



The viaduct is vulnerable to earthquakes and continues to show signs of age and deterioration. It must be replaced.

SR 99 Alaskan Way Viaduct Automated Closure System

The Alaskan Way Viaduct and adjacent seawall are old, deteriorating structures that are vulnerable in an earthquake. In 2005 WSDOT and the Seattle Department of Transportation (SDOT) developed an emergency closure plan for the viaduct, outlining basic strategies for protecting lives and speedily restoring the transportation system after a strong earthquake. The current closure process, however, is manual and utilizes the police force and others to close the viaduct in emergencies.

WSDOT is developing an automated closure system for the Alaskan Way Viaduct. This system would quickly close the structure, in coordination with local agencies such as SDOT, after an earthquake or other activity that compromises its structural integrity, and allow the police to address other areas in times of emergency.

The automated closure system will include:

- Monitoring equipment to detect ground movement and movement of the viaduct. When movement is detected, an automated warning message will be sent to the appropriate agencies to commence closure.
- Signage, gates, and other traffic management devices that notify travelers of a closure, prohibit access to the viaduct and detour traffic away from the structure.
- Systems to monitor the data from detection devices, activate the closure system, and send warning messaging to electronic driver information signs.

Not only would this system stop traffic from using the viaduct in case of catastrophic failure, it would also help remove traffic in case of a moderate earthquake that weakens the viaduct. This would reduce the risk of further damage to the structure and may prevent structural failure. The automated closure system could also be used for other emergency

situations, like a fire or oil spill, and maintenance shutdowns.

In an emergency, once the system is activated, the Alaskan Way Viaduct would need to be certified by WSDOT bridge inspectors before the system could reopen the gates. This system will be in operation until the viaduct is permanently closed.

Automated closure equipment

This project is currently in preliminary design. The automated closure system is expected to be operational in mid- to late-2010.

Gates will be placed at ramps and entrances to the viaduct, and advance warning signs, to notify travelers of a closure, will be added or upgraded in West Seattle, South Seattle, downtown and south of downtown, and north of the viaduct. Traffic cameras will also be added along the viaduct and at gate locations to provide visual confirmation of emergency events and confirmation the gate system is engaged properly.

Other fact sheets include:

- All tunnels are not the same: SR 99 deep bored tunnel vs. the waterfront tunnel
- Comparison of the Big Dig and the Alaskan Way Viaduct and Seawall Replacement Program
- Learning from local and international tunnel projects
- Public safety a top priority in bored tunnel



For More Information:

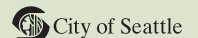
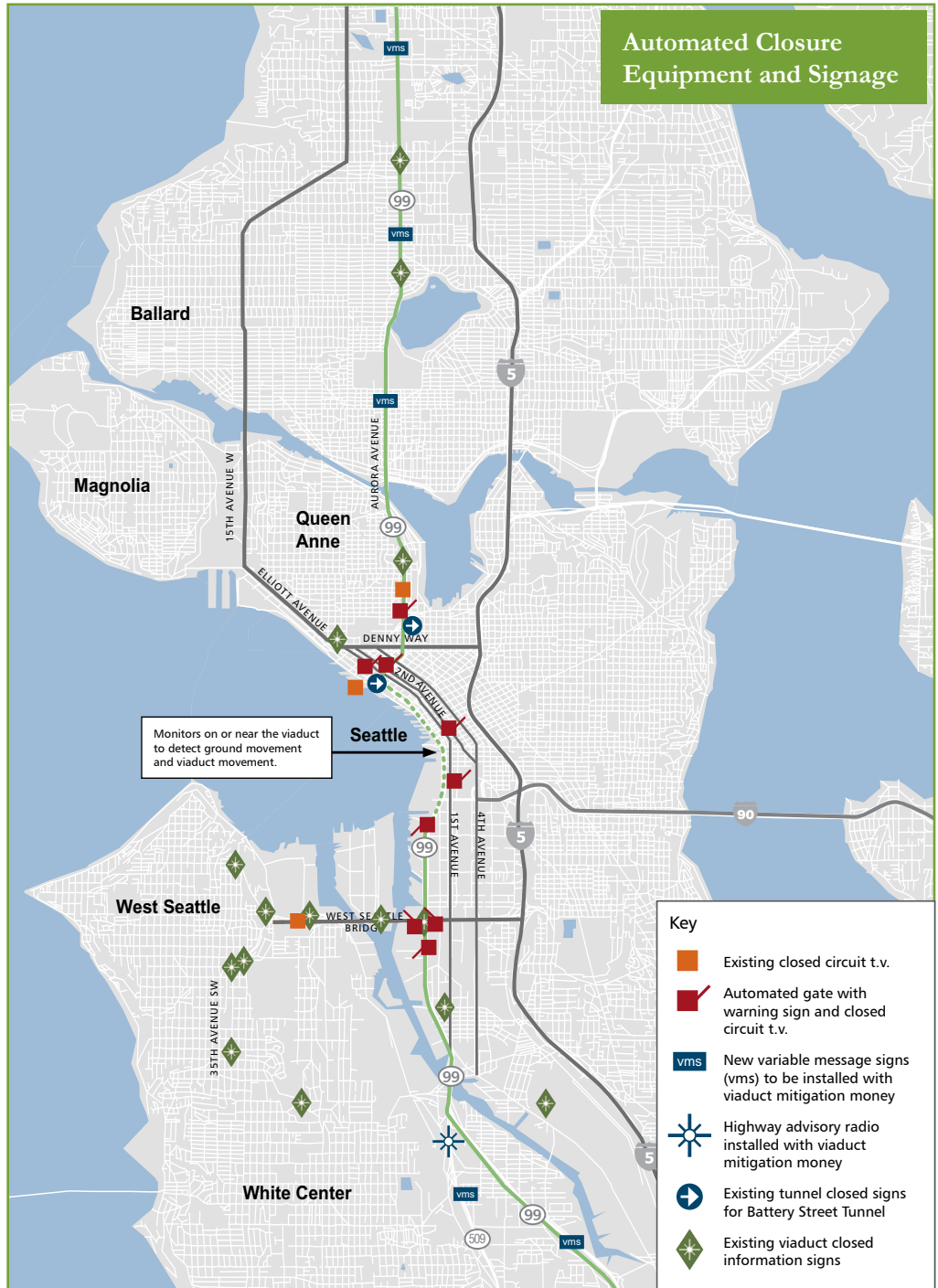
Visit the Web site at:
www.alaskanwayviaduct.org

Call the hotline:
 1-888-AWV-LINE

Send an e-mail to:
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Send a letter to:
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