Joint Transportation Committee

July 25, 2012

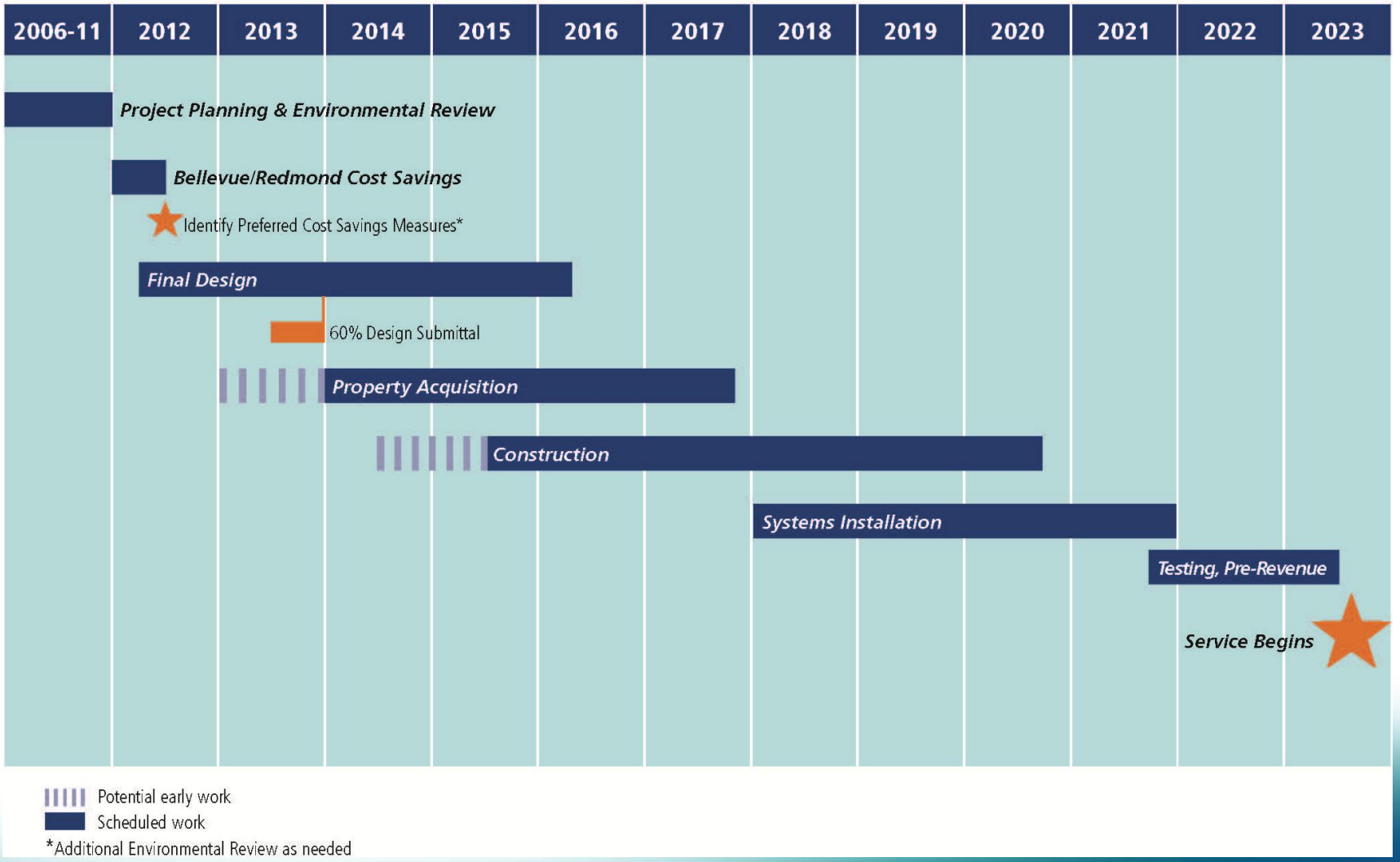
SOUNDTRANSIT
RIDE THE WAVE

East Link Project:
Independent Review Team Update
7/25/12

East Link Status

- Preliminary Engineering complete
- Final EIS published
- FTA and FHWA Records-of-Decision signed
- Final Design
  - Bellevue-Redmond underway
  - I-90 Fall 2012
- Baseline Scope, Schedule, and Budget 2014

East Link Working Schedule



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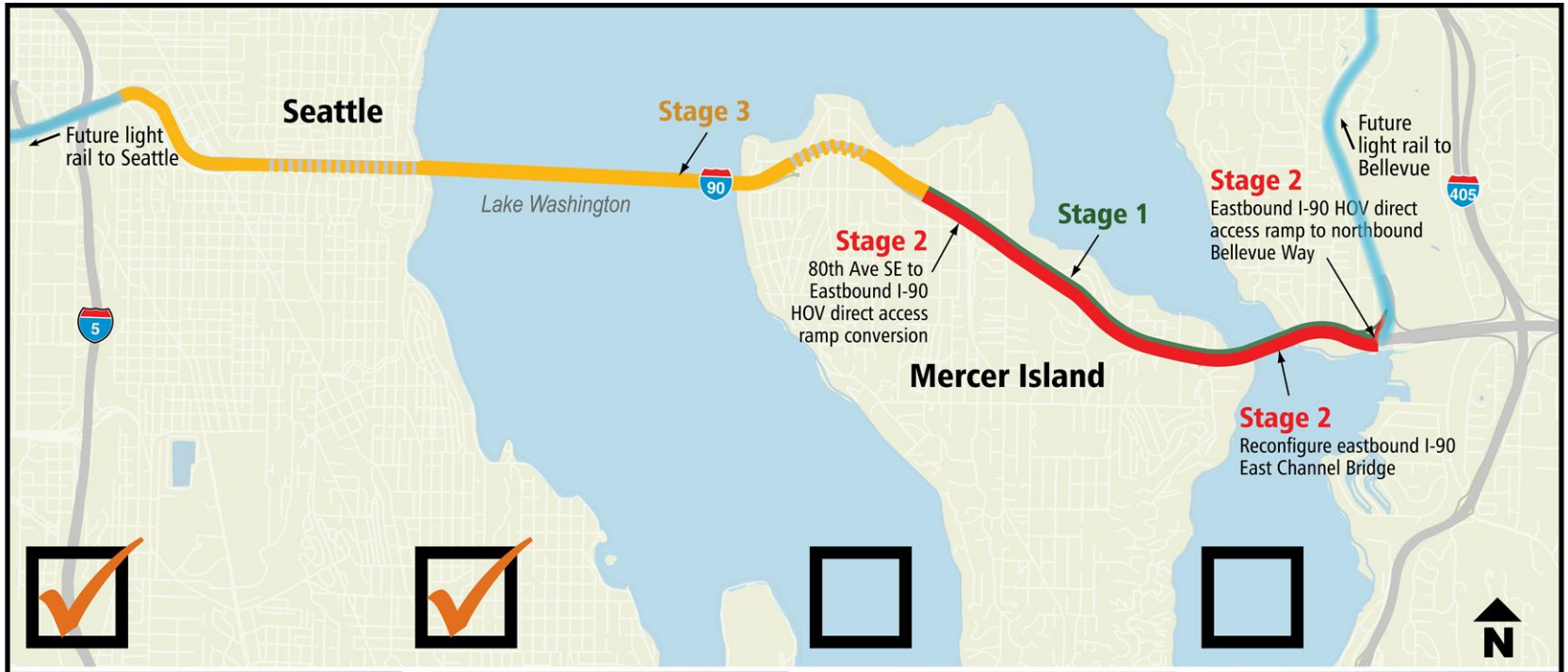
I-90 Seattle-to-Bellevue Corridor



Stage 1
Westbound HOV from Bellevue to Mercer Island

Completed 2008

Stage 2
Eastbound HOV from Mercer Island to Bellevue

Completed 2012

Stage 3
East and Westbound HOV between Seattle and Mercer Island

In Final Design

East Link
Light rail between Seattle, Mercer Island, Bellevue & Redmond

Open 2023

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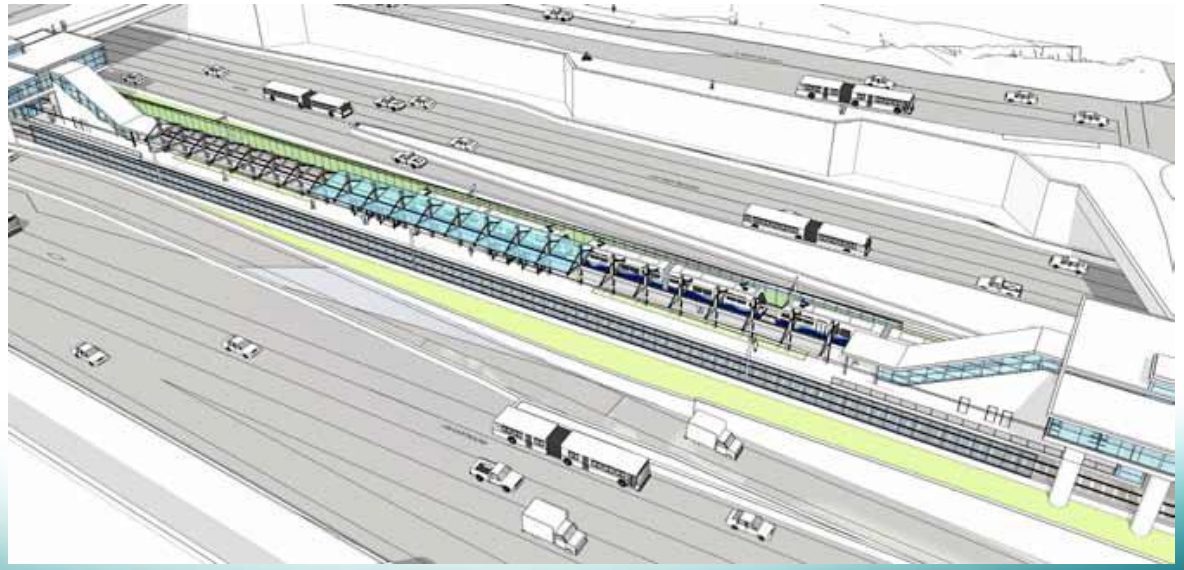
Stakeholder Agreements

- WSDOT
  - I-90 HOV lanes
  - Center Roadway Agreement, Design Review, Constructability Review, and long term operations
- King County
  - D2 Roadway Design
- Mercer Island
  - Exploring partnership for additional parking
- City of Bellevue
  - Memorandum of Understanding (MOU)
- City of Redmond
  - Exploring agreements with City and Microsoft for station enhancements
- City of Seattle
  - Rainier Station
  - D2 Roadway Design

I-90 Stations

Rainier Station



Mercer Island Station

I-90 Independent Review Team (IRT)

- 2008 State Transportation Budget Proviso
  - Up to $550,000 for an independent technical review, overseen by the Joint Transportation Committee (JTC), of light rail feasibility across the Interstate 90 - Homer Hadley Floating Bridge.
- September 15, 2008 IRT report concluded that:
  - All issues identified as potentially affecting feasibility can be addressed
  - Made recommendations for issues to address during design
- ST and WSDOT are implementing the IRT recommendations

IRT Classified 23 Issues into 6 Categories

- General
- Stray Current Mitigation Measures
- Impact of LRT Track System Installation on the Bridge
- Seismic Vulnerability of Approach and Transition Spans
- Miscellaneous
- Rail Expansion Joint Design and Prototype Testing

General

- Criteria Established for Independent Review Team to Evaluate Numerous Issues
- Washington State DOT's and Sound Transit's Goal for the Life Expectancy of Bridge
- Additional Needs and Changes Required for LRT Installation to meet "Blue Ribbon Panel" Recommendations

Stray Current Mitigation Measures

- Sound Transit Adoption of North Link/Airport Link Stray Current Mitigation Design Criteria for Homer M. Hadley Floating Bridge Installation
- Stray Current and Cathodic Protection System Interference and compatibility
- Determining Strength and Electrical Resistance of Existing Concrete
- Modification of Current Bridge Inspection Procedures for LRT Installation
- Method for Identifying Stray Current Failure and Response/Repair Plan

Impact of LRT Track System Installation on the Bridge

- Need for Lightning Arrestors on Floating Bridge and Approaches
- Impact of Stray Current Dispersion in Lake Washington on Environment and Fish
- Attachment of OCS Supports to Edge of Homer M. Hadley Floating Bridge Deck Cantilevers
- Methods to be Utilized for Locating Rebar and Post Tensioning in Bridge Deck

Seismic Vulnerability of Approach Spans and Transition Span

- Seismic Vulnerability and Seismic Retrofit of Approach Spans and Transition Span

- West Approach Tunnel Design Criteria Consistency

Miscellaneous

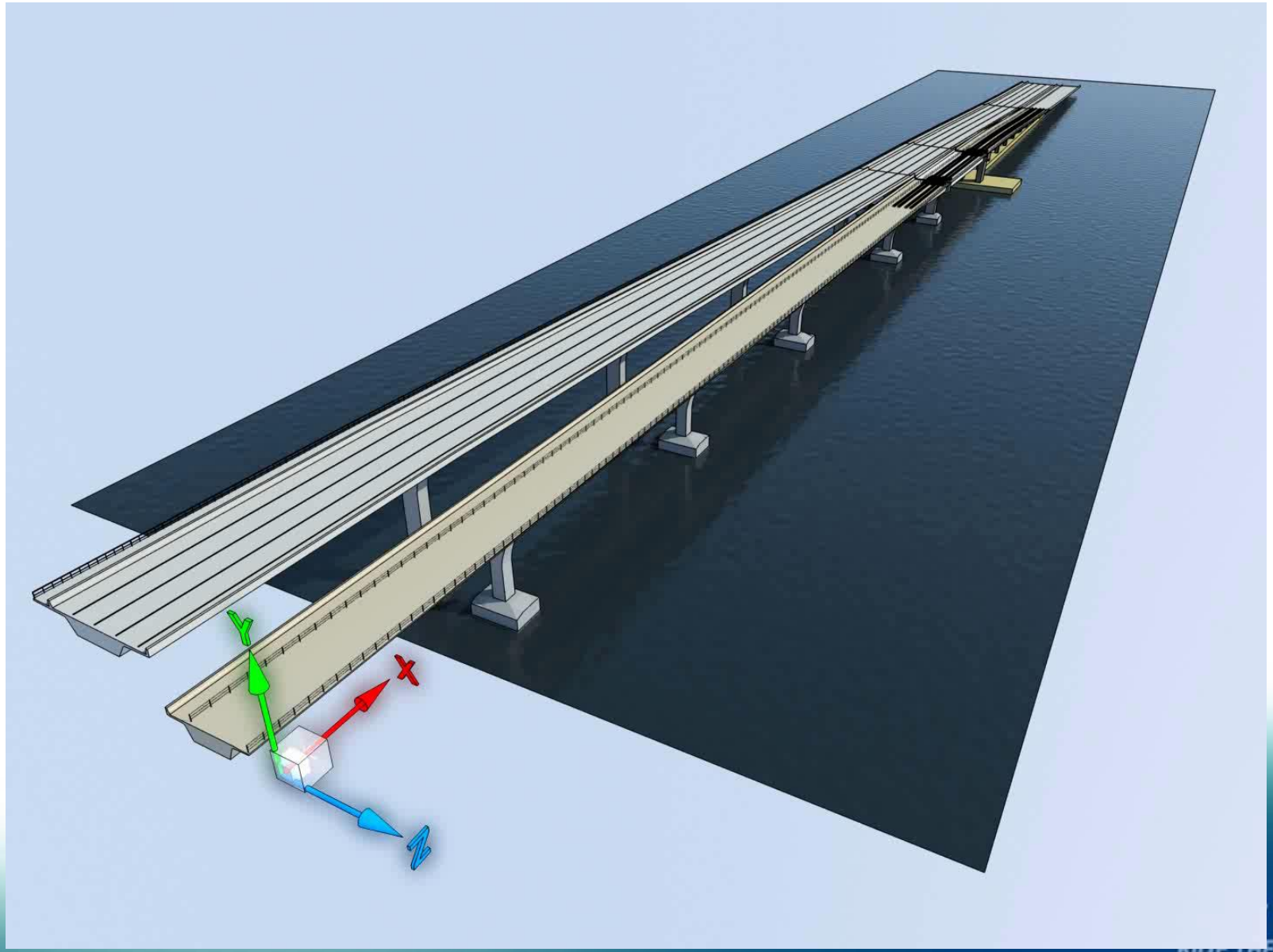
- Operational Restrictions for Combination of Train Loading and One - Year Storm Loading from North
- Analysis to Confirm Torsional Capacity of the Existing Bridge
- Analysis of “North Wind” Storm Effects on Homer M. Hadley Floating Bridge
- Operational and Maintenance Coordination Agreement between Sound Transit and Washington State DOT
- Median Barrier Relocation Design, Attachment, Maintenance and Drainage
- Effect of LRT Installation on Construction Operations Associated with Anchor Cable Replacement

Rail Expansion Joint Design and Prototype Testing

- Track Bridge/Expansion Joint Design and Performance Criteria
- Rider Comfort Performance for LRT Track Bridge at Expansion Joints
- Storm Water Drainage System Modifications under New LRT Track Bridge at Expansion Joints

Expansion Joint Locations

Range of Motion



Track Bridge Project Team

- Parsons Brinckerhoff/Balfour Beatty Team selected on:
  - Approach
  - Experience
  - Expertise

Evaluation Criteria

Performance

- Operating speed
- Restricted speeds

System Parameters

- Reliability/ Maintainability/ Inspection ability
- Ease of fabrication

Life Cycle costs

- Initial costs
- Customer Impact/O&M

Contracting Approach

Phase 1A (Completed November 2011)

- Develop Alternatives
- Evaluate Alternatives
- Select one alternative for Phase 1B

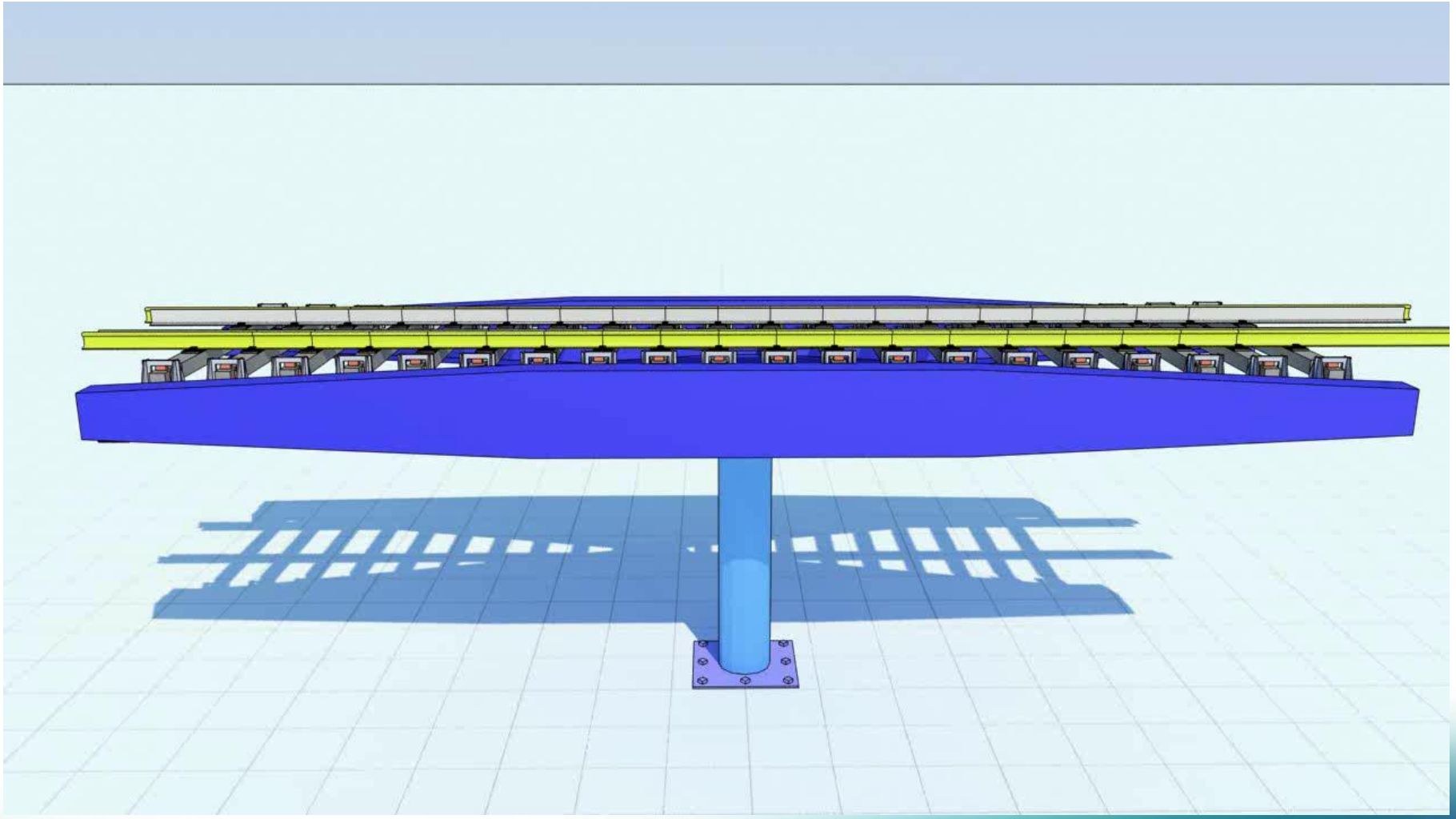
Phase 1B (Now through November 2012)

- Prepare 90% design document
- Develop the testing plan
- Component Testing

Phase 2 *(In contract – scope & fee to be negotiated and approved by the Board)*

- Build and test prototype in shop
- Full scale field test of prototype

CESURA



Next Steps

- Continue to incorporate IRT recommendations in East Link Design and Construction Documents

- Sound Transit and WSDOT to sign issue specific concurrence letters at appropriate milestones

Questions?