East Link Light Rail

What is the Cost-Savings Decision Making Process?

Memorandum of Understanding (MOU)

November 2011

The MOU identifies Sound Transit and the City of Bellevue's committment to work together to manage the project's scope, schedule and budget.

Collaborative Design Process

Early 2012

The City and Sound Transit are working together to meet the MOU goal of reducing the City's financial contribution for a downtown light rail tunnel by up to $60 million.

Cost-Savings Study

Early 2012

Sound Transit and the City of Bellevue developed ideas to reduce East Link costs within the City of Bellevue and convened a peer review panel to identify the most promising ideas.

Open House
April 26
We are here

Publish Cost - Savings Report
Late May
Open House, June 5

ST Board/Committee & City Council briefings
Late May to Mid-June

City and ST identify ideas to advance for further development
Late-June

Additional Design & Environmental Review as Needed
July →

City and ST select final cost-savings ideas
No earlier than 2013

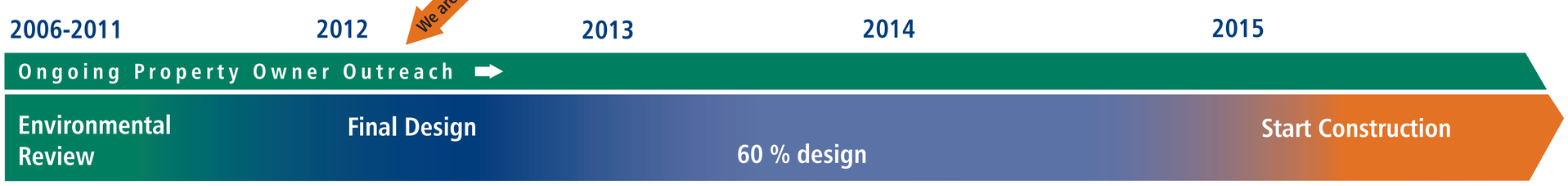
Ongoing Community Outreach and Stakeholder Briefings

What's Next?

Sound Transit and the City of Bellevue will weigh public feedback from open houses, stakeholder briefings and public comment as they refine the cost-savings concepts. All comments will be compiled and shared with the Sound Transit Board and Bellevue City Council. In June, cost-savings ideas will be identified for incorporation into value engineering and further development. As the project moves forward, there will be ongoing community engagement.

East Link Light Rail

How Will Sound Transit Work With Property Owners?



Property owners contacted prior to the publication of the Draft Environmental Impact Statement (EIS), Supplemental EIS and Final EIS.

Field Work

- During final design, Sound Transit will test soil conditions and ground water levels, conduct field surveys, and perform utility locates.
- This work will require individual rights-of-entry within public and private properties. All properties requiring rights-of-entry will be contacted by Sound Transit representatives.

Property Acquisition Process*

Typically, after the 60% design milestone, the Sound Transit Board approves right-of-way authorization identifying which properties will be necessary to build and operate the project.

1. Right-of-Way Identified

Real property personnel work with civil engineers to identify full or/and partial property needed to build project.

2. Board Meeting Notice

Sound Transit will notify property owners of the Sound Transit Board meeting where the Board will authorize property purchases.

3. Appraisal/Review Process

Independent appraiser contacts property owner to schedule appraisal. Appraisal will then be reviewed by Sound Transit to determine compensation for property.

4. Written Offer

Property owner receives written offer with copy of reviewed appraisal. Sound Transit will make reasonable efforts to acquire real property expeditiously through voluntary agreements based on appraised fair market value.

5. Conclude Property Purchase

Sound Transit purchases property.

Start Construction

- Sound Transit is committed to maintaining open communication with nearby property owners before and during construction.
- There will be multiple public involvement opportunities and ways to stay informed throughout construction.
- Sound Transit will work with property owners throughout construction to facilitate access during construction sequencing.

Questions?

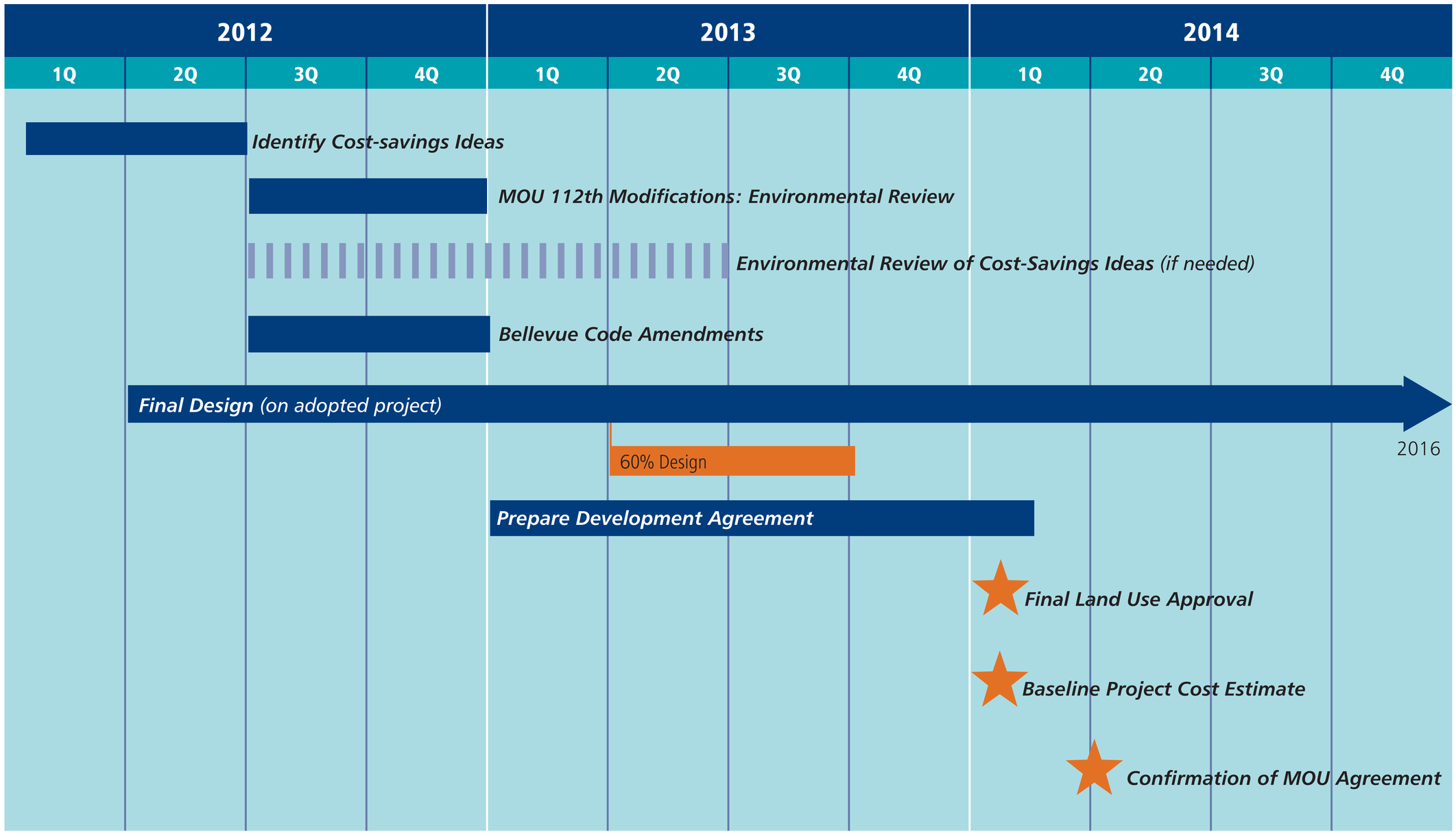
For more information, contact the East Link Community Outreach Team at
206-398-5459 or eastlink@soundtransit.org.

*__Note:__ The property acquisition process typically occurs after the 60% design milestone. This is when design has progressed to determine which properties, and how much of the property, needs to be purchased.

April 2012

East Link Light Rail

Sound Transit/Bellevue MOU Schedule



Potential early work

Scheduled work

April 2012

East Link Light Rail

Cost-Savings Ideas Evaluation Criteria

- Potential for cost-savings
- Light rail operations: speed, reliability
- Light rail access & ridership
- Traffic mobility
- Potential noise impacts & mitigation (during operations)
- Visual appearance
- Other potential environmental elements: property acquisition, parks, wetlands, historic resources, vibration
- Potential for schedule risk

Next Steps

Cost-savings ideas presented will undergo an initial evaluation that considers engineering, operations, cost, and a review of possible environmental impacts and mitigation. The evaluation of cost-savings ideas will be presented to the Sound Transit Board and City Council in late-May, with an Open House on June 5.

A formal environmental review, if needed, will be conducted after Sound Transit and the City of Bellevue have identified cost-savings ideas for further development in June, 2012.

A final decision on the cost-savings ideas that affect the current project description (per the MOU) will be made no earlier than 2013, after any needed environmental review is complete.

Ideas with Potential Changes to Current Project Description (per MOU)

Winters House

$$ 1a. Shift Bellevue Way west, At-grade light rail in front of Winters House

$$ 1b. Relocate Winters House, At-grade alignment

112th Avenue SE

$$ 2a. At-grade, closing SE 4th Street while extending SE 8th Street into Surrey Downs to provide new neighborhood access

Downtown Station Design

$$ 3a. Eliminate mezzanine, station entrance in the outer travel lanes of 110th Avenue NE

$$ 3b. Construct a stacked tunnel configuration with entrances in the outer travel lanes of 110th Avenue NE

$$$ 3c. Relocate station to NE 6th Street

$$$ 3d. Relocate station to the City Hall Plaza

Downtown Tunnel Design

$$ 4a. Retained-cut from Main Street to NE 2nd Street

NE 16th Street & Light Rail Configuration

$ 5a. Build a two-way road only on north-side of light rail alignment

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail

Ideas for Further Engineering Review

$$ 1. Downtown Tunnel Design Optimization: depth structural load-bearing walls, ventilation equipment, slurry wall

$ 2. Downtown Station Design Optimization: platform width and mezzanine height

$ 3. Downtown Tunnel Construction Staging Area: consider alternatives to the identified staging site on 110th Avenue NE

$$$ 4. Elevated Guideway Design: foundations, superstructure, construction methods, and retained fill along SR 520 rather than structure

$ 5. 120th Station Design Optimization

$ 6. Reduce Stormwater Vaults: Utilize low-impact development designs such as drywells, bioswales, rain gardens

$$ 7. Expedite Tunnel Construction Through Additional Road Closures: Traffic closures and/or limited access along 110th Avenue NE

Ideas Previously Reviewed and Not Selected

South Bellevue Alignment

1a) Utilize Bellevue Way HOV ramps to exit from I-90

1b) At-grade in the center of Bellevue Way and 112th Avenue SE

112th Avenue SE Design Modifications

2a) Gated crossings at SE 6th Street

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

April 2012

East Link Light Rail
Cost Savings Ideas

Winters House

$$ 1a) Shift Bellevue Way West, At-grade light rail in front of Winters House

Why is this alternative being studied?

- Reduces construction cost
- Reduces construction risk by replacing a retained cut/lidded trench with at-grade
- Improves light rail operations due to fewer vertical changes in the alignment
- Increases separation between light rail and the Winters House
- Maintains access to the Blueberry Farm Stand

What other considerations need to be evaluated with this alternative?

- Purchase of properties on Bellevue Way near the Winters House
- Potential noise effects and mitigation from shifting light rail and Bellevue Way closer to residential homes
- Changes to access and effects at the Winters House
- Change in wetlands and Mercer Slough Nature Park impacts and mitigation
- Change in visual appearance

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail
Cost Savings Ideas

Winters House

$$ 1b) Relocate Winters House, At-grade alignment

Why is this alternative being studied?

- Reduces construction cost
- Reduces construction risk by replacing a retained cut/lidded trench with at-grade
- Improves light rail operations due to fewer vertical changes in the alignment
- Maintains access to Blueberry Farm Stand

What other considerations need to be evaluated with this alternative?

- Selecting a relocation site for the Winters House and changes to effects on the house
- Change in wetlands and Mercer Slough Nature Park impacts and mitigation
- Potential noise effects and mitigation from moving light rail from retained cut to at-grade
- Change in visual appearance

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail
Cost Savings Ideas

112th Avenue SE

$$ 2a) At-grade, closing SE 4th Street while extending SE 8th Street into Surrey Downs to provide new neighborhood access

Why is this alternative being studied?

- Reduces construction cost
- Reduces construction risk by replacing a retained-cut with at-grade
- Improves light rail operations due to fewer vertical changes in the alignment
- Avoids the need for a bridge at SE 4th Street

What other considerations need to be evaluated with this alternative?

- Changes some partial property acquisitions on 112th Avenue SE to full purchases
- Changes local access from 112th Avenue SE to the Surrey Downs neighborhood from SE 4th Street to SE 8th Street and evaluation of potential for cut through traffic
- Changes to access and effects at Surrey Downs Park
- Potential noise effects and mitigation from moving light rail from retained-cut to at-grade
- Change in visual appearance

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail
Cost Savings Ideas

Downtown Station Design

$$ **3a) Eliminate mezzanine, station entrance in the outer travel lane of 110th Ave. NE**

Why is this alternative being studied?

- Reduces construction cost
- Improves station access by reducing the depth of the station
- Reduces construction risk due to a shallower tunnel and station
- May shorten construction duration
- Successfully used in the Downtown Seattle Transit Tunnel at the International District

What other considerations need to be evaluated with this alternative?

- Analysis of changes in pedestrian and traffic circulation and congestion
- Analysis of vibration effects from a shallower tunnel

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail
Cost Savings Ideas

Downtown Station Design

$$ 3b) Construct a stacked tunnel configuration with entrances in the outer travel lane of 110th Ave. NE

Why is this alternative being studied?

- Reduces construction cost
- Reduces construction risk due to a narrower tunnel
- May reduce utility relocations due to a narrower tunnel
- May shorten construction duration
- Successfully used in Vancouver, BC

What other considerations need to be evaluated with this alternative?

- Analysis of changes in pedestrian and traffic circulation and congestion
- Analysis of vibration effects from a shallower tunnel

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail
Cost Savings Ideas

Downtown Station Design

$$$ 3c) Relocate Station to NE 6th

Why is this alternative being studied?

- Reduces construction cost
- Reduces construction risk due to replacement of subway station with an elevated station
- Reduces construction risk due to a shallower tunnel
- May shorten construction duration
- Greater visibility of the station

What other considerations need to be evaluated with this alternative?

- Changes in station access due to elimination of entrance south of NE 4th Street
- Effects on City Hall, Meydenbauer Center, and other properties on NE 6th Street
- Effects of future development of the vacant parcel by City Hall
- Analysis of vibration effects from a shallower tunnel
- Analysis of potential noise effects and mitigation
- Change in visual appearance

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail
Cost Savings Ideas

Downtown Station Design

$$$ 3d) Relocate Station to City Hall Plaza

Why is this alternative being studied?

- Reduces construction cost
- Reduces construction risk due to replacement of subway station with a partially elevated station
- Reduces construction risk due to a shallower tunnel
- May shorten construction duration
- Greater visibility of the station

What other considerations need to be evaluated with this alternative?

- Changes in station access due to elimination of entrance south of NE 4th St
- Effects on City Hall, including parking and public safety facilities
- Effects of future development of the vacant parcel by City Hall
- Analysis of vibration effects from a shallower tunnel
- Analysis of potential noise effects and mitigation
- Change in visual appearance

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail
Cost Savings Ideas

Downtown Tunnel Design

$$ 4a) Retained-Cut Main St to NE 2nd

Why is this alternative being studied?

- May reduce construction cost by reducing length of cut & cover of tunnel
- May reduce tunnel ventilation requirements

What other considerations need to be evaluated with this alternative?

- Requires additional property acquisition
- Analysis of changes in pedestrian and traffic circulation and congestion
- May increase utility relocations
- Analysis of potential noise effects and mitigation
- Change in visual appearance

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million

East Link Light Rail
Cost Savings Ideas

NE 16th Street & Light Rail Configuration

$ 5a) Build a two-way road only on north-side of light rail alignment

Why is this alternative being studied?

- Reduces construction cost
- Total road/light rail width gets narrower

  Reduces amount of road construction

What other considerations need to be evaluated with this alternative?

- Introduces gates until full comprehensive plan for NE 16th Street built
- Changes to traffic and pedestrian access to properties along NE 16th Street
- Analysis of potential noise effects and mitigation

Potential Cost-Savings	
$	$0-$5 million
$$	$5-$15 million
$$$	$15+ million