
- Freeway ramp closures
- Local arterial lane closures
- Haul routes
- Freeway transit stations



- Construction staging areas
- Construction duration
- Truck access to construction sites

The following sections discuss these assumptions in more detail.

Construction Phasing

SR 520 construction work was organized into five phases to evaluate its likely effects on transportation facilities. Construction activities in each phase were further divided into stages. This phasing strategy is for planning purposes and may be refined during the design process. Final construction phasing would be determined by the contractor, with approval from WSDOT.

Exhibit 10-1 shows the potential phasing strategy and timeline. Most work on the freeway would occur during Phases 2, 3, and 4, including construction of the lids, bridges, fish passage culverts, and other roadway elements. Each phase of project construction would affect traffic differently, as summarized below:

- During Phases 1 and 2, the existing traffic lanes would be maintained in both eastbound (two general-purpose lanes) and westbound (two general-purpose lanes and one HOV lane) directions of travel.
- Phase 3 would shift eastbound traffic to a newly constructed outside roadway (south side) and westbound traffic to the existing eastbound roadway.
- Phase 4 would shift westbound traffic to the newly constructed outside roadway (north side), while maintaining eastbound traffic on the outside (south side) roadway.
- Phase 5 would shift traffic to the final alignment.

Freeway Lane Closures

Transportation analysts made the following assumptions about freeway operations during construction:

- Two eastbound lanes would remain open throughout construction from 5 a.m. to 9 p.m. weekdays.



Quarter	1	2	3	4	5	6	7	8	9	10	11	12
	Phase 1		Phase 2					Phase 3		Phase 4		Phase 5
SR 520 Mainline Construction	Design, utility coordination, and fish passage work.		Construct lids, crossing structures, walls and roadways (outside of the existing roadway), and on- and off-ramps.					Construct westbound outside and start eastbound inside.		Construct eastbound and westbound inside.		Punch list and landscaping work.
SR 520 Mainline Traffic	Maintain existing traffic lanes in both eastbound and westbound directions.		Maintain existing traffic lanes in both eastbound and westbound directions. Potential modifications to lane and shoulder widths.					Shift eastbound traffic to outside and westbound traffic to existing eastbound lanes.		Keep eastbound traffic to outside. Shift westbound traffic to outside.		Shift traffic to final alignment.
SR 520 Overcrossing at 108th Avenue NE			<div style="border: 1px solid black; padding: 5px; text-align: center;"> Stage A Construct new westbound overcrossing and westbound on- and off-ramps. </div>					<div style="border: 1px solid black; padding: 5px; text-align: center;"> Stage B Paving and striping. </div>		<div style="border: 1px solid black; padding: 5px; text-align: center;"> Stage C Demolish westbound structure. Construct direct access. </div>		
SR 520 Undercrossing at Bellevue Way NE			<div style="border: 1px solid black; padding: 5px;"> Stage A Shift traffic east, all on northbound structure. Demolish west bridge. Construct west portion of lid, eastbound to southbound Bellevue Way off-ramp, southbound Bellevue Way to westbound on-ramp and temporary signals at ramps. </div>			<div style="border: 1px solid black; padding: 5px;"> Stage B Shift traffic west to new structure (half-diamond interchange configuration). Demolish existing east bridge. Construct remainder of new lid structure. Paving and striping. </div>						
92nd Avenue NE Lid and Freeway Transit Station			<div style="border: 1px solid black; padding: 5px;"> Stage A Construct east portion of lid and ramps. Shift transit flyer stops. </div>		<div style="border: 1px solid black; padding: 5px;"> Stage B Shift traffic east on new lid. Demolish existing bridge. Construct remainder of lid. Paving and striping. Shift transit stops. </div>				<div style="border: 1px solid black; padding: 5px;"> Stage C Construct new freeway transit station. </div>			
84th Avenue NE Lid			<div style="border: 1px solid black; padding: 5px;"> Stage A Construct west portion of lid and new westbound on-ramp. </div>	<div style="border: 1px solid black; padding: 5px;"> Stage B Shift traffic west on new lid (half-diamond interchange configuration). Demolish existing bridge. Construct remainder of lid and eastbound off-ramp. </div>				<div style="border: 1px solid black; padding: 5px;"> Stage C Paving and striping. </div>				
Evergreen Point Road Lid and Freeway Transit Station			<div style="border: 1px solid black; padding: 5px;"> Stage A Construct east portion of lid. Shift transit stops. Demolish pedestrian bridge. </div>		<div style="border: 1px solid black; padding: 5px;"> Stage B Shift traffic east on new lid. Demolish existing bridge. Construct remainder of lid. Shift transit stops. </div>			<div style="border: 1px solid black; padding: 5px;"> Stage C Paving and striping. </div>	<div style="border: 1px solid black; padding: 5px;"> Stage D Construct new freeway transit station. </div>			

Note: Fish passage culvert work would begin in Phase 1 and may conclude as late as Phase 5. In-water work for fish passage culverts occurs during the months of July and August, with the possibility of extending 2 weeks at either end.



Exhibit 10-1. Potential Construction Phasing Strategy and Timeline

Medina to SR 202: Eastside Transit and HOV Project

- Two westbound general-purpose lanes and one westbound HOV lane would remain open throughout construction from 5 a.m. to 9 p.m. weekdays.
- Full weekend closure hours and dates would be restricted to special events and coordinated with closures that might occur on other freeway projects.
- Demolition of existing sign bridges and installation of new sign bridges would probably be completed with rolling slowdowns or during the full-weekend freeway closures scheduled for other construction activities.

Freeway Ramp Closures

Transportation analysts made the following assumptions about freeway ramp operations during construction:

- Ramps would remain open from 5 a.m. to 9 p.m. weekdays.
- No more than one on-ramp and one off-ramp at a time would be closed in each direction of travel.
- Detour routes would be provided during ramp closures.

Closures of freeway ramps would likely be required for the following construction activities:

- Ramp paving
- Ramp striping
- Installation of temporary barrier on the ramps
- Traffic shifts on the ramps
- Construction of fish passage culverts
- Construction of adjacent bridge abutments and walls
- Ramp realignments

Ramp closures would be restricted to nighttime hours between 9 p.m. and 5 a.m. on weekdays. Advanced notification would be provided prior to any ramp closure. Designated detour ramps would be signed. Exhibit 10-2 shows construction activities and probable detour routes for ramp closures.



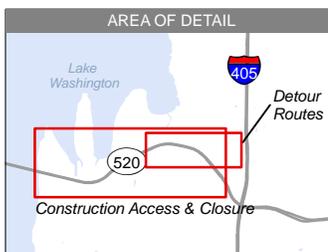
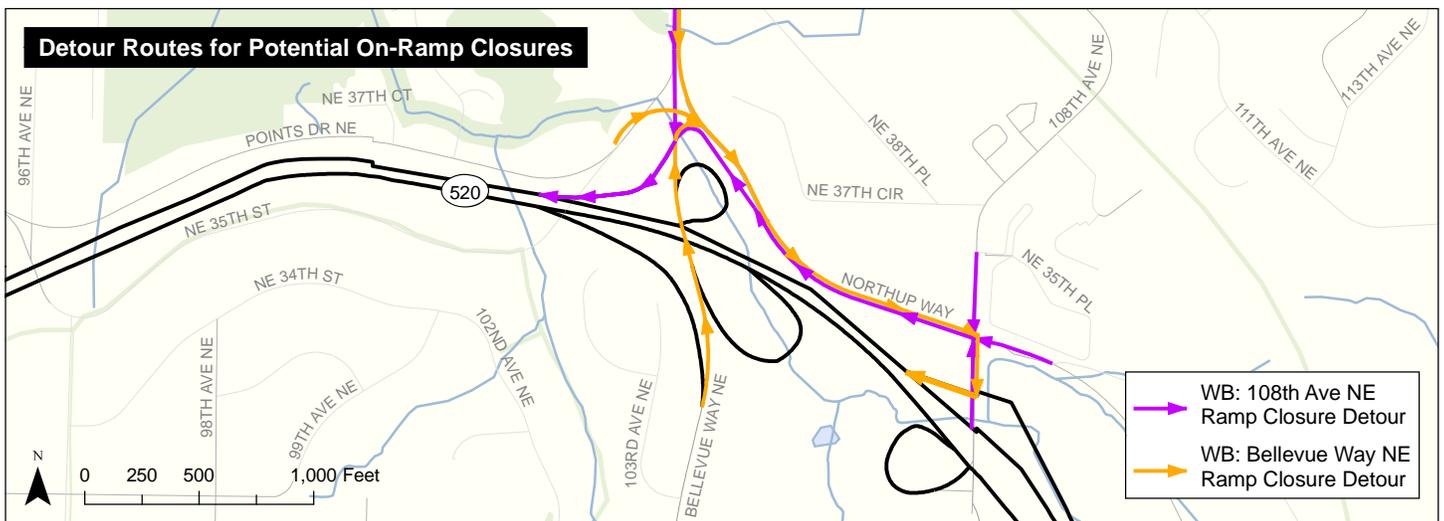
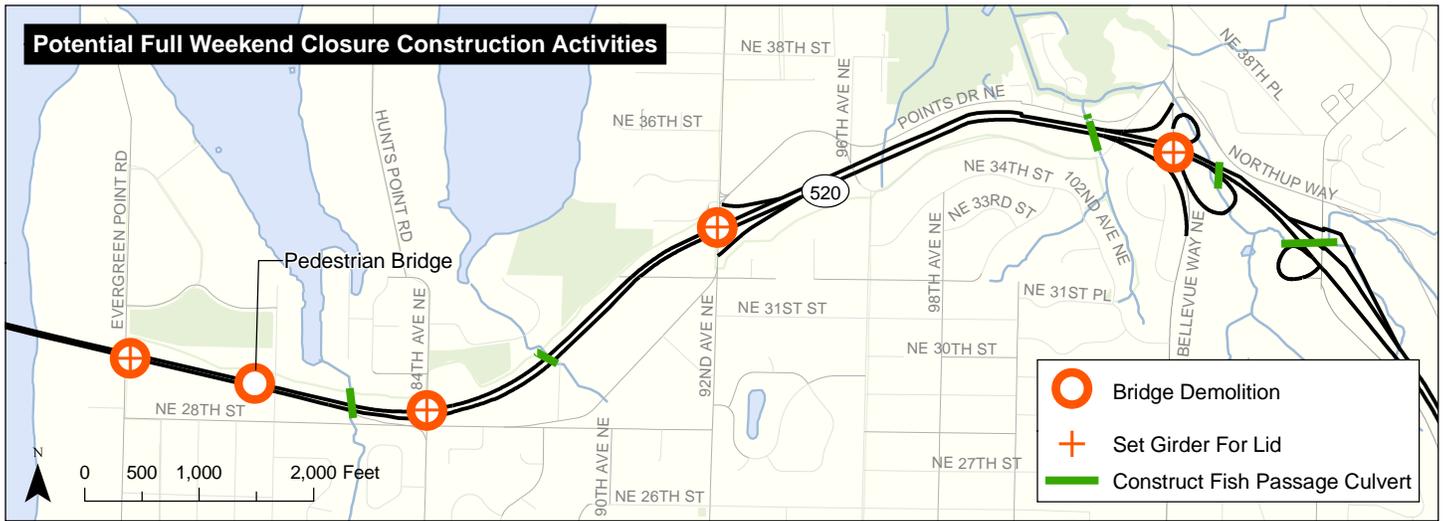
Did you know?

A *sign bridge* is a structure with the primary purpose of supporting overhead signs that is independent of a regular roadway bridge.

What Is a Rolling Slowdown?

A rolling slowdown is a form of traffic control commonly practiced by the Washington State Patrol, contractors, and highway maintenance staff. Traffic control vehicles enter the roadway upstream and form a moving blockade, which reduces traffic speeds and creates a large gap in traffic, or a clear area, allowing very short-term work to be completed without closing the roadway.





Source: King County (2008) GIS Data (Streams, Streets, Water Bodies), CH2M HILL (2008) GIS Data (Parks). Horizontal datum for all layers is NAD83(91); vertical datum for layers is NAVD88.



Exhibit 10-2. Construction Effects

Medina to SR 202: Eastside Transit and HOV Project

Local Arterial Lane Closures

The project team made the following assumptions about local street operations during construction.

- Under typical construction conditions on Bellevue Way NE, there would be two lanes in each direction, plus one northbound auxiliary lane where Bellevue Way crosses SR 520. Construction of the Build Alternative may require short-term lane closures that reduce each direction by one lane, leaving a minimum of two northbound lanes and one southbound lane open during construction. Any additional lane closures would occur during off-peak hours. Traffic would be detoured to 108th Avenue NE/112th Avenue NE during any required nighttime, full-street closures. Pedestrian walkways along the arterial would be maintained throughout construction.
- The 108th Avenue NE arterial, where it crosses under SR 520, would remain open during construction of the proposed SR 520 bridge structure. Any lane closures would occur during off-peak hours. Traffic would be detoured to Bellevue Way NE during any required nighttime, full-street closures. Construction restrictions would be in place to prevent the closure of Bellevue Way NE and 108th Avenue NE at the same time. Sidewalks along the arterial would be maintained throughout construction.

Potential Truck Routes

Most vehicles used for construction activities would access the work site directly from the freeway and freeway ramps. Access points from the freeway, consisting of an opening in the temporary concrete barrier, would be provided where there are no conflicting on- and off-ramps and where sufficient acceleration and deceleration lengths are available for construction vehicles.

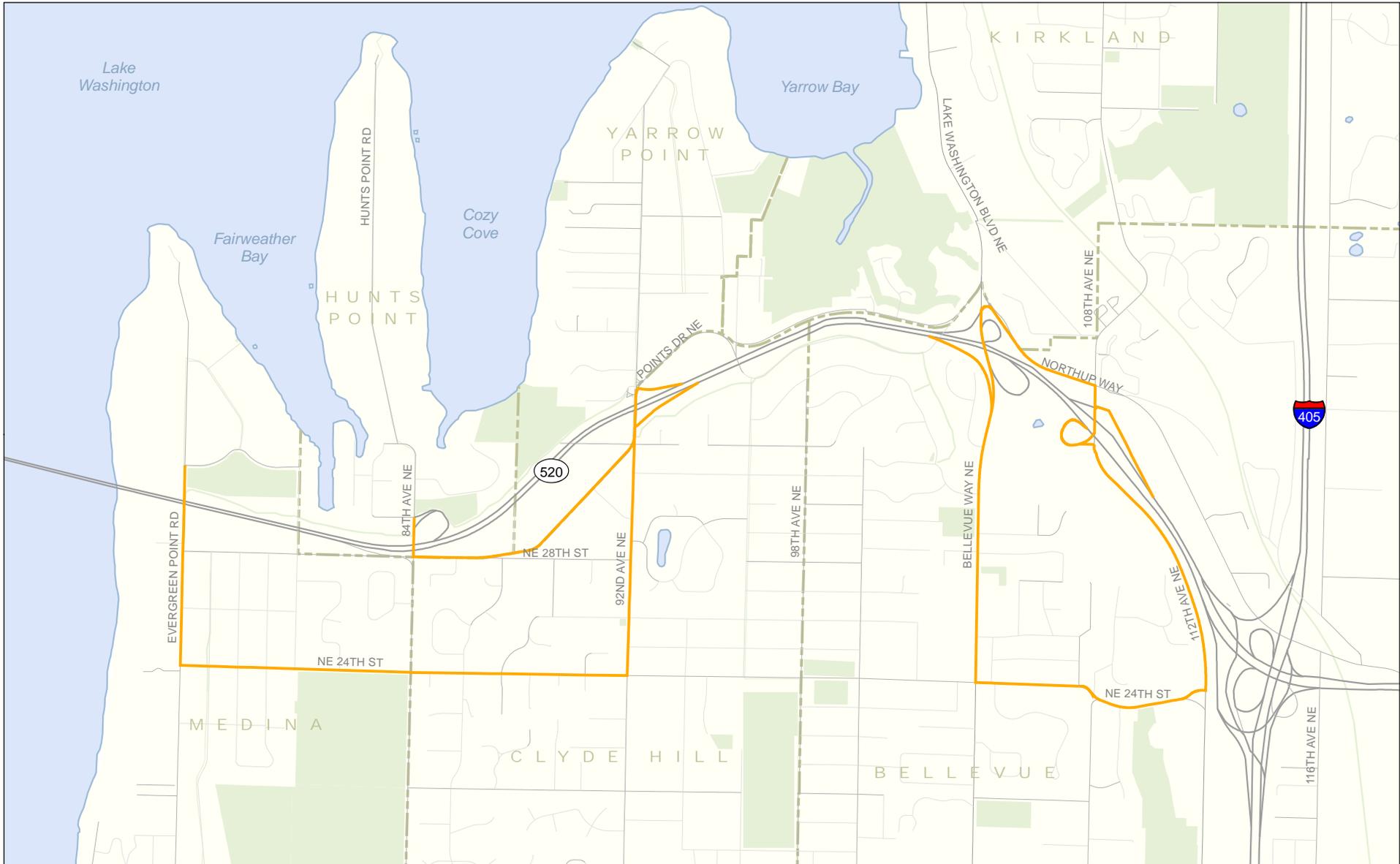
Due to limited accessibility of the freeway lid work sites, there would be construction-related truck traffic on some arterial roadways.

Exhibit 10-3 shows the potential construction haul routes on the local streets.

Freeway Transit Stations

Closure of transit stations for short durations may be required during construction of the proposed project. Construction restrictions would be





— Potential Haul Routes



Source: King County (2008) GIS Data (Streams, Streets, Water Bodies), CH2M HILL (2008) GIS Data (Parks). Horizontal datum for all layers is NAD83(91); vertical datum for layers is NAVD88.

Exhibit 10-3. Potential Arterial Truck Routes (Limited Construction Activities Only)

Medina to SR 202: Eastside Transit and HOV Project

in place to prevent closure of both the Evergreen Point Road and 92nd Avenue NE Freeway Transit Stations at the same time.

Construction Duration

Exhibit 10-1 provides a potential construction phasing strategy and timeline. Exhibit 10-4 shows the estimated duration of each construction activity.

Exhibit 10-4. Estimated Construction Durations and Daily Truckloads on Arterial Streets

Construction Activity ^a	Estimated Duration (Months) ^b	Estimated Daily Truckloads		Notes
		Average	Peak	
Evergreen Point Road Lid Structure and Freeway Transit Flyer Station	27	10 – 20	40 – 50	Truck access primarily from SR 520 mainline. Truck access on arterials for limited activities only.
84th Avenue NE Lid Structure	23	10 – 20	40 – 50	Truck access primarily from SR 520 mainline. Truck access on arterials for limited activities only.
92nd Avenue NE Lid Structure and Freeway Transit Flyer Station	25	10 – 20	40 – 50	Truck access primarily from SR 520 mainline. Truck access on arterials for limited activities only.
SR 520 Undercrossing at Bellevue Way NE	24	5 – 10	20 – 30	Truck access primarily from SR 520 mainline. Truck access on arterials for limited activities only.
SR 520 Overcrossing at 108th Avenue NE	26	5 – 10	20 – 30	Truck access primarily SR 520 mainline. Truck access on arterials for limited activities only.

^a Some construction activities would overlap.

^b Months of estimated duration may not be sequential. See Exhibit 10-1.

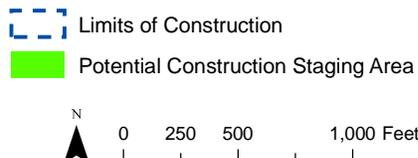
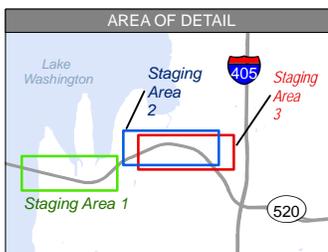
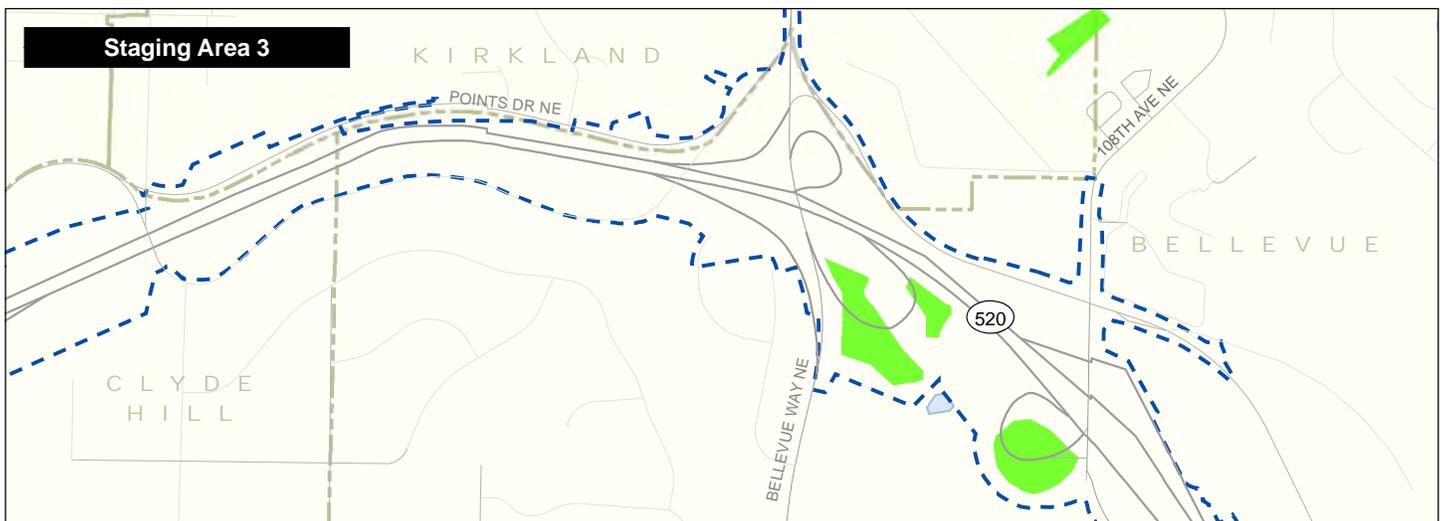
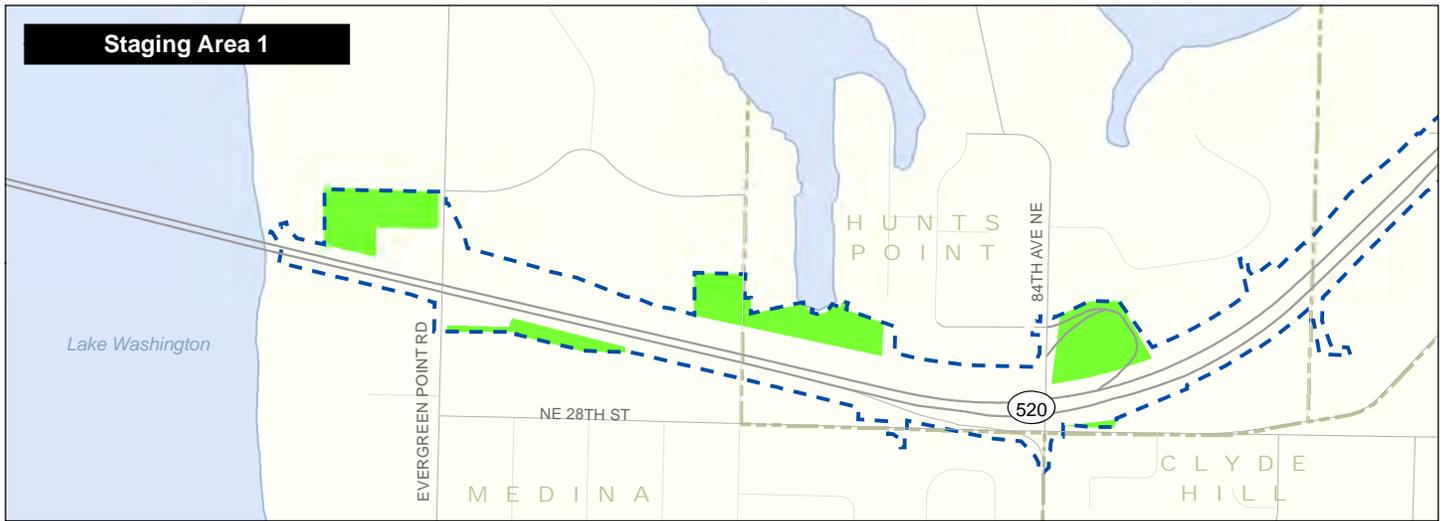
Construction Staging Areas

It is anticipated that all construction staging areas would be within the limits of the project site. Exhibit 10-5 illustrates the potential staging areas. Parking for construction staff has not been specifically identified and may lie outside of the project footprint.

Truck Access to Construction Sites

Construction-related truck traffic would use the arterial roadways to access work sites that cannot be accessed directly from the freeway. Exhibit 10-2 shows the potential construction site access points to and from SR 520.





Source: King County (2008) GIS Data (Streams, Streets, Water Bodies), CH2M HILL (2008) GIS Data (Parks). Horizontal datum for all layers is NAD83(91); vertical datum for layers is NAVD88.



Exhibit 10-5. Construction Staging Areas of Eastside Projects

Medina to SR 202: Eastside Transit and HOV Project

What are the anticipated construction effects?

Freeway Lane Closures

Multiple full-weekend closures of SR 520 are expected over the duration of the project. Full weekend and/or nighttime closures are expected for the following construction activities:

- Demolish the existing bridge structures at Evergreen Point Road, Pedestrian Bridge, 84th Avenue, 92nd Avenue, and Bellevue Way NE (two bridge structures).
- Construct five fish passages that cross SR 520 (i.e., culverts A and B west of 92nd Avenue and culverts C, E, and F between 92nd Avenue and 108th Avenue). Construction of the sixth fish passage—Culvert H across SR 520 east of 108th Avenue—would be restricted from using a full closure.
- Set girders for the new lids/bridges at Evergreen Point Road, 84th Avenue, 92nd Avenue, and Bellevue Way NE.
- Pave tie-in and overlap at existing floating bridge approach to Evergreen Point Road and shift traffic to final alignment.
- Install new utility crossings.

Some of these construction activities likely would occur at the same time to reduce the number of full-weekend closures.

When full closures of SR 520 are required west of 92nd Avenue NE, the project would use the same closure plan that WSDOT uses for its annual SR 520 bridge maintenance and inspection. The plan closes SR 520 from Montlake Boulevard on the west side of Lake Washington to 92nd Avenue NE on the east side of the lake. A similar plan would be used for full closures between 92nd Avenue NE and 108th Avenue NE. SR 520 would be closed from Montlake Boulevard to 108th Avenue NE. There would be construction restrictions to prevent full closure of SR 520 east of 108th Avenue NE. The I-90 bridge is the primary cross-lake detour route for an SR 520 closure.

Construction Trucks on Arterial Streets

Construction on surface streets and the lid structures would require truck traffic on arterial roadways because the work sites would not be



accessible from the freeway. Up to 100 trucks per day could use arterials during peak construction. Exhibit 10-5 shows average and peak truckloads for arterial streets, and the duration of the related construction activities. Based on a typical hauling rate during an 8-hour day, there could be 12 trucks per hour – or approximately 1 truck every 5 minutes – during the most active construction periods. These active construction periods would likely last for 1 to 3 weeks and may occur several times throughout the duration of the project. One truck every 5 minutes would not substantially affect traffic on the arterial streets. Exhibit 10-2 shows the potential construction access points and Exhibit 10-3 shows potential truck traffic routes.

Lid and Interchange Construction

Construction staging would minimize traffic effects caused by demolition of existing bridge structures and construction of new freeway lids. Each lid structure would have a set of site-specific staging plans to maintain traffic flow on the arterials crossing the freeway while maintaining access to the freeway ramps throughout construction, where possible.

Traffic would be maintained on the Evergreen Point Road, 84th Avenue NE, and 92nd Avenue NE bridges at all times. Construction activities may require one-lane traffic on the two-lane arterials, using flaggers for traffic control. This may affect traffic briefly during off-peak hours. The speed limit may be reduced through the work zone. Pedestrian walkways along arterials would be maintained throughout construction. The following sections provide more detail on the construction effects at each interchange.

SR 520 Undercrossing Construction at Bellevue Way NE

New facilities would be constructed in stages in order to maintain traffic through the SR 520/Bellevue Way NE interchange. (See Exhibit 10-1 for construction phasing and staging on Bellevue Way NE.) The staging strategy would shift all freeway traffic onto the existing northbound SR 520 bridge structure during Stage A. Exhibit 10-6 shows the existing configuration of Bellevue Way NE, as well as its configuration during Stages A and B. The existing configuration of Bellevue Way NE is two southbound and three northbound lanes, including one ramp auxiliary lane. The existing northbound bridge structure can accommodate three lanes and one sidewalk. During Stage A, one northbound and one southbound lane would be



Did you know?

The eastern-most lane on the Bellevue Way NE bridge structure is referred to as an add/drop lane because it adds (begins) as the SR 520 eastbound off-ramp and drops (ends) as the SR 520 westbound on-ramp.



eliminated. The reduced number of lanes over the freeway would not affect the lane configuration or traffic operations at the Bellevue Way NE/Northrup Way signalized intersection.

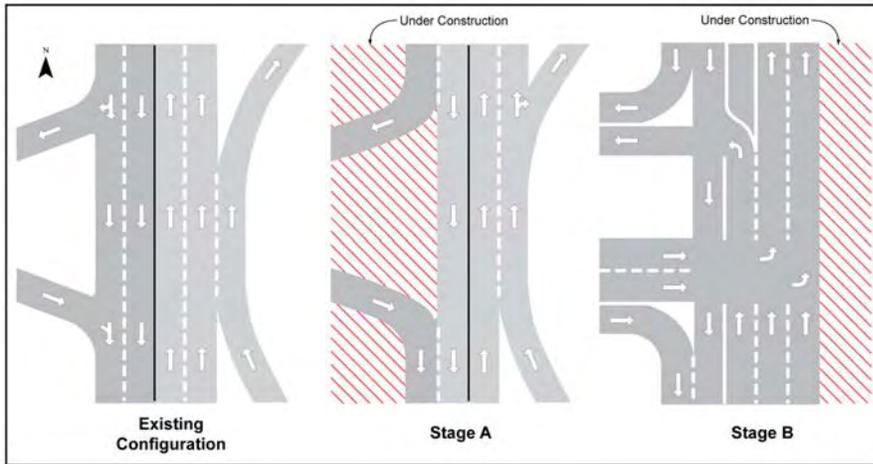


Exhibit 10-6. Potential Bellevue Way NE Bridge Staging Strategy Diagram

The only expected increase in congestion on local streets may occur in the northbound direction of Bellevue Way NE, as traffic merges from two lanes down to one immediately south of the construction area. This northbound congestion would be most likely to occur during the afternoon peak hour when traffic volumes are highest, at 1,330 vehicles per hour (vph). The morning peak hour northbound traffic volume is 650 vph and is not likely to become congested.

During Stage B, traffic would shift west to the new bridge structure, which would be able to accommodate four lanes and one sidewalk. During this stage, the ramps on the east side of Bellevue Way NE would be closed. Traffic signals would be installed at the ramps on the west side of Bellevue Way NE in a half-diamond interchange configuration. Timing of the new signals would be coordinated with the existing signal at Northrup Way to maintain traffic flow along Bellevue Way NE. The speed limit may be reduced through the work zone. Exhibit 10-7 shows intersection operations in terms of level of service (LOS) and estimated delay time during Stage B, as well as existing conditions.



Exhibit 10-7. Bellevue Way NE Construction (Stage B) Intersection Operations

Intersection	Morning Peak Hour				Afternoon Peak Hour			
	Existing		Stage B		Existing		Stage B	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Bellevue Way NE/Lake Washington Blvd & Northup Way/Points Drive	C	30	E	59	D	39	D	40
Bellevue Way NE & Westbound On-Ramp	n/a	n/a	A	1	n/a	n/a	A	7
Bellevue Way NE & Eastbound Off-Ramp	n/a	n/a	B	16	n/a	n/a	C	21

If full nighttime street closure is required, advance warning and detours would be provided on 108th Avenue.

The on-ramp from southbound Bellevue Way NE to westbound SR 520 would be closed for 2 to 3 months during Stage A to realign the ramp for the half-diamond interchange configuration. (See Exhibit 10-3 for the detour route to the 108th Avenue westbound on-ramp.) Traffic that currently uses the westbound on-ramp at Bellevue Way NE would be detoured during ramp closure. The estimate for traffic volumes that would be detoured is 510 vph in the morning peak hour and 610 vph in the afternoon peak hour. When combined with the traffic regularly traveling on 108th Avenue, detoured traffic would affect the signal operations as shown in Exhibit 10-8.

Exhibit 10-8. Southbound Bellevue Way NE Westbound On-Ramp Closure Detour Intersection Operations

Intersection	Morning Peak Hour				Afternoon Peak Hour			
	Existing		Detour		Existing		Detour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Bellevue Way NE/Lake Washington Blvd & Northup Way/Points Drive	C	30	D	51	D	39	F	111
108th Avenue & Northup Way	D	44	E	55	D	54	E	66
108th Avenue & Westbound Ramps	C	28	C	26	C	26	D	38



The most substantial effect to the intersection operations would occur at the Bellevue Way NE and Northup Way intersection during the afternoon peak hour. Intersection operations would degrade from LOS D to F because southbound vehicles destined for the westbound on-ramp would detour to Northup Way. This detour would more than double the volume of southbound, left-turning vehicles.

SR 520 Overcrossing Construction at 108th Avenue NE

The westbound on-ramp at 108th Avenue NE may be closed for 6 to 9 months during Phase 1 or 2 to construct the west abutment of the new SR 520 westbound overcrossing bridge structure and the fish passage culvert under the ramp. During this period, traffic would be detoured to the westbound on-ramp at Bellevue Way NE (Exhibit 10-3). The volume of that detoured traffic would be 220 vph in the morning peak hour and 370 vph in the afternoon peak hour. When combined with the existing traffic, detoured traffic would affect the signal operations along the detour route. Exhibit 10-9 shows intersection operations during this work, along with existing conditions.

Exhibit 10-9. 108th Avenue Westbound On-Ramp Closure Detour Intersection Operations

Intersection	Morning Peak Hour				Afternoon Peak Hour			
	Existing		Detour		Existing		Detour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
108th Avenue & Westbound Ramps	C	28	C	26	C	26	C	27
108th Avenue & Northup Way	D	44	D	46	D	54	E	62
Bellevue Way NE/Lake Washington Blvd and Northup Way/Points Drive	C	30	E	72	D	39	E	76

Regardless of ramp closures, traffic would be maintained on 108th Avenue NE through most of the construction periods. Lane closures may briefly affect traffic during off-peak hours. In the event that a full nighttime street closure is required, advanced warning and detours on Bellevue Way NE would be provided. The speed limit may be reduced through the work zone.



Freeway Transit Stations

Both the Evergreen Point Road and 92nd Avenue NE Freeway Transit Stations would remain in place during construction. Construction may require the closure of the transit stations for short durations. However, construction restrictions would be in place to prevent closure of both transit stations at the same time.

At the Evergreen Point Road Transit Station there are approximately 450 westbound and 60 eastbound boarding and alighting passengers in the morning peak period and 100 westbound and 270 eastbound in the afternoon peak period. At the 92nd Avenue NE Transit Station there are approximately 80 westbound and 20 eastbound boarding and alighting passengers in the morning peak period, and 30 westbound and 80 eastbound in the afternoon peak period.

Most of the activity at these stops is due to transfers between SR 520 bus routes. These transfers would shift to the adjacent transit station when one is closed. Passengers departing from or destined to one of these stops would have to use an adjacent transit station during temporary closures. The 92nd Avenue NE Freeway Transit Station would be improved to accommodate more buses before the Evergreen Point Road Transit Station is closed. A peak-hour shuttle service may be considered between the Evergreen Point Road and 92nd Avenue NE Freeway Transit Stations during closures.

Nonmotorized Facilities

The following nonmotorized facilities would be affected on a short-term basis during construction:

- Points Loop Trail – Evergreen Point Road to 92nd Avenue NE on the north side of SR 520
- Points Drive NE (which is commonly used by bicyclists) – 92nd Avenue NE to Bellevue Way NE on the north side of SR 520
- Freeway Crossings – Evergreen Point Road bridge sidewalk, pedestrian bridge (near 79th Avenue), 84th Avenue NE bridge sidewalk, 92nd Avenue NE bridge sidewalk, Bellevue Way NE bridge sidewalk, and 108th Avenue NE sidewalk
- Freeway Transit Stations – Evergreen Point Road and 92nd Avenue NE



project. Pedestrians currently using this bridge would need to use an alternative crossing, such as Evergreen Point Road or 84th Avenue NE. In the event that a short-term closure of either of these crossings is required, a temporary ADA-compliant detour route around the construction activity would be provided so that effects on these facilities and their users would be minimal.

