

**CITY COUNCIL STUDY SESSION ITEM**

**SUBJECT:**

East Link: Initial findings of the Collaborative Design Process cost savings effort

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**POLICY ISSUES:**

The City and Sound Transit entered into a Memorandum of Understanding (MOU) in November 2011 that describes Bellevue's contributions to a downtown tunnel. The MOU also provides the basis for a Collaborative Design Process (CDP) that the City and Sound Transit jointly developed and agreed to in January 2012. The CDP provides the mechanism for the agencies to jointly pursue project cost-savings and to collaborate on other tasks to advance the project through the 60% design phase. Numerous cost savings concepts were presented to Council on April 23 and the community at an open house on April 26. These concepts have since been further developed and analyzed to determine their relative effects on system performance, the environment, and whether they would help to reduce overall project costs.

**DIRECTION NEEDED FROM COUNCIL:**

<u>    </u>	Action
<u>  X  </u>	Discussion
<u>  X  </u>	Information

**BACKGROUND/ANALYSIS:**

The City and Sound Transit have been working together since early February to identify and evaluate potential cost savings measures that hold promise to reduce the overall cost of the East Link light rail project within Bellevue. This effort is consistent with the MOU, the subsequent CDP, and Council's direction. The evaluation of potential cost savings measures has now progressed with better information about the options for refined cost estimates and potential savings. This information will be presented to Council on May 29. A report will be available publicly on May 30 and an open house held on June 5. Staff will support continued Council deliberations scheduled for June 18 for final discussion and action, with June 25 held as a back up if additional time is needed. The Sound Transit Board of Directors is expected to select cost savings measures for further analysis at their June 28 meeting.

The following sections provide background context regarding the MOU, CDP, cost savings analysis, and public engagement:

### MOU Commitments

Key components of the MOU include creation of the CDP, the City's \$100M up front contribution, and the City's \$60M contingent contribution. The CDP is discussed in more detail in the following section. The City's up front and contingent contributions can be summarized as follows:

- \$100M Up-Front Contribution
  - Made up of property and other contributions: actual cost to City will be less than the value to the Project
  - Not subject to a downward adjustment based on project cost savings or increased Sound Transit revenues
  - City-owned properties (at the time the MOU was signed) must be contributed even if the City decides to terminate the MOU at Project Baseline Budget.
  
- \$60M Contingent Contribution
  - Subject to a permanent downward adjustment to \$0 with project cost savings in Bellevue identified by the time of the Project Baseline Budget
  - Subject to downward adjustment to \$0 (if any remaining at Baseline) based on the actual costs of "portal to portal" tunnel construction only
  - City contingent amount (if any remaining at Baseline) is the last source of money, after proportion of Sound Transit project budget and contingency, for portal to portal tunnel costs.

### CDP Progress

The CDP approved by the City and Sound Transit in January 2012 established a structure (see Attachment A) consisting of six Technical Working Groups, a Collaboration Team, a Steering Committee and a Leadership Group. The Technical Working Groups, Collaboration Team, and Steering Committee are comprised of staff from the City and Sound Transit. The Leadership Group is composed of three City Council members and three Sound Transit Board members. At this time, all of the Technical Working Groups are proceeding with their assigned tasks. The Collaboration Team has been meeting weekly to review and direct the work of the Technical Working Groups and to coordinate the overall work effort under the CDP. The Steering Committee has provided guidance on policy issues and prepared briefings for the Leadership Group, City Council and Sound Transit Board. The Leadership Group established its ground rules and provided feedback on cost-savings ideas. The primary focus of the CDP during this quarter is on the cost-savings process.

### Cost-Savings Process

One of the primary tasks described in the CDP is to identify project cost savings. While cost savings work will continue throughout the design process, Sound Transit and the City committed significant resources early in the process to identify major ideas that could result in cost savings. Because some of these ideas may modify the agreed project alignment through Bellevue, the parties recognized the need to identify those ideas early to allow for further design work while maintaining the overall project schedule. Project cost reductions within that portion of East Link within Bellevue may translate to a reduction of the City's \$60M contingent contribution. It is in the mutual interests of Bellevue and Sound Transit to identify more than \$60M in savings in order to offset upward pressure on costs (e.g. inflation, design modifications) prior to establishing the new project baseline cost at completion of 60% design.

Toward this end, City and Sound Transit staff met in an all-day workshop earlier this year to brainstorm a broad range of potential cost-savings ideas. In order to foster creativity and keep the focus on the project at hand, few limitations were placed on the exercise other than remaining generally within the existing alignment. In addition to staff input, the list included ideas from Council and Sound Transit Board members.

The Collaboration Team developed a set of functional criteria to evaluate the list. The Collaboration Team recognized that many of the cost saving ideas have potential impacts that are different or greater than the current design. The Team also acknowledged that additional environmental analysis may be needed and mitigation would still be required per City, state and federal regulations. The highest ranked functional criteria were:

- Light rail transit mobility – ridership, capacity
- Urban development – quality and appropriate land use
- Access – to light rail from communities and businesses
- Noise and visual impacts
- Construction impacts
- Light rail operations – speed, reliability and flexibility
- Safety and security.

A four-day workshop involving a panel of independent cost-saving experts in structural and civil engineering, architecture, tunnel design, geotechnical engineering, construction and transportation planning and engineering was held to filter the list of ideas in accordance with the functional criteria listed above and to further develop them into concepts with potentially substantial cost benefits while still meeting the project criteria. The concepts developed by the panel were reviewed by the Steering Committee and categorized into three groups (see Attachment B):

- 1) Engineering modifications that can be evaluated in the early design work and incorporated into 60% design. These are ideas, such as column design, that would not affect or be noticeable to light rail users or from nearby properties. These ideas are moving forward with Sound Transit’s final designer;
- 2) Ideas that may affect the MOU project description and therefore require City Council and ST Board action. These are ideas, such as relocating the downtown tunnel station, that require public review and input before determining whether individual ideas should be further evaluated and potentially advanced into 60% design; and,
- 3) Previously studied and rejected ideas where there has not been a significant change to support reconsideration or further evaluation. These are ideas, such as converting the Bellevue Way HOV ramps I-90 to light rail use, that are not being advanced into 60% design.

In order to allow for a better understanding of the relative merits of the cost savings concepts included in the second category (may affect MOU project description), the East Link final design consultant team was tasked with developing conceptual designs of the cost-savings ideas. This early design work was the basis of cost estimates and an early, largely qualitative assessment of potential environmental effects. This information is the focus of the May 29 Council presentation and will be described in the cost savings report.

#### Significance of June City Council and Sound Transit Board of Directors Decision

Those cost savings ideas that are categorized as ideas that “impact the MOU Project Description,” would, if ultimately determined to be ideas that should be incorporated into East

Link, require approval by both agencies; by the Sound Transit Board as modifications to the approved Project, and by the City Council as modifications to the Project described in the MOU. Before either agency can take that action, additional engineering work and environmental review is necessary to identify impacts and mitigation consistent with the standards applicable to East Link. This additional engineering and environmental work requires time and resources, and would occur as design of the Project moves forward in 2012 and 2013.

In order to ensure that this dedication of time and resources has the support of both agencies, the Sound Transit Board and City Council will be asked in June to endorse moving forward for further feasibility analysis only those cost savings ideas that the agencies believe could be incorporated into East Link and support the agencies' commitment to deliver a high-quality, well-integrated project which serves the region. This June endorsement is not a final decision, and in no way alters the East Link project as approved by the Sound Transit Board and reflected in the Record of Decision issued by the Federal Transit Administration and the Federal Highway Administration. Rather, it is an indication that the ideas have sufficient merit to continue to spend resources to review. The next phase of review, including additional engineering design and impact and mitigation analysis consistent with requirements under NEPA and SEPA, will occur in the latter half of 2012 and into 2013.

A final decision to incorporate any one or more of these cost savings ideas into East Link would not occur until this additional review is complete; and only after the Sound Transit Board and the City Council determine, in light of the cost savings available and the impacts on the Project and surrounding neighborhoods (including ridership, system impacts, noise, traffic and visual impacts), that these cost savings ideas are consistent with the shared Project goals.

#### Council Involvement and Outreach

City and Sound Transit staff provided the Council with a brief overview of the ideas on April 23 and discussed them with the community at a public open house on April 26. Staff is also conducting follow-up meetings with a number of interested groups, such as the Bellevue Downtown Association, Meydenbauer Convention Center Board, Eastside Heritage Center, and several neighborhood groups. These have been held subsequent to the April 23 open house and will continue after the June 5 open house. See attachment C for a draft summary of public outreach through mid-May.

#### Next Steps

Following the City Council and Sound Transit Board of Directors decisions in late June regarding which cost savings measures to pursue further, a value engineering process will take place in July. The value engineering process will include the entire alignment, with specific focus on more detailed design of the cost-saving concepts, as well as overall project constructability and contract packaging. The Design and Value Engineering Technical Working Group, which includes City and Sound Transit staff, will be involved in the value engineering process per the CDP.

Project work for the last half of this year will mark the beginning of the 60% design phase of the project, which includes further development of the preferred cost-saving measures, as well as the remainder of the entire East Link project. Additional environmental analysis, including mitigation, resulting from modifications to the 112<sup>th</sup> portion of the alignment described in the MOU will be completed by the end of this year.

The overall project timeline includes final design continuing through 2016, and construction commencing in 2015. The baseline cost estimate identified in the MOU is anticipated to occur early in 2014. The sequencing of construction (i.e. what facilities are constructed and when) will be determined as part of the 60% design work that is currently scheduled to be completed about the end of 2013. Passenger service is scheduled to begin in 2023.

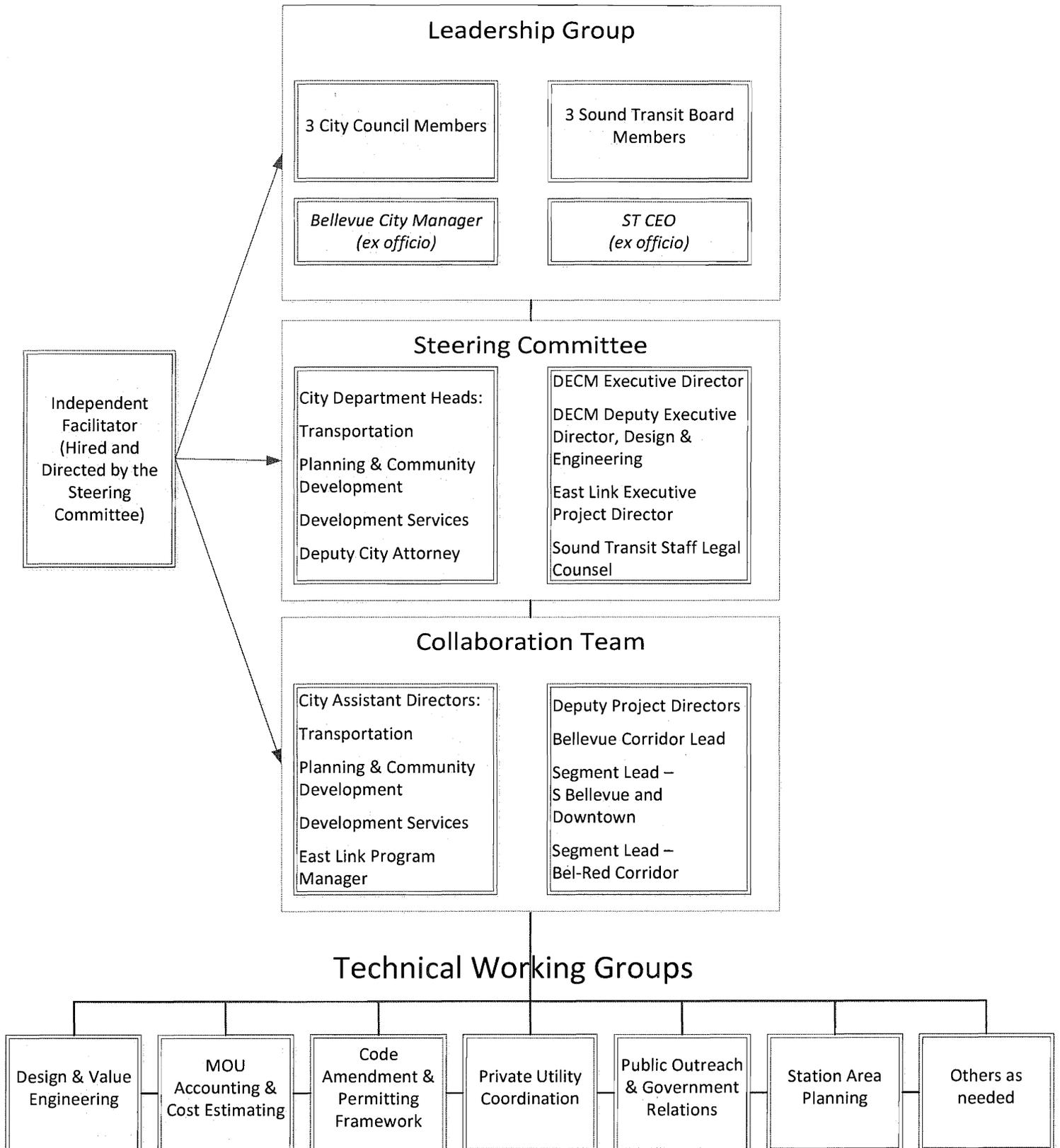
**RECOMMENDATION:**

This briefing is informational. There is no Council action required at this time.

**ATTACHMENTS:**

- A. CDP Organizational Chart
- B. List of Cost-saving Ideas
- C. Draft outreach summary

Figure 1: Collaborative Design Process Organization Chart



# LIST OF POTENTIAL COST-SAVING IDEAS

Attachment B

## IDEAS FOR FURTHER ENGINEERING REVIEW

1. Tunnel design optimization
2. Tunnel station design optimization
3. Tunnel construction staging area
4. Elevated guideway design
5. Optimize 120<sup>th</sup> station design
6. Reduce stormwater vaults through use of low-impact development design
7. Expedite tunnel construction through additional road closures

## IDEAS THAT MAY AFFECT MOU PROJECT DESCRIPTION

1. Bellevue Way Alignment at Winters House
2. 112<sup>th</sup> Alignment at Surrey Downs Park
3. Downtown station design
4. Downtown tunnel design
5. NE 16<sup>th</sup> cross-section

## IDEAS PREVIOUSLY REVIEWED AND NOT SELECTED

1. South Bellevue alignment
  - a) Utilize Bellevue Way HOV ramps to exit I-90
  - b) At-grade center running alignment on Bellevue Way and 112<sup>th</sup>
2. 112<sup>th</sup> design modifications
  - a) At-grade crossing at SE 6<sup>th</sup>

**East Link Collaborative Design Process  
April – June Meetings**

<b>Date (Time)</b>	<b>Status</b>	<b>Name</b>
4/26 (4-7 pm)	Completed	
5/1 (11 am)	Completed	Mariella Cadavid, Bellevue Way resident
5/3 (4 pm)	Completed	Eastside Heritage Center Board
5/3	Completed	Citizens Oversight Panel
5/7 (1 pm)	Completed	Bill Thurston
5/10 (3 pm)	Completed	Meydenbauer Center/Stacy briefing
5/23 (1:30 p.m.)	Confirmed	FTA Briefing
5/23 (7:00 pm)	Confirmed	Surrey Downs Community Club
5/29 (4 pm)	Confirmed	Move Bellevue Forward
5/29		
5/30 (3-5 pm)	Confirmed	Bellevue Downtown Association membership
5/31 (10:30 am)	Confirmed	FTA/SHPO briefing
5/31 (2 pm)	Proposed	Enatai Light Rail Committee
5/31 (7 pm)	Confirmed	Bellecrest Neighborhood Association
5/31 (7 pm)	Confirmed	Enatai Neighborhood Association
6/5 (4-7 pm)	Confirmed	
6/6 (8:30 am)	Confirmed	BOMA
6/6 (6:30 pm)	Confirmed	Susan Ilvanakis & 112 <sup>th</sup> property owners
6/7 (3 pm)	Confirmed	Meydenbauer Center board members (#2)
6/7 (1 pm)	Tentative	Bellefield Residential Park Board
6/8 (7:30 am)	Tentative	Eastside Transportation Partnership
6/12 (7:30 am)	Confirmed	Chamber of Commerce Transportation Committee