Magnolia BRIDGE PROJECT

Public Meeting

September 13, 2006

Seattle Department of Transportation

Overview

- Project Background
- Preferred Alignment - Alternative A
- Structure Type Options & Views
- Column Design Types
- Potential Bridge Amenities
- Potential Detour Routes
- Funding & Next Steps

Project Background

- SDOT commissioned a Type, Size, and Location (TS&L) study after the 1997 landslide and the 2001 Nisqually earthquake
- Bridge at risk if another seismic event were to occur
- Seismic upgrades would approach the cost of building a new bridge
- After technical, environmental, and public review, SDOT selected Alternative A as the preferred alignment

Alternatives Timeline

- **Fall 2002:** Identified “Universe of Alternatives” (25)
- **Winter 2002:** Fatal flaw analysis reduces list (9)
- **Winter 2003:** Additional screening (A, B, D, and H)
- **Winter 2004 – Spring 2006:**
  - Alternative B eliminated (shoreline and public impacts)
  - Alternative H eliminated (functionality)
  - Alternative C added (to bring list to 3)
  - Rehab Alternative added
- **Spring 2006:** Alternative A selected as preferred

Preferred Alignment - Alternative A

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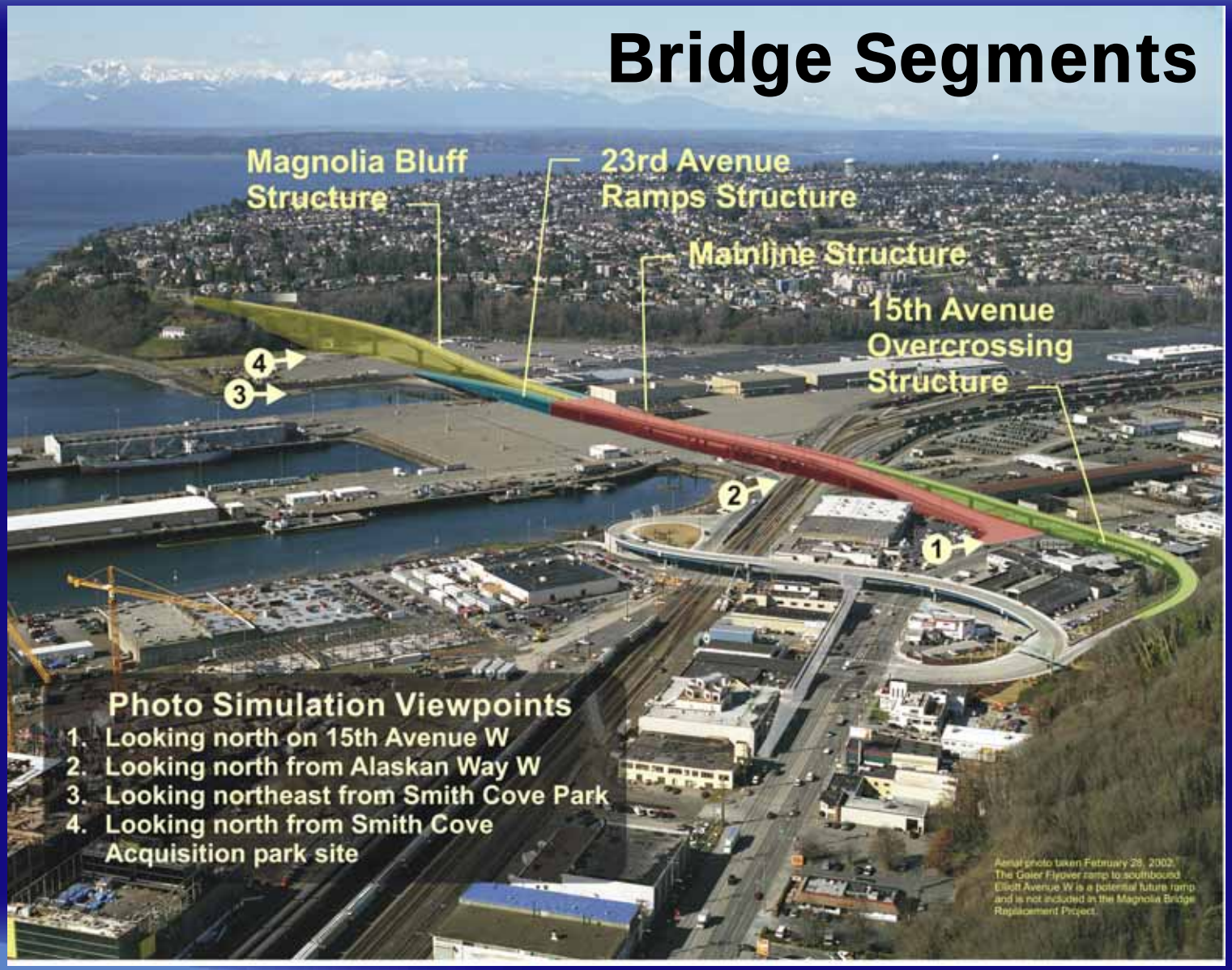
Why Was Alternative A Selected?

- Responds to local transportation needs
- Strong based on environmental and technical analysis
- Received significant neighborhood, business, and governmental agency support
- Least disruptive to Magnolia residents on eastern edge and businesses under the bridge
- Allows Interbay business owners greater certainty in future planning
- Costs less than other proposed alternatives

Bridge Segments



15th Avenue W Overcrossing: Existing

15th Avenue W Overcrossing: Prestressed Concrete Girders

15th Avenue W Overcrossing: Haunched Cast-in-Place Concrete Box Girder

15th Avenue W Overcrossing: Straight Cast-in-Place Concrete Box Girder

Mainline Structure: Existing

Mainline Structure:
Prestressed Concrete Girders

Mainline Structure:
Straight Cast-in-Place Concrete Box Girder

23rd Avenue Ramps: Existing

23rd Avenue Ramps: Prestressed Concrete Girders

23rd Avenue Ramps: Haunched Cast-in-Place Concrete Box Girder (Main Structure)

Straight Cast-in-Place Concrete Box Girder (Ramps Structure)

Magnolia Bluff: Existing

Magnolia Bluff:
Prestressed Concrete Girders

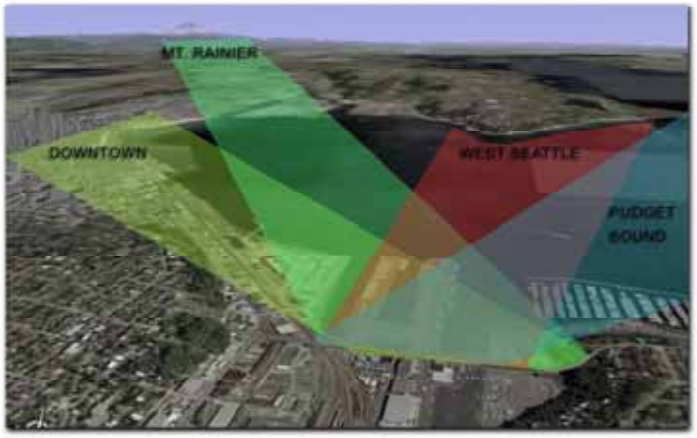
Magnolia Bluff: Haunched Cast-in-Place Concrete Box Girder

Column Types: Curved Flare

Column Types: Angular Flare

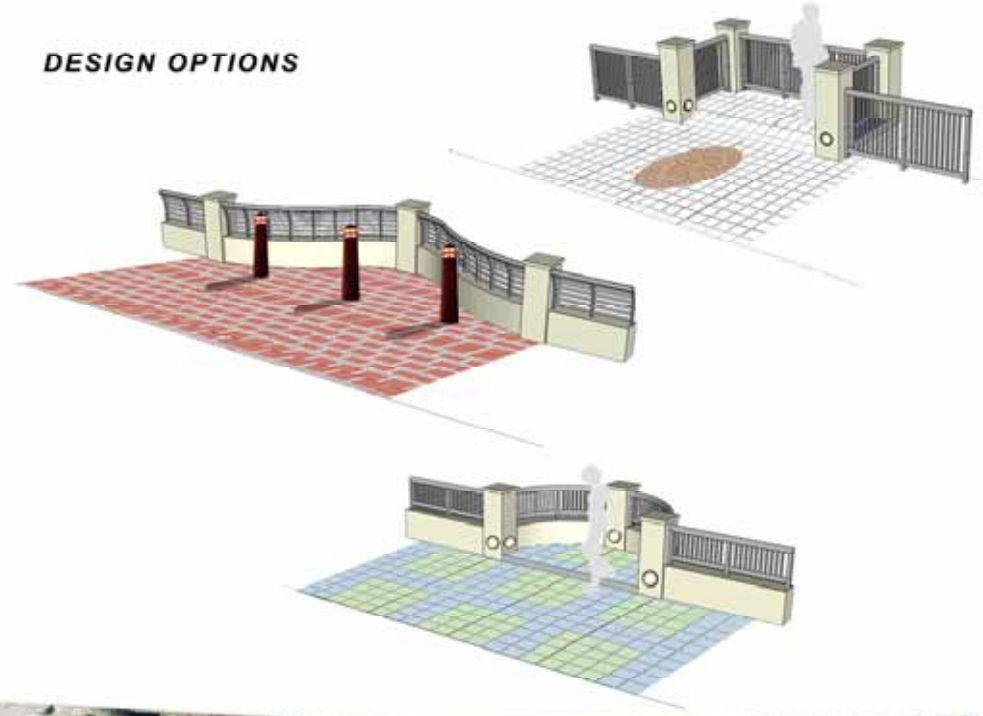
Column Types: Tapered

Overlooks



VIEW ANALYSIS

DESIGN OPTIONS



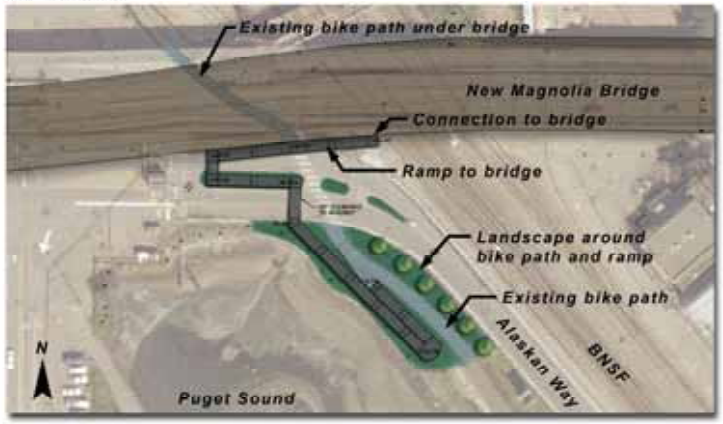
POTENTIAL OVERLOOK LOCATIONS

Bike & Pedestrian Access

OPTION 1

OPTION 2

OPTION 3



OPTION 4

August 2, 2006

Railing & Lighting

	BASELINE	OPTION 1	OPTION 2	OPTION 3	OPTION 4
RAILING	 ADVANTAGES -ARCHITECTURAL INTEREST HIGH -MAINTAINS HISTORIC FEATURES DISADVANTAGES -PRE-CAST IS EXPENSIVE TO CONSTRUCT -BUFFERS VIEWS COST - LOW	  ADVANTAGES -SIMPLICITY – FITS VARIETY OF SCHEMES -MAINTAINS VIEWS -EASY TO INSTALL AND MAINTAIN -ADAPTABLE TO BARRIER INSTALLATION DISADVANTAGES -ARCHITECTURAL INTEREST MINIMAL -REQUIRES WIDER CURB FOR MOUNTING TO ALLOW FOR CURVATURE COST - LOW	  ADVANTAGES -ARCHITECTURAL INTEREST HIGH -FITS MARITIME THEME -MAINTAINS VIEWS -EASY TO INSTALL AND MAINTAIN -ADAPTABLE TO BARRIER INSTALLATION DISADVANTAGES -COMPLEX DESIGN LIMITS VARIETY OF SCHEMES -PSEUDOLOGICALLY LACKS STRENGTH COST - MODERATE	  ADVANTAGES -ARCHITECTURAL INTEREST HIGH -COLUMNS PROVIDE VISUAL BREAKS & CAN CARRY TEXTURE THEME -PROVIDES SENSE OF PROTECTION FOR PEDESTRIANS DISADVANTAGES -FORMING AND CONCRETE ADD TO COST -HIGHER MAINTENANCE COST DUE TO VARIETY OF MATERIALS COST - HIGH	  ADVANTAGES -ARCHITECTURAL INTEREST HIGH -MAINTAINS VIEWS -EASY TO INSTALL AND MAINTAIN DISADVANTAGES -COMPLEX DESIGN LIMITS VARIETY OF SCHEMES COST - MODERATE
LIGHTING – ROADWAY	  ADVANTAGES -COMMON PARTS THAT MAY BE IN STOCK -STANDARD ROADWAY LIGHTS & TIE INTO CONNECTIONS DISADVANTAGES -LACK VISUAL INTEREST -DOES NOT SUGGEST A THEME COST - LOW	 ADVANTAGES -SIMPLICITY - FITS A VARIETY OF SCHEMES -MODERN VARIATION OF STANDARD COBRA HEAD FIXTURE DISADVANTAGES -ARCHITECTURAL INTEREST MINIMAL -NOT COMMONLY STOCKED PARTS COST - LOW	  ADVANTAGES -ARCHITECTURAL INTEREST HIGH DISADVANTAGES -SUGGESTS CONTEMPORARY THEME -NOT COMMONLY STOCKED PARTS COST - MODERATE	  ADVANTAGES -ARCHITECTURAL INTEREST HIGH -SIMPLICITY - FITS WITH VARIETY OF SCHEMES DISADVANTAGES -SUGGESTS CONTEMPORARY THEME -NOT COMMONLY STOCKED PARTS COST - MODERATE	
LIGHTING – PEDESTRIAN		  ADVANTAGES -ARCHITECTURAL INTEREST HIGH -FITS MARITIME THEME DISADVANTAGES -LIMITED TO MARITIME THEME COST - MODERATE	  ADVANTAGES -WOULD ENHANCE EXISTING HISTORIC FEATURES DISADVANTAGES -LIMITED TO HISTORIC THEME COST - MODERATE	  ADVANTAGES -ARCHITECTURAL INTEREST HIGH -FITS MARITIME THEME DISADVANTAGES -LIMITED TO MARITIME THEME COST - MODERATE/HIGH	 ADVANTAGES -ARCHITECTURAL INTEREST HIGH -COULD SET PRECEDENT FOR NEW DEVELOPMENT IN AREA DISADVANTAGES -LIMITED VARIETY OF SCHEMES -MAY NOT 'FIT' FUTURE DEVELOPMENT IN AREA COST - HIGH
LIGHTING – ACCENT		 ADVANTAGES -ARCHITECTURAL INTEREST HIGH -FITS MARITIME THEME DISADVANTAGES -ADDITIONAL EXPENSE -COULD ADD GLARE COST - LOW/MODERATE	 ADVANTAGES -ARCHITECTURAL INTEREST HIGH -WOULD ENHANCE EXISTING HISTORIC FEATURES -COLUMNS PROVIDE VISUAL BREAKS -COULD PROVIDE ACCENT TO OVERLOOKS DISADVANTAGES -COST FOR ADDITIONAL FORMING COST - MODERATE	 ADVANTAGES -ARCHITECTURAL INTEREST HIGH -FITS MARITIME THEME -COULD PROVIDE ACCENTS AT OVERLOOKS DISADVANTAGES -LIMITED TO MARITIME THEME COST - MODERATE	 ADVANTAGES -ARCHITECTURAL INTEREST HIGH -COLUMNS PROVIDE VISUAL BREAK/ACCENT AT OVERLOOKS DISADVANTAGES -ADDITIONAL COST COST - HIGH

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Potential Detour Routes

Temporary Ramp Alternative

Surface Route Alternative

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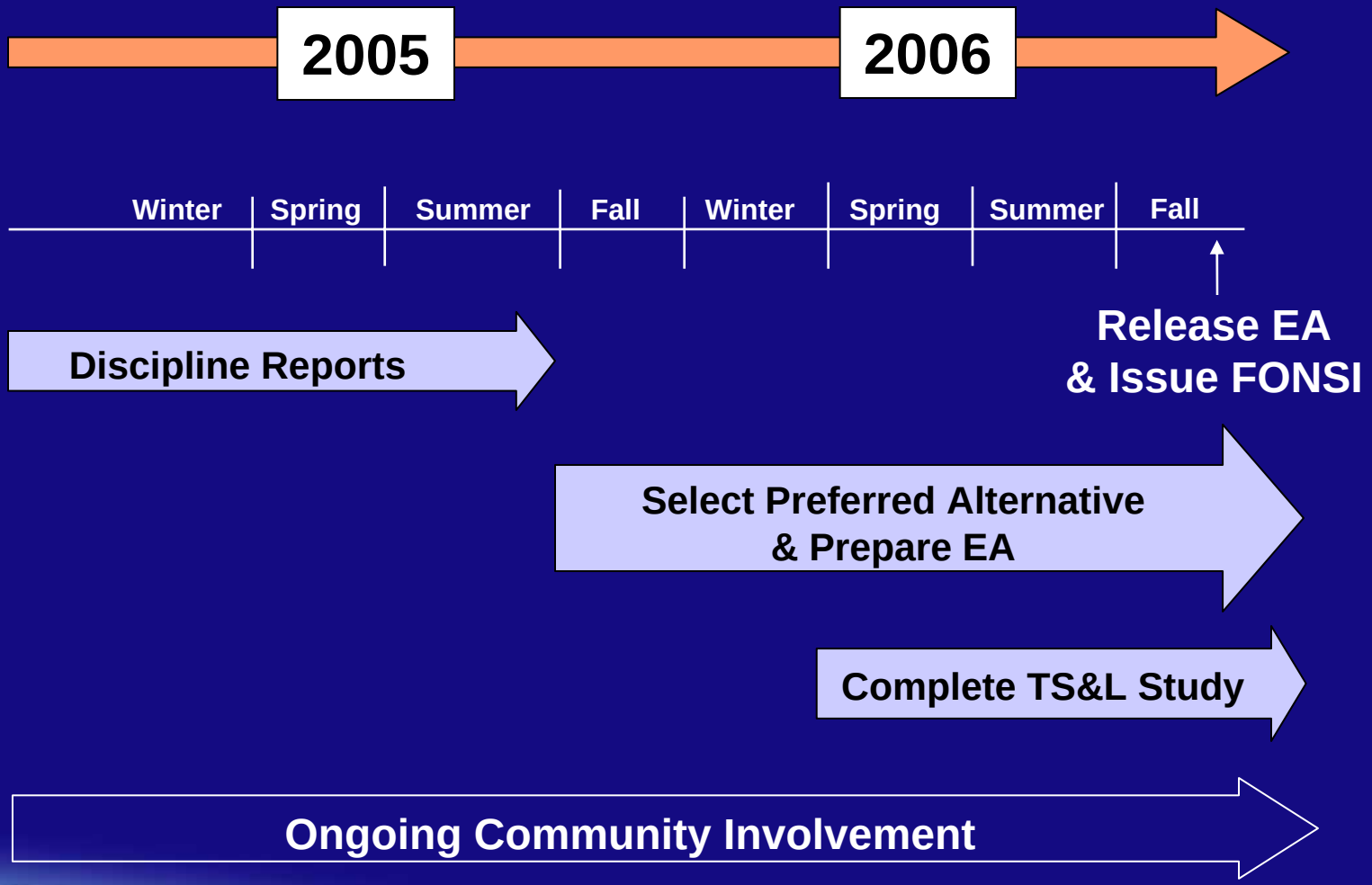
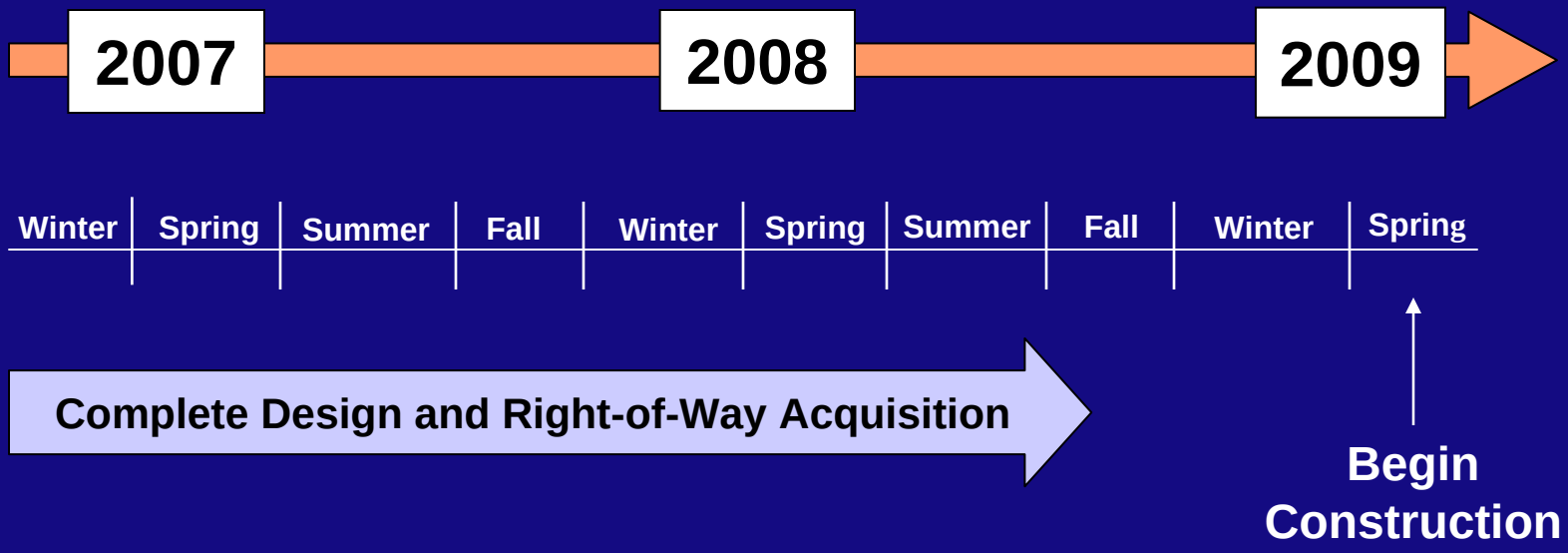
Funding

- Senator Patty Murray secured $9 million to evaluate alternatives and complete final design work
- The City of Seattle is exploring several possible sources to put together a funding package to build the bridge, including:
  - Local funding partners
  - Grant funds through State and Federal sources
  - Local special taxing district
  - Direct Federal appropriation

Schedule: 2005 - 2006



Schedule: 2007 - 2009



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