Welcome
Thank you for coming to tonight’s Open House!

We value your feedback
If you would like to provide comments, or have questions about the project, you can:

- Fill out a comment form
- Visit the project Web site: [www.seattle.gov/transportation/45th-bridge.htm](http://www.seattle.gov/transportation/45th-bridge.htm)
- E-mail us: [NE45thBridgeRehab@Seattle.Gov](mailto:NE45thBridgeRehab@Seattle.Gov)
- Or contact:
  
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<tr>
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<td>206.684.7963</td>
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Project need and benefits

Background
- The 1,480-foot viaduct was originally constructed in 1938; portions of the structure are nearly 70 years old.
- The viaduct has had several retrofits and partial reconstructions; first in the 1960’s and more recently in 2002.
- The existing 468-foot west approach is nearing the end of its structural life and needs to be replaced to maintain a safe and efficient travel corridor.

Project Benefits
- Improves structure safety
- Keeps freight moving
- More durable concrete road surface
- Reduces the City’s maintenance backlog
- Improved sidewalk and enhanced street lighting
- Identifies seismic retrofit needs
Project area

The NE 45th Street Viaduct is a major thoroughfare in Northeast Seattle, connecting Interstate-5 to the University District and Northeast Seattle neighborhoods.

- Approximately 20,000 vehicles use the viaduct each day
- One King County Metro bus (Route #25) travels on the viaduct
- Seattle Children’s Hospital shuttles make approximately 160 trips across the viaduct each day
- Approximately 500 pedestrians use the viaduct each day

Project area map
Environmental review

A 21-day public comment period on the draft environmental documentation is anticipated in late 2009 or early 2010.

Environmental considerations that will be evaluated include:
- Social/economic issues
- Biological resources
- Bicycles/pedestrians
- Historic and cultural resources
- Visual quality
- Land use
- Wetlands
- Noise and vibration

Potential mitigation measures:
- Minimize clearing of trees
- Removal of invasive species
- Use of best management practices in contract specifications for erosion control, air emissions, and stormwater runoff
- Develop a landscape restoration plan prior to the start of construction
- Implement measures to reduce noise from construction equipment
Design of the new structure

The City’s preferred alternative for replacing the west approach uses a fill wall technology.

The design consists of:

- Pre-made concrete panels used to create the outer walls of the new structure
- Backfilling the area between the new walls to support a new road surface
- The cross section of the roadway will stay the same, with two westbound lanes, one eastbound lane, and a pedestrian pathway
- Aesthetic treatments can be added to the solid outer walls

Cross section of fill wall structure
Benefits of design

- Lower cost option to build, and reduced costs for future operation and maintenance
- Allows for shorter construction duration, and also a shorter viaduct closure
- Does not preclude future improvements or widening of the structure
- Eliminates space under roadway (solid wall) and enhances public safety

Wall renderings
Project schedule

SDOT is planning to close the viaduct during the **summer of 2010** to replace the west approach. SDOT made the decision to move forward with a full-closure plan after consulting with local community groups, businesses and business-interest groups, major institutions and employers, and city advisory groups/departments.

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Viaduct Closure
Traffic impacts during viaduct closure

SDOT has studied seasonal traffic conditions to evaluate impacts to nearby intersections during the scheduled summer 2010 closure. The traffic analysis showed the following:

- Traffic conditions during summer AM and PM peak periods with a full closure of the viaduct will be similar to traffic conditions during the fall/winter/spring AM and PM peak periods with the viaduct open
- Only a few key intersections along the detour route may experience additional congestion
- Early action projects and mitigation efforts will be used to best manage traffic at key intersections during construction

SDOT’s proposed detour plan includes modifications to the existing AM and PM parking restrictions along the detour route. The plan also includes signal timing enhancements at key intersections and local access only restrictions.
Potential early action projects and mitigation during the viaduct closure

SDOT is considering the following types of early action projects to mitigate impacts during the viaduct closure:

- Simulated traffic calming and control measures to enhance safety and traffic flow at critical intersections
- Spot repair and/or repaving of designated detour routes
- Improved pedestrian pathways near and around the viaduct
- Implementation of Opticom technology on signals for enhanced emergency response
- Strategic placement of Uniformed Police Officers (UPOs) at critical intersections

Early action projects must:

- Be cost effective
- Be directly related to the anticipated impacts of the viaduct closure to traffic and pedestrians
- Balance the need for a permanent fix versus a temporary operational investment based on the anticipated duration of construction
**Preliminary detour plan**

Elements of the detour plan:

- Modified parking restrictions on 15th Avenue NE, NE 65th Street, and 25th Avenue NE during AM and PM peak periods
- Signal timing enhancements at key intersections
- Local access only restrictions
- Signage for regional travelers
- Emergency access detours in coordination with the Seattle Fire and Seattle Police Departments

Proposed traffic detour route
Pedestrians, transit and bicycles during the viaduct closure

The NE 45th Street Viaduct is heavily used by pedestrians and shuttles, as well as Metro Route #25. Very few bicyclists use the viaduct due to the steep grade. During the viaduct closure pedestrians and transit will be detoured around the viaduct.

- The informal pedestrian trail on the south side of the viaduct will be closed during construction. Pedestrians will need to use alternate routes such as the NE 52nd Street staircase.
- SDOT is working with transit agencies to evaluate impacts to bus routes in the area.
- SDOT is working with the University of Washington and Seattle Children’s Hospital on alternative routes for their shuttles during construction.

We anticipate that there will be little impact to the Burke-Gilman Trail during construction. We will notify the bicycle community in advance if the trail needs to be closed temporarily at any time during construction.
Other major projects in the area

SDOT is aware of other major projects in the area and is coordinating with the respective agencies and organizations to ensure safe and efficient travel during this busy time in the region.