



I-5/Surface/Transit Hybrid Scenario

WSDOT, King County, and the City of Seattle are working together to find a solution for the Alaskan Way Viaduct and Seawall's central waterfront section. After developing and evaluating eight scenarios, or comprehensive solutions, for the central waterfront, the three transportation agencies created two hybrid scenarios that combine the most promising components of the earlier scenarios. These hybrids include not only investments on the central waterfront, but also investments in I-5, transit, surface streets, and demand management. Further analysis will be done on investigating a bored bypass tunnel.

Governor Christine Gregoire, King County Executive Ron Sims, and Seattle Mayor Greg Nickels are committed to reaching agreement on a solution by the end of 2008, and to begin taking down the central section of the viaduct in 2012. Regardless of what solution is chosen, we are moving forward to remove or repair about half of the viaduct in the south and north ends.

The following describes one of the two hybrid scenarios. The other is an SR 99 elevated bypass hybrid scenario.

What is the I-5/surface/transit hybrid scenario?

This scenario would create a pair of north and southbound one-way streets, called a couplet, along the waterfront. Alaskan Way would become a one-way southbound street with three lanes and a bike lane. Starting near Yesler Way, Western Avenue would become a one-way northbound street with three lanes and a bike lane. It would connect to the Battery Street Tunnel at a signalized intersection at Battery Street.

The street grid north of the Battery Street Tunnel would be reconnected with signalized intersections on Aurora Avenue. Examples of other surface street changes include new transit lanes on Madison, Stewart, Olive and Howell streets, among others, and converting Third Avenue to transit-only all day in downtown. Mercer Street would become two-way between I-5 and Elliott Avenue. Sixth Avenue



Aerial view near Victor Steinbrueck Park looking south.

would also become two-way between Westlake Avenue and Denny Way, with a new extension to Mercer Street.

At the south end, the couplet would connect to the new south end project at S. King Street. The Spokane Street Viaduct would also be widened and an off-ramp would be built at Fourth Avenue S.

Transit improvements include more all-day service than the elevated hybrid scenario. This would include increased service on Metro's RapidRide routes for Ballard/Uptown, Aurora Avenue and West Seattle and new RapidRide routes on Delridge Way and Lake City Way. The waterfront streetcar would be replaced with a new First Avenue line between King Street and Seattle Center. Park and rides would be expanded in Burien, White Center and Shoreline. The Rapid Trolleybus Network would be expanded with new connections such as Madison Park to Colman Dock, Queen Anne to Capitol Hill, and Beacon Hill to Capitol Hill. Moderate investment would be made in other express and local routes in Seattle.

Changes to I-5 would allow for more efficient operations through downtown. Northbound, a new lane would be created between Seneca Street and SR 520 using the existing shoulder of the highway. This new lane would be managed and the Cherry Street on-ramp would be closed at night. Other improvements include allowing general purpose traffic to use the southbound HOV lane between Mercer Street and S. Spokane Street during peak periods, automating the express lane switch-over, converting the Stewart Street express lane ramp to HOV only, converting the Cherry Street and Columbia Street express lane ramps to general purpose, and implementing additional active traffic management.

A number of transportation policies and incentives would be introduced to change how people travel. These would include a parking management system; smart, or adaptive, traffic signals; and increased incentives for alternative commutes.

Why is this scenario being considered?

This alternative is put forward for further consideration as it offers a lower-cost SR 99 option that maintains the economic vitality of the city and region while reconnecting the city's historic waterfront with downtown. System-wide improvements maintain regional traffic flows even with expected population growth. Removal of the viaduct in the existing SR 99 corridor creates a unique opportunity to re-envision the city's waterfront, providing quality open space, reducing noise impacts and improving views from downtown and along the waterfront.

This alternative has the lowest construction impacts to the waterfront, and it is expected to have no long-term economic impacts within the waterfront and region. However, there will likely be changes to local businesses as a result of change in transportation access. Travel times on the SR 99 corridor through the central waterfront would take five to 10 minutes longer than the bypass scenarios and 10 to 15 minutes more than today. Most trips to or through the Center City would have minimal changes in travel time. Other advantages include:

- It is a low cost SR 99 option compared to the bypass options studied.

- Substantial improvements to I-5 expected to improve functionality of that critical highway, maintaining primary thru-corridor freight route.
- Substantial transit improvements would improve overall system capacity and reduce use of single-occupancy vehicles.
- Creates a 104-foot-wide promenade along the waterfront.

How much will it cost?

	Capital cost (escalated to year of expenditure)
SR 99 Alaskan Way/Western Avenue couplet and seawall replacement	\$ 929 million
Changes to I-5	\$ 553 million
Changes to city surface streets	\$ 216 million
Transit improvements	\$ 476 million
Transportation policies and management	\$ 37 million
Scenario total	\$ 2.2 billion
Construction traffic mitigation	\$ 30 million
Alaskan Way Viaduct’s Moving Forward projects and prior program expenditures	\$ 1.1 billion
Alaskan Way Viaduct and Seawall Replacement Program total	\$ 3.3 billion

Note: Total annual operating costs for this scenario would be \$55 million in 2008 dollars.

What are the potential issues that will need further analysis?

- Additional funding necessary.
- Changes to Western Avenue near Pike Place Market.
- Efficient movement of freight through city center.
- Managing traffic during stadium events.
- Managing traffic near the cruise ship terminals.
- Parking loss partially replaced by 300-space joint use facility on central waterfront.
- Access from West Seattle to downtown.

Further work on the bored bypass tunnel

The bored tunnel was not carried forward due to its high cost. However, it does have advantages associated with avoiding some of the construction on the central waterfront. The agencies will continue to investigate the costs of the bored tunnel as a future project that could be constructed if the I-5/surface/transit hybrid alternative is agreed upon.