

The bored tunnel will be two lanes in each direction with shoulders on each side.

## All tunnels are not the same: SR 99 deep bored tunnel vs. the waterfront tunnel

WSDOT, King County and the City of Seattle plan to replace the central waterfront portion of the Alaskan Way Viaduct and Seawall with an approximately 1.7 mile-long deep bored tunnel beneath downtown, a new waterfront surface street, transit investments, and downtown and waterfront city street improvements.

While this bored tunnel and the cut-and-cover tunnel considered by Seattle voters in March 2007 are both tunnels, they are vastly different in their construction methods, length and degree of public disruption, and environmental effects.

### Location and depth

The bored tunnel will be located several blocks inshore under First Avenue, bypassing the Battery Street Tunnel. The cut-and-cover tunnel would have roughly followed the path of the existing viaduct.

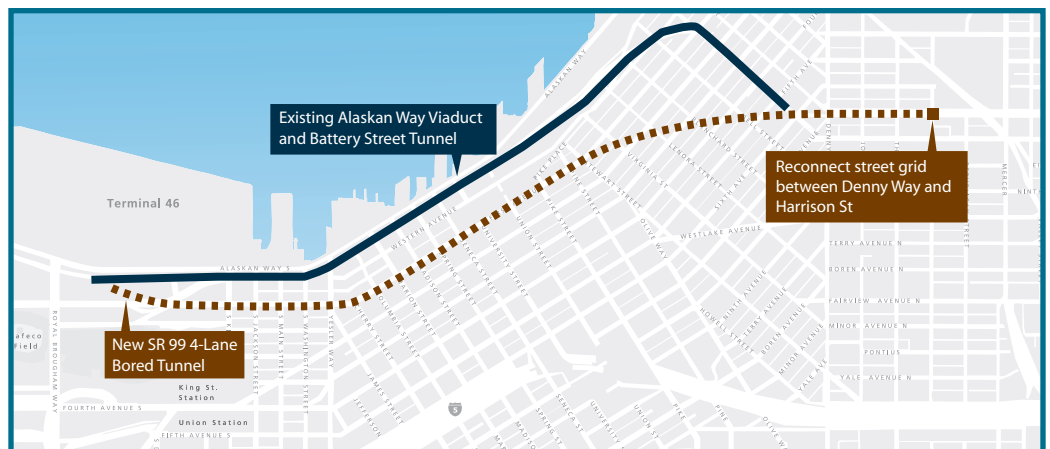
The bored tunnel will be at depths of 100-200 feet, while the cut-and-cover tunnel would have required excavation of 30-50 feet of soil.

### Construction method and timeline

The bored tunnel will be drilled by a large tunnel boring machine, and most of the construction operations will occur from one location near the stadiums. The tunnel boring machine will be a new machine built specifically for this tunnel. Constructing the cut-and-cover tunnel would have meant digging up the entire street along Alaskan Way, temporarily rebuilding

### Fact sheets are available on other projects, including:

- Column Safety Repairs
- Electrical Line Relocation
- South End: S. Holgate Street to S. King Street Viaduct Replacement Project
- Transit Enhancements and Other Improvements



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## For More Information:

### Visit the Web site at:

[www.alaskanwayviaduct.org](http://www.alaskanwayviaduct.org)

### Call the hotline:

1-888-AWW-LINE

### Send an e-mail to:

[viaduct@wsdot.wa.gov](mailto:viaduct@wsdot.wa.gov)

### Send a letter to:

Alaskan Way Viaduct and Seawall  
Replacement Program  
c/o Washington State  
Department of Transportation  
999 Third Avenue, Suite 2424  
Seattle, WA 98104

Printed 02/09

the street surface, then excavating beneath using conventional construction equipment. The time needed to excavate the deep bored tunnel will also be less than for the cut and cover tunnel.

## Disruptions to the public

With cut-and-cover tunnel construction, we would have to demolish the viaduct first and reroute traffic to city streets for several years.

The public will experience much less disruption during bored tunnel construction, since the only openings to the surface will be at the ends of the tunnel. The bored tunnel concept will also allow traffic on the viaduct while the tunnel is being constructed.

In addition to the bored tunnel, restoration of the waterfront, including demolition of the viaduct, reconstruction of the seawall, required utility relocations, and construction of a new Alaskan Way and promenade, will be completed as separate projects.

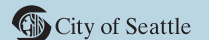
Overall, the bored tunnel will result in significantly less traffic disruption both in length of time and intensity.

## Environmental and archaeological impact

Because of its depth, the environmental and potential archaeological impact of a bored tunnel will be considerably less than that associated with a cut-and-cover tunnel.

Since cut-and-cover requires excavating the upper soils, we would have encountered difficult ground conditions along the tunnel's entire length. These conditions would have included very soft soils, miscellaneous man-made rubble, abundant old timbers, and a considerable volume of contaminated soil and groundwater.

The bored tunnel is expected to encounter uncontaminated dense natural glacial soils throughout most of its length. Construction activities will encounter challenging soil conditions primarily at its south entrance, which would have been true for the cut-and-cover tunnel as well.



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