

# **Public Open House**

September 13, 2006

## Welcome and thanks for coming!

#### **Tonight's Agenda**

5:30 p.m.	<b>Open House –</b> Check out our displays and speak with the project team!
6:30 p.m.	Presentation – Receive a project update!
7:00 p.m.	<b>Open House Resumes –</b> Get answers to your lingering questions!
8:30 p.m.	Adjourn

The Magnolia Bridge, twice damaged by a landslide and an earthquake, needs to be replaced. The City of Seattle has selected a preferred alignment (Alternative A) to replace the bridge and is seeking public comments on bridge design options. Please share your comments and questions with us this evening!

### **Purpose of Tonight's Meeting**

- Input on bridge structure types: The project team will decide on the final bridge structure types shortly after this open house. Your comments will help the team choose the best possible bridge type for this project.
- **Review other design feature options:** Please comment on our preliminary designs for overlooks, pedestrian and bicycle connections, rails and lighting, and detour routes. Decisions about these elements will be made after bridge structure types are selected.

#### **Meeting Materials**

- **Photo of bridge structure segments.** Use this guide as a reference for the bridge segments being discussed and to find the locations used to take photos and create bridge simulations.
- Matrix of bridge structure types. This grid compares the costs, pros, and cons of structure types for different Magnolia Bridge segments. The headings match titles of the display boards where you can see pictures of these structure types.
- Supplemental views of potential bridge column types. This handout shows how different types of bridge columns would look at various sections of the bridge.
- Frequently Asked Questions. An updated list of common project questions and answers.
- Comment form. Please share your comments!
- Alternative A Cost Estimate Validation Process (CEVP): A summary of how the project team estimated the cost of Alternative A in 2004. This estimate will be updated once final bridge structure elements and design features are selected.

Please see reverse for a glossary of technical terms.

## **Glossary of Terms**

**Bridge Span:** The length a segment of bridge crosses without touching the ground; the distance between bridge supports or columns.

Haunched Cast-in-Place Concrete Box Girder: Bridge that is constructed by casting concrete inside forms that are located in the final bridge location. The shape of the bridge will be a box shape. The box is a variable depth with a haunched shape so it is called a haunched box girder.

**Life-cycle costs:** The life-cycle costs are the costs associated with the long-term maintenance and inspection of a bridge.

**Preferred Alignment:** The alternative or alignment that the City of Seattle determined is best for replacing the Magnolia Bridge. Factors considered included technical considerations; environmental, social, and economic impacts; and public feedback.

**Prestressed Concrete Girders:** Bridge that is constructed using concrete girders that are fabricated off-site and trucked to the bridge site and installed using cranes. The concrete girders are prestressed (pre-loaded) at the fabrication plant. In other words, stresses are introduced during manufacturing that counteract the loads the bridge segment is expected to carry during its use.

**Seismic Loads:** Seismic loads are forces on the bridge caused by an earthquake. As the ground moves, the bridge will move along with the ground causing forces in the columns.

**Steel Plate I-Girder:** Bridge that is constructed using girders that are built of steel plates. The plates will be welded together to form the shape of an "I". The steel girders will be fabricated off-site and trucked to the bridge site and installed using cranes.

**Substructure:** The bridge substructure is the part of the bridge below the top of the columns.

**Superstructure:** The bridge superstructure is the part of the bridge above the top of the columns.

**Straight Cast-in-Place Concrete Box Girder:** Bridge that is constructed by casting concrete inside forms that are located at the final bridge location. The shape of the bridge will be a box shape. The box is a constant depth so it is called a straight box girder.

**Temporary Shoring:** Temporary shoring consists of supports placed under the bridge to support the bridge work. It could support the forms for the cast-in-place concrete or support the girders during girder installation. The temporary supports are removed after the bridge is completed.