

**From:** [Dave Leffmann](#)  
**To:** [AWV SDEIS Comments](#);  
**CC:**  
**Subject:**  
**Date:** Saturday, September 16, 2006 1:48:35 AM  
**Attachments:**

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- I-610-001** Thank you for the opportunity to comment on the Viaduct. I believe a tunnel is the most costly to build and makes the least sense. Again how practical is it to build a cut and cover tunnel next to the water, below sea level, in fill, in an earthquake zone when so many scientists are anticipating a rise in sea level. I've heard several other options that make a lot more sense. In order of cost and impact:
- I-610-002** 1. repair the existing viaduct and retrofit it for sound. The main problem with the ascetics of our current one is not sight, it is sound.
- I-610-003** 2. build a suspension bridge, something that is beautiful and may cost less than the tunnel. It will also not terribly disrupt traffic for several years while waiting for it's completion.
- I-610-004** 3. Build parking in the SODO and north lake union, build public transit, (you may start by removing many bus stops to make busses run faster, you could also dedicate bus lanes or roads without a large outlay in infrastructure) and shut down the down town core (15 to the water and Belltown to pioneer square to most automobile travel.

Thank you for your consideration.

Dave Leffmann

### **I-610-001**

FHWA, WSDOT, and the City of Seattle appreciate receiving your comments and recognize that you do not prefer a tunnel alternative.

The preferred Bored Tunnel Alternative is a safe alternative. Generally, structural engineers agree that tunnels are one of the safest places to be during an earthquake, because the tunnel moves with the earth. No Seattle tunnels were damaged during the 2001 Nisqually earthquake, including the Mt. Baker and Mercer Island I-90 tunnels, Battery Street Tunnel, Third Avenue Bus Tunnel, and Burlington Northern Tunnel.

The bored tunnel would be built to current seismic standards, which are considerably more stringent than what was in place when the viaduct was built in the early 1950s. The bored tunnel design includes improving relatively soft, liquefiable soils found near the south tunnel portal. Emergency exits would be provided every 650 feet in the tunnel. Project engineers have studied current data on global warming and possible sea level rise and concluded that the seawall provides enough room to protect the tunnel from rising sea levels. The engineers also considered the possible threat of tsunamis during the design process.

### **I-610-002**

The lead agencies recognize that retrofitting highways, roadways, and bridges is often a viable option to counter earthquake threats. However, unlike other bridges and structures in the area, it isn't practical to retrofit the viaduct by only strengthening one or two structural elements. Fundamentally, such fixes transfer the forces from one weak point in the structure to another, and the viaduct is weak in too many places. The concrete frames, columns, foundations, and even the soil under the structure don't provide enough strength by today's standards. The lead agencies have studied various retrofitting concepts, and all of these concepts fail to provide a cost-effective, long-term solution that adequately addresses the risks to public safety and the weakened state

of the viaduct. The lead agencies also determined that retrofitting 20 percent of the viaduct as discussed for the Rebuild Alternative is not reasonable.

Compared to the current viaduct and the Elevated Structure Alternative, the Cut-and-Cover Tunnel Alternative and preferred Bored Tunnel Alternative would have fewer noise impacts. See Chapter 5 of the Final EIS and Appendix F, Noise Discipline Report, for more information on noise impacts.

### **I-610-003**

Several concepts were considered that would construct a bridge over Elliott Bay as an alternative to reconstructing the viaduct in its current location. However, these concepts were screened out for several reasons:

- A bridge over Elliott Bay would restrict navigation within Elliott Bay, which would affect both the Port of Seattle's container terminal operations and the Washington State Ferry operations at Colman Dock.
- Obtaining the necessary permits for in-water bridge construction would be extremely difficult.
- The bridge concept has visual quality impacts that are not consistent with the City's existing land use and shoreline plans.

### **I-610-004**

Implementing parking lots within the city is restricted by policy and ordinance. However, the project is investigating a number of parking mitigation strategies that are described in Chapter 8 of the Final EIS.

Public transit is an important part of the city's long-range transportation future. Today, the central part of Seattle, including downtown area, is

served by an extensive network of bus services and commuter rail. In 2009, Central Link Light Rail began service between downtown and the airport. A local streetcar line operates in the South Lake Union area. Implementation of bus rapid transit services into downtown from West Seattle, Ballard, and North Seattle has begun. In summary, public transit services are plentiful today, but will be much more in the future.

Finally, shutting down the downtown core to most auto traffic may not be feasible to maintain a vibrant downtown. While the city is encouraging more people to use transit, bike, carpool, or vanpool, there will still be a need to provide for short-term access for autos to maintain commercial and business activities.