Demolition overview

Why demolish the viaduct
The Alaskan Way Viaduct was built in the 1950s and was damaged in the 2001 Nisqually Earthquake. While it has been strengthened and is safe for daily use, it remains seismically vulnerable.

The viaduct’s role in moving people around Seattle will be replaced by a tunnel and a new surface street built in the footprint of the viaduct.

The goals for demolition
WSDOT’s primary goal is to demolish the viaduct safely and with as little disruption as possible to people, property and businesses. WSDOT will require the selected contractor to adhere to a variety of standards and best practices in designing and conducting the work, which is expected to take up to nine months.

Scope of work
• Shifting Alaskan Way west from beneath the viaduct (in 2018).
• Removing the viaduct from South Dearborn Street to the Battery Street Tunnel.
• Removing the Columbia Street and Seneca Street ramp structures.
• Decommissioning the Battery Street Tunnel and restoring Aurora Avenue North between Harrison Street and Denny Way.
• Handing over space to the City of Seattle for building the new waterfront.
Selecting a contractor

WSDOT will select a contractor in early 2018, using a best-value approach and a design-build contracting method.

This approach gives contractors greater flexibility in how they propose to do the work, resulting in innovative and cost-effective proposals.

It also means that many details about the demolition work will not be determined until after the contractor is selected and completes their plan.

How does design-build work?

• The contractor is responsible for both project design and construction. This gives them more flexibility and opportunity for efficiency.

• WSDOT issues technical requirements for the finished product and how the work can happen.

• Contractors have more opportunity to propose innovative designs and methods, and WSDOT gets a better product at a better value.

What this means for viaduct demolition:

• The contractor is responsible for designing and completing the work.

• We will not have specifics of the demolition plan until we award the contract and the winning contractor completes their demolition plan.

• The plan still has to adhere to requirements we put in the contract.

What we know today:

• The scope of work.

• The overall timeline.

• Requirements the contractor must adhere to concerning noise, dust, vibration, traffic and other effects of demolition work.

• After the contractor has been selected in 2018, we will reach out again to share their plans for the demolition.

What will be defined after the contractor is selected:

• Work schedule and sequence (in accordance with the project timeline).

• Demolition means and methods (within requirements of the contract).

• Traffic control plans (e.g. detours).

What will demolition look like?

Demolition may look similar to the 2011 demolition of the viaduct’s southern mile.

In 2011, the contractor used saw cutting, hoe rams and munchers to carefully bring the structure down section by section.
Noise during demolition

Demolition work is going to be unavoidably noisy. Some construction methods may be noisier than others, but would allow demolition to proceed faster. WSDOT will seek to balance construction speed with the desire to reduce noise, especially nighttime disruptions.

City of Seattle noise ordinances limit the noise levels that equipment can produce near businesses and residences. Factors that influence the limits include the source of the sound and the property where that sound is heard. Noise levels that do not exceed the ordinance limits are allowed at all times.

Different types of work generate different levels of sound. Examples of work likely involved in demolition:
- Saw cutting of concrete
- Loading debris into trucks
- Unloading materials
- Moving equipment

Demolition of the southern mile of the viaduct - 2011
Noise variance

WSDOT is requesting a noise variance from the City of Seattle that would allow the demolition contractor to conduct noisy work outside of standard work hours.

Daytime work requested

- Extending allowable hours for impact work to 7 a.m. – 10 p.m.

Nighttime work requested

- Allow quieter work (no impact equipment) between 10 p.m. – 7 a.m.

Specific locations will require impact work at night:

- Seneca and Columbia ramps:
  - Up to seven days of 24/7 work at each ramp location.
- At railroad tracks between Stewart and Virginia streets:
  - Up to 51 nights (Sat, Sun and Mon), between 1 a.m. 4 – a.m.

What’s special about these locations?

- Ramps: Access restrictions for nearby buildings require that some work is completed quickly.
- Train tracks: The work must be coordinated with BNSF operations.