Item No. SS 2(a)
June 18, 2012

CITY COUNCIL STUDY SESSION ITEM

SUBJECT:
East Link: City Council Recommended Cost Savings Meaures.

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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. The cost savings concepts under consideration were presented to Council on June 4 and to the community at an open house on June 5. On June 11 the Council heard and discussed the recommendations of the CDP Steering Committee and Leadership Group. Council is now being asked to endorse cost savings measures meriting further analysis to the Sound Transit Board in advance of the Board's anticipated June 28 direction on which measures to further for additional engineering and environmental review. Measures that are further developed and analyzed will be revisited by the Council and Sound Transit Board of Directors in 2013 to determine whether they ultimately become components of the project to be built.

DIRECTION NEEDED FROM COUNCIL:
_X_ Action
____ Discussion
____ Information

Staff is seeking Council direction to transmit the attached memorandum (Attachment C) and Cost Savings Work Plan (Attachment D) to the Sound Transit Board of Directors prior to their June 28 meeting. Attachment B includes the Bellevue Leadership Group's transmittal and recommendation with respect to the proposed Cost Savings Work Plan.

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 progressed with better information about the options, with refined cost estimates, and information about potential environmental consequences. Project cost reductions within the Bellevue portion of East Link 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.

Since the February effort to identify a range of possible cost savings ideas, the City and Sound Transit have been working to develop preliminary information about design and engineering to allow for a more refined estimate of potential cost savings and feasibility. There are two types of potential cost saving concepts that have been the focus of this effort:

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 and are currently estimated to have potential cost savings of between $20 million and $24 million; and
2) Ideas that may affect the MOU project description and therefore require City Council and Sound Transit Board action. These have been the focus of Council briefings and public outreach since April. These are the ideas set out for Council deliberation on June 18.

Since the introduction of the cost saving concepts in April, the project team has performed additional engineering design work, prepared preliminary cost estimates, and conducted an initial environmental screening to identify potential impacts. This information is compiled and compared with the adopted project for each of the ideas in the *Draft Cost Savings Report* published on June 5.

City Council received a briefing on the information in the *Cost Savings Report* at the June 4 Council meeting and discussed the concepts to move forward for additional review on June 11.

The next step in that process of review of the cost savings ideas is to determine which of the cost savings measures that affect the MOU project description merit further engineering and environmental analysis. Staff will support continued Council deliberations with the intent of Council endorsing (at its June 18 meeting) a package of cost savings ideas that should be studied further. The Sound Transit Board of Directors is scheduled to select cost savings measures for further analysis at their June 28 meeting. This 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 on review. Before either agency can take an action to modify the East Link project, 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.

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. The information from the *Draft Cost Saving Report* was presented to Council on June 4 and provided to the public at an open house on June 5. Staff began conducting follow-up meetings with a number of interested groups, such as the Bellevue Downtown Association, Meydenbauer Convention Center Board, Eastside Heritage Center, and Surrey Downs Community Club, Enatai Neighborhood Association, Bellecrest Neighborhood Association, and several other interested groups subsequent to the April 26 open house, and these are continuing through the middle of June. A summary of the comments received from both open houses, stakeholder briefings, and submitted through e-mail to the City or Sound Transit is attached (Attachment A).

The proposed Cost Savings Work Plan attached as Attachment D was prepared through the Collaborative Design Process, and reflects the consensus views of the City of Bellevue/Sound Transit Leadership Group. The Bellevue members of the Leadership Group discussed the content of the Cost Savings Work Plan at the Council workshop on June 11. Attachment B is the formal transmittal of the Cost Savings Work Plan to the full City Council, with a recommendation from the Leadership Group for endorsement by the full Council. In addition, the Leadership Group is recommending a separate transmittal memo from the Council to the Sound Transit Board which reflects Bellevue's specific concerns and considerations with respect to the ideas being furthered for additional review. This separate transmittal memo was drafted to reflect consensus themes from Council's discussion on June 11. It is intended to provide additional context and background for the two agencies as the Cost Savings Work Plan is implemented in the coming months.

Next Steps

Following the City Council and Sound Transit Board of Directors decisions in 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 Council- and Sound Transit Board-endorsed 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 112th portion of the alignment described in the MOU, will be completed by the end of this year. However, to the extent that any of the cost savings concepts affect the modifications in the MOU, the timeline for completing the environmental analysis could also be affected.

Setting of 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:

Staff recommends that Council transmit the attached memorandum (Attachment C) and Cost Savings Work Plan (Attachment D) to the Sound Transit Board of Directors.

ATTACHMENTS:

A. Draft Public Outreach Summary
B. Leadership Group Transmittal and Recommendation
C. Proposed Council memorandum to Sound Transit Board
D. Cost Savings Work Plan

ATTACHMENT A

Not available at time of print

Attachment B

City of Bellevue

Memorandum

Date: June 14, 2012

To: Mayor Lee; Members of the Bellevue City Council

From: Bellevue City Council Leadership Group Members

RE: East Link Project; Cost Savings Concepts Transmittal and Recommendation

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Attached to this memorandum are two documents for the Council's consideration and action on Monday, June 18. These documents represent the culmination of preliminary cost savings work that the City and Sound Transit have been focused on for the past several months. You have already received under separate cover the *Draft Cost Savings Report* dated June 5, 2012 with additional detail about the process and ideas generated and preliminarily reviewed in our efforts to reduce the costs of the East Link Project, and thereby reduce the amount of the City's contribution to East Link.

Our role as members of the Leadership Group described in the Collaborative Design Process plan included providing feedback to technical staff throughout the cost savings process, as well as working with our counterparts from Sound Transit to provide a preliminary review and recommendation to our respective bodies on these cost savings ideas. Our review and recommendation is designed to help inform the Council's deliberations, any final endorsement of cost savings ideas must come from our full City Council.

Attached to this transmittal memorandum are two documents that we recommend be approved by the Bellevue City Council on Monday night:

Attachment C: Proposed transmittal memorandum from the Bellevue City Council to the Sound Transit Board. This document provides some additional background on the cost savings effort, as well as describes the Council's principles for considering cost savings ideas and highlights the particular concerns that should be addressed during the next phase of review; and

Attachment D: Joint Work Program directing Sound Transit and City staff to continue review work and analysis on certain cost savings concepts. This document reflects the consensus view of the City/Sound Transit Leadership Group.

We have appreciated the opportunity to serve the Council in this capacity, and look forward to continued participation between Bellevue and Sound Transit as we continue the difficult work of finding the right balance between East Link operations and context and neighborhood-sensitive design, all while delivering the East Link project efficiently and within available resources.

Attachment C

City of Bellevue

Memorandum

Date: June 18, 2012

To: Sound Transit Board Chair McCarthy; Members of the Sound Transit Board

From: Mayor Lee; Members of the Bellevue City Council

RE: East Link Project; Cost Savings Concepts and Proposed Joint Work Plan

DRAFT FOR COUNCIL DISCUSSION

DRAFT

The Bellevue City Council is pleased to endorse the Proposed Joint Work Plan transmitted with this memorandum. The Work Plan reflects those cost savings ideas that merit further refinement and review to determine whether they offer cost savings for the project while still furthering the City's and Sound Transit's principles for the East Link project.

Before any final determination can be made about whether revisions to the Project agreed to in the Memorandum of Understanding (MOU) should be made to incorporate any of these ideas, additional engineering work, community outreach, and environmental review is required. We are confident that the Collaborative Design Process that the City and Sound Transit used to preliminarily identify and define these cost savings ideas will continue to develop thoughtful, practical responses to the challenges presented by these concepts.

Background

Since the beginning of this year, the City and Sound Transit have been working through the Collaborative Design Process to identify potential project cost savings within Bellevue. This process arose from our two agencies' commitment to collaboration that was the foundation of the Memorandum of Understanding regarding East Link executed in November 2011. The need to identify substantial cost savings for the project is driven by multiple factors, including the mutual recognition of the benefits of a tunnel through downtown Bellevue and the recognition that cost savings and refinements are necessary to make the project financially feasible given available resources.

The cost savings work to date is summarized in a *Draft Cost Savings Report* dated June 5, 2012. A number of cost savings ideas, referred to as "Ideas Advanced for Further Engineering Review" are already being reviewed by project designers and will be utilized in the Project wherever feasible. It is our understanding and expectation that through the design process additional opportunities to reduce project costs through

construction efficiencies, use of alternative materials and techniques and other measures will be explored and incorporated into the Project.

The *Draft Cost Savings Report* also identified and described a number of cost savings ideas that would require modifications to the adopted MOU Project description to be incorporated into East Link. Through the Collaborative Design Process, the Steering Committee and Leadership Group developed the Joint Work Plan to outline which of those ideas should be further explored in the coming months. These new concepts, if mutually acceptable to the City and Sound Transit, would modify the current project description, requiring additional review of impacts and identification of mitigation prior to any final decision to incorporate any one or more of them into the Project.

The remainder of this memorandum identifies those areas of particular concern to the City Council that will need to be addressed during the subsequent review process.

Bellevue's Principles for Evaluation of Cost Savings Alternatives:

In deciding to endorse the Joint Work Plan, the Council reviewed the available information in the *Draft Cost Savings Report*, as well as community feedback provided through the outreach that has been done to date. The Council is concerned with carrying multiple ideas forward through the design process for a number of reasons, including the potential for community disruption and uncertainty that results from continuing design alternatives, as well as the increased expense associated with pursuing mutually exclusive design options. For that reason, the Council was committed to narrowing the options moving forward in the Joint Work Plan.

As the Joint Work Plan proceeds, we will be looking for the information and analysis that allows us to conclude that the cost saving ideas can be incorporated into the project without compromising the levels of mitigation that the community has come to expect with the alignment described in the MOU. In addition, we are seeking to ensure that cost savings ideas meet other shared goals, including a broad base of community acceptance and the ability to improve system performance by decreasing the variation in profile and elevation of the alignment. The Council is committed to ensuring that cost savings do not come at the expense of mitigation and quality design.

Specific Comments and Concerns

Bellevue Way Alignment at Winters House
The Council endorses continued review of idea 1a (shift Bellevue Way west) as described in the Joint Work Program because of the potential for cost savings, the potential for operational improvements, and the potential to avoid or minimize construction impacts on portions of Mercer Slough and the Winters House. Consistent with the above principles, a number of impacts will need to be further identified and design options explored to minimize or mitigate those impacts. The information included in the *Draft Cost Savings Report* for this design alternative includes an extension of the elevated section of guideway north of the South Bellevue Park and Ride in order to allow grade-separated access to Mercer Slough Park. We urge

technical staff to develop creative solutions to the access issues in order to allow the guideway to drop to an at-grade profile in a shorter distance (similar to the MOU project description) and to explore other ways to mitigate the visual and noise impacts of this modification to the surrounding neighborhoods including to:

- Mitigate visual impacts of segment for neighborhood west of Bellevue Way to similar level provided by trench
- Mitigate noise impacts through variety of techniques, including review of potential for decreasing noise from train wheels by depressing tracks below grade

This design option offers some potential for synergy with Bellevue's possible HOV lane along Bellevue Way in this location. The City has identified potential need for this project through a separate capital projects review process that is already underway, having included it in the City's Transportation Improvement Plan, a long-range planning document identifying potential future projects. The next phase of consideration includes determining whether to include the Bellevue Way HOV project in our Transportation Facilities Plan (TFP) and capital improvement plan (CIP). That work will proceed during the summer of 2012.

There are potential benefits to timing construction of the Bellevue Way project in a way that could save costs for both agencies. In addition, if timing of construction allows for completion of the Bellevue Way project prior to construction of East Link, traffic flow on Bellevue Way could be improved during East Link construction, benefiting vehicle and transit traffic, and construction staging areas between the road and the Slough would be enhanced, potentially reducing construction risks and environmental impacts. We will continue to explore the potential for maximizing the efficiencies of these two projects.

112th Ave SE Alignment:
The Council endorses continued review of the concept for crossing 112th Ave SE at approximately SE 15th with the train at or slightly below grade, with 112th Ave SE reconstructed to cross over the tracks. This concept appears to provide for some decrease in visual impacts while still allowing for grade separation of vehicular and light rail traffic at the crossing.[1]

Along the west side of 112th Ave SE, the Council endorses further review of raising the elevation of the trenched segment. Elevating the alignment out of the trench would save costs and could improve system performance. We have concerns about how this change in elevation along 112th Ave SE affects noise, visual and traffic impacts. The following comments and concerns should be addressed in the next phase of review:

- Maintain one location for grade-separated neighborhood access from 112th unless an appropriate alternative exists when considering travel time and cut-through traffic

[1] Note, this option was not included in the *Draft Cost Savings Report* but has been described in the open houses and other outreach associated with the cost savings effort.

  - We do not support having the 112th connection at SE8th (concept 2(a)) due to concern that the connection at the intersection would produce increased volumes of cut-through traffic in the neighborhood;
- Continue commitment to no gates/bells along 112th
- Mitigate visual impacts of segment for neighborhood west of 112th to similar level provided by trench (e.g. it would seem that noise walls would be less expensive than trenches)
- Mitigate noise impacts through variety of techniques, including review of potential for decreasing noise from train wheels by depressing tracks below grade
- Jointly explore alternatives for early property acquisition
- Consider options for developing and providing noise and visual mitigation early in the construction phase
- City staff is directed to examine future Surrey Downs park functions

Downtown Station Design:
We endorse continued review of 3b (stacked tunnel configuration) based on potential cost savings and minimal operational impacts. Some refinements, however, would be necessary for the Council to ultimately support this configuration, including modifications to avoid loss of lane capacity on 110th Ave NE north of NE 4th Street, and to mitigate any loss of lane capacity south of NE 4th to ensure that the overall road grid capacity is maintained. As this concept is carried forward, we understand that it may impact the feasibility and/or magnitude of savings available with some of the tunnel optimization concepts that are already being reviewed through the engineering process. Prior to any final decision on a downtown tunnel station configuration, we would need to see the package of ideas for an underground downtown tunnel station that provides the greatest savings consistent with our agencies' other principles.

The Council also endorses further review of 3c, moving the downtown station parallel to NE 6th and in alignment with the Downtown pedestrian corridor. We understand that 3b and 3c are mutually exclusive alternatives, but believe that further exploration of the urban design opportunities and implications of 3c merit continued work in the short term. There remain significant unanswered questions about the magnitude of the impact of this design on the City Hall public safety garage and functions that should be explored for feasibility in the short term as well. The configuration and location of rider access to this revised station location also needs continued review and refinement. This station has the opportunity to become the centerpiece of the East Link system, but must be designed to ensure that rider access remains convenient and available to the growth centers of Downtown Bellevue.

The next phase of review for any downtown station alternative should include a detailed look at the construction period traffic impacts and mitigation and a review for consistency with the City's long-term initiatives for Downtown growth and development.

Suggested Next Steps:

The Cost Savings Work Plan does not include a specific schedule for implementation of this next phase of review. We understand that an implementation schedule will be developed and the Council and Board will be updated about that schedule in the near term. Consistent with our principles outlined above, because of the anxiety that a lack of certainty about alignment configuration can create in the community, we urge that that schedule place an emphasis on further narrowing alternative concepts as quickly as possible. Critical issues that may prove a concept to be infeasible should be resolved in the near term, and priority should be placed on resolving other crux issues identified in this transmittal, for example, the work to optimize access issues for Mercer Slough Park and the Surrey Downs neighborhood from 112th.

Conclusion:

The Bellevue City Council is pleased with the results of the Collaborative Design Process to date. This is a new and unprecedented level of coordination between Sound Transit and a local host jurisdiction, and we believe this collaborative model has allowed for creative solutions to the difficult job of balancing system needs with neighborhood impacts. We are hopeful that the continued review outlined in the Joint Work Plan will lead to similar successes, resulting in not only a more cost-effective system, but one that combines operational efficiency with community support and a neighborhood-sensitive design.

DRAFT

Attachment D

Sound Transit and City of Bellevue Cost Savings Work Plan

(DRAFT)

This joint work plan identifies Cost Savings ideas for further development. It 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, but rather is an indication that the ideas have sufficient merit to continue to invest 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.

Winters House

Advance for further development options that replace the retained cut by the Winters House with an at-grade light rail alignment.

Design options: If the City Council in July 2012 decides to include a Bellevue Way HOV lane in the City's Transportation Facilities Plan environmental review and continues to make progress towards implementation, then study shifting Bellevue Way west with the cost of the project addressed as set forth in Section 7.2 of the MOU (Idea 1a). If not, then study relocating the Winters House. (Idea 1b)

Other design considerations:

- Noise and visual mitigation for increased length of above grade guideway
- Reduce the added length of elevated guideway
- Optimize the access location for the blueberry farm and Winter's House
- If alternative 1a advances, it should include an HOV lane

Advantages to this approach:

- Lower cost and risk
- Better LRT profile for operations

- Potentially overall reduction in cost and construction impacts for the City and Sound Transit if Bellevue Way HOV lane and LRT construction properly sequenced

112th

Advance for further development an at-grade alignment the length of 112th with a crossing from the east to the west-side at SE 15th below a new road overpass (Idea 2b). No further development of the MOU option of an elevated fly-over at SE 15th and to the extent possible the retained cut at SE 4th.

Design options: Continue to study location for optimal access to the Surrey Downs neighborhood including options from 112th which do not require a gated crossing with bells.

Other Design considerations:

- Work with the community on a package of changes in park use, neighborhood traffic control, other measures to mitigate change in access
- Reduce the height of the reconstructed 112th Ave SE over light rail by depressing light rail tracks to the extent prudent given soil conditions
- Use landscaping to screen the road overpass and LRT
- Noise mitigation for at-grade LRT
- Evaluate pedestrian access to the E. Main Station from the neighborhood and kiss-and-ride access from 112th

Advantages to this approach:

- Responds to Leadership Group criteria for 112th with respect to cost, visual, noise, and avoidance of retained cut
- Lower cost and risk
- Provides grade separated LRT operations

Downtown Station

Advance for further development both a Tunnel Station and the NE 6th Station to refine and better distinguish the difference in potential cost savings.

Design issues to examine with Tunnel Station:

- Optimize configuration to minimize impacts to surface traffic while retaining entrances north and south of NE 4th
- May involve stacked tunnel with one entrance setback from street and mitigation for loss of turn pocket south of NE 4th or further optimization of PE design with mezzanine

Design issues to examine with NE 6th Station:

- Reach agreement on impacts to City Hall and damages payment prior to further design
- Determine acceptability of design deviation (curve at 110th/NE 6th)

Advantages to this approach:

- Allows limited additional time to vet actual cost differences. Relocating the Station to NE 6th should only be advanced further if it has substantially more savings as it has operational and ridership impacts.