

BRIDGE SEISMIC RETROFIT PROGRAM

Investing in bridge infrastructure to increase resiliency

BACKGROUND

It's important to make sure our bridges are ready for anything - especially earthquakes. This is why the City of Seattle has a program to reinforce bridges! Our Bridge Seismic Retrofit (BSR) program figures out which bridges are most at risk for damage from earthquakes. Then, with money from the Levy to Move Seattle, we update bridge components through changes called **seismic retrofitting**. There are currently 16 bridges that will receive seismic retrofits.

SEISMIC RETROFITTING

When we do a seismic retrofit, we make an existing bridge better equipped to withstand earthquakes. This can mean many things. We could add supports to the bridge columns and arches, fix cracks, or wrap it with carbon fiber. To learn more about our retrofit work, check out the image below. Don't worry, though – none of modifications will change how the bridge operates or how you use it. This program is funded by the 9-year Levy to Move Seattle, approved by voters in 2015. Learn more about the levy at www.seattle.gov/LevytoMoveSeattle.

TYPICAL MODIFICATIONS

In a seismic retrofit, we can make a variety of modifications. Modifications typically include:

- 1. Repairing cracks and damaged concrete
- 2. Installing concrete blocks and supportive shells for the bridge's columns and crossbeams
- 3. Strengthening the existing arch with a concrete infill wall
- 4. Installing carbon fiber wrapping to the bridge's crossbeams, columns, and arches
- 5. Replacing the expansion joints at both ends of the bridge. Expansion joints are pieces of the bridge that are designed to safely expand, shrink, and absorb movement.



Figure 1: Different modifications SDOT can make to an existing bridge during a seismic retrofit.

WHAT TO EXPECT DURING CONSTRUCTION

Construction impacts will vary by day, the type of work we are doing, and the bridge itself. Please visit the webpage for a specific bridge to see the most updated information about construction. However, construction impacts typically include:

- Detours for people walking, biking, rolling, and driving
- Noise, dust, vibrations, and construction equipment staged on the bridge and within the project area
- Temporary on-street parking restrictions, with "no park" signs placed 72 hours in advance
- Typical weekday work hours of 7 AM 5 PM, Monday through Friday

Construction duration and activities are subject to change. Stay up to date by signing up for our email listserv!

MOVE SEAT

PROJECT INFORMATION & CONTACT

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