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Subject: Comments on FEIS for Sound Transit's East Link Proposal

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The information presented herein may substantially impact the decision being contemplated with respect to Sound Transit's (ST) preferred B2M alternative as represented in the project FEIS. As a result of a review starting with *FEIS Chapter 7, Section 7.6 Review of City of Bellevue B7R Study*, we have uncovered new information and opportunities as well as heretofore unrecognized crucial mistakes, omissions, and some misrepresentations impacting the choices made in the selection of ST's preferred alternative. These new issues and opportunities were discovered by selectively reviewing information in the DEIS, SDEIS, FEIS and the City of Bellevue's B7R study (aka ARUP study or B7R/C9T study).

As you may be aware, the B7 alternative analyzed by ST in the SDEIS was B7/C9T which included a station and small garage at a remote location (118th Ave SE) and another station at Main Street on the Red Lion site with the alignment connecting directly to the Main Street tunnel portal of the 110th Ave SE C9T alignment. This is the same tunnel alignment that ST's preferred alternative B2M connects to.

The B7R/C9T alternative included a station and large garage at I-90/Bellevue Way (B7R portion), and a station at Main Street with a connection to a shortened 110th Ave SE tunnel alignment via NE 2nd Street. The B7R/C9T alternative or possible variations thereof represent the City of Bellevue's preference.

My standing to provide comments on this issue comes from 35 year residency in the impacted Enatai neighborhood, many years of professionally compensated involvement with transportation planning issues in Bellevue and the eastside of Lake Washington, and a background of regional transportation planning with the Puget Sound Council of Governments (forerunner of Puget Sound Regional Council).

Some of the foregoing comments on the FEIS are admittedly lengthy and technical but necessary to convincingly frame the issues. The comments are decidedly focused on the Segment's B and C and are as follows:

1. Future LOS estimates on Bellevue Way are irrational.

The ST intersection traffic analysis (Appendix H1, Sub Appendix D) shows PM peak LOS F at the South Bellevue Park and Ride lot (SBP&R) signalized intersection for 2007 (believable) and LOS D for no-build (unbelievable) as well as build in 2020 and 2030. The future year LOS estimate for no-build cannot be better than existing when there is no improvement proposed for Bellevue Way, I-405 is operating at capacity even with its assumed Master Plan improvement, the Bellevue CBD is forecast to double in trip generation, and there are frequent existing traffic congestion events in the corridor. And the ST build proposal (signal at south driveway to P&R and southbound HOV lane conversion of center turn lane) only provides an insignificant (5 sec) improvement in the LOS delay value vs no-build. This deficiency should be corrected prior to finalizing mitigation for the ROD.

2. ST Forecast model problem is recognized.

In the absence of Bellevue Way widening or significant diversion to I-405 which is at capacity in 2030, the no-build can only be better than existing if the forecast volumes are lower than existing. And that is what has apparently happened. The ST traffic forecast volumes on Bellevue Way and 112th Ave SE are acknowledged as up to 20% "different" (translation -- lower) than the BKR volumes (see FEIS Chap 7 discussion on p.7-39). And 20% reduction in volume can cause a two level-of-service improvement which would take it from F to D. Note -- when this author made a Public Records Request for the ST forecast volumes in January 2011 (PD 10-211), the reply was these are not available, otherwise the deductive reasoning would not be necessary.

According to the FEIS Appendix H, sub Appendix A, the PSRC model modal split run and adaption and import of vehicle trip tables to Bellevue-Kirkland-Redmond (BKR) is supposed to "be consistent with the vehicle demand distribution found in the future year BKR model" -- but there is no mention of trip generation consistency. And to argue that the difference is due to diversion of SOV trips to transit trips is disproved by the no-build results and is not believable for the build either given the anemic market share of person trips that East Link actually captures. There is also no calibration documentation, or formal approval information that we have found in the FEIS.

It is not likely that ST's ad-hoc model would produce more credible traffic forecasts than the BKR model on which the City has spent years and millions of \$ and has produced documentation which has been periodically reviewed by a number of agencies. In addition the City bases its land use and transportation plans and programs and concurrency approvals on use of this model as do the cities of Kirkland and Redmond.

The obvious discrepancies in the ST traffic forecast should be corrected prior to finalizing mitigation for the ROD.

3. Use of an understated forecast results in substantially understated B2M traffic impacts.

ST does not acknowledge the need for any mitigation on Bellevue Way since they show future LOS D at the P&R intersection, although they do discuss an optional minor fix consisting of signaling the south driveway and optionally converting the existing center two-way-turn lane south of the P&R to a southbound HOV lane. But the impacts of these improvements is a very minor 5 second reduction in their delay estimates. With the existing traffic and/or the BKR forecast, improvements are needed for operation of the P&R facility and mitigation of impacts on Bellevue Way and 112th Avenue corridor traffic flows.

The traffic congestion and resulting neighborhood diversions likely to be created by the unmitigated B2M proposal will negatively impact the daily lives of thousands of residents in at least four communities, not to mention the accessibility of the retail core of the CBD. This issue is currently unrecognized and the situation needs to be corrected prior to finalizing the ROD.

It is estimated that a new southbound GP lane is needed on Bellevue Way from the 112th wye to I-90 to provide adequate traffic operations for the existing SBP&R condition as well as to address the corridor LOS needs with B2M garage operation. This independent conclusion could be accepted or verified with new forecast and LOS analysis to inform the final alignment decision and the ROD.

4. The impacts and cost of the added GP lane improvement represent a substantial change in the proposal.

Per City of Bellevue staff, the cost of the added lane is approximately \$30 to \$40 million. This amount should be added to the B2M FEIS project cost as it is required for satisfactory operation of the P&R lot, represents a substantial change to the proposal, and the implementation thereof is likely to cause significant adverse impacts (WAC 197-11-440(6)(c)(iv) to residents, topography and flora and fauna along the bluff on the west side of Bellevue Way. Per the WAC, detail analysis of this mitigation is required.

5. The impacts and cost of ST's current mitigation proposals along 112th Ave north of the "Y" represent a substantial change in the proposal.

The most recent mitigation proposal consists of an elevated crossing of 112th Ave SE at about SE 15th St and a west side running alignment partly elevated along Bellefield Park Condominiums and Surrey Downs with additional property and park takes and an undercrossing of SE 4th St along with a new partial trench station. Estimated cost for this revision is \$35 million. The estimated cost of this change should be added to the B2M FEIS cost for comparisons to the B7R and other alternatives.

6. FEIS fails to present the beneficial impacts of closure of the SBP&R lot on Bellevue Way and 112th Ave SE corridors as a result of B7R.

The ARUP BKR-volume-based Traffic Impact Analysis (ARUP Technical Memorandum 04¹) indicates that the signalized intersection at the SBP&R will operate at LOS F for AM and PM under the 2030 B7/C9T condition (existing P&R in operation) and LOS B and C respectively for B7R/C9T (lot closed). It also

¹City of Bellevue **East Link Light Rail B7/C9T to NE 2nd Portal (B7 – Revised) Alternative** TM04 - South Bellevue Traffic Impact Analysis 215382/TM04
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quantifies, with micro-simulation modeling, the huge PM peak hour corridor delay to the north that this existing P&R operation causes -- without the added burden of a tripled lot size as per B2M.

The Memorandum also suggests that B7R protects the Enatai neighborhood from traffic diversions from Bellevue Way due to the freer operation of that corridor with the elimination of the SBP&R lot.

The FEIS (p. 7-39) incorrectly claims that the SBP&R intersection operates satisfactorily under B7/C9T and fails to present the quantified substantial beneficial impacts of closure of the SBP&R lot on Bellevue Way and 112th Ave SE corridors as a result of B7R/C9T.

7. B7R presents a huge environmental windfall that constitutes significant new information.

This is in the form of potential conversion of the 11.5 acre SBP&R lot to park and wetland for the Mercer Slough area. Since this environmental opportunity is not discussed in the ARUP studies it is not considered an FEIS omission since this is essentially new information. But it is assumed in the FEIS that the lot would close with B7R. This potential action essentially offsets all of the B7R's limited permanent park and wetland and impervious surface environmental impacts and makes up for a host of past and some future environmental takings in the Slough as well.

8. FEIS misstates impacts on Enatai neighborhood character and traffic patterns.

FEIS (p-7-39) claims the Environmental Technical Memorandum says the B7R garage and station would "substantially change the character of the Enatai neighborhood because it would add intense activity, change neighborhood views and alter traffic patterns". The Enatai neighborhood is huge at 952 residential units, within limits of the neighborhood recognized by City of Bellevue as a sub area, and by the Enatai Neighborhood Association. The actual statement deals with only the residences on the west side of 113th Avenue SE and the impact on their views and aesthetic character with merging of local residential and transit traffic at the north end of the garage. And the Traffic Impact Analysis Memorandum observes that there should be very little negative traffic impact on the south Enatai neighborhood and points out the unlikelihood of traffic diversions through the Enatai neighborhood due to B7R.

9. Opportunities identified in the ARUP report to save substantial costs in the B7R/C9T alignment are not mentioned in the FEIS.

Since costs and ridership are the principle criterion utilized by ST for the preferred alignment selection, the next several issue points are focused mainly on cost as the ridership is better than the B2M datum .

ARUP's suggestion for deleting the East Main station and realigning C9T results in a cost reduction of some \$115 million (without considering residual value for the Red Lion site or tunnel cost adjustment) And there is only a minor reduction in estimated ridership of 1000 boardings. For only \$6 million more a gently curved at-grade station abutting the future I-405 RoW could be incorporated if an ST design deviation were to be obtained.

An additional \$15 to \$20 million savings “opportunity” is also identified by using the more appropriate corridor estimate method for the BNSF RoW versus ST’s “across the fence” method.

Initial cost reduction for the above items is \$130 to \$135 million. Because the City of Bellevue stopped the ARUP study due to budget ceiling and to inform the FEIS process, these potential cost reductions were not fully documented. But in light of the importance of costs and the changing comparison datum, the decision makers should have the advantage of that information prior to finalizing the ROD, unless there is a favorable decision on issue 12 below, which then takes precedence.

10. The costs for B2M/C9T substantial changes and ARUP “opportunities” should be incorporated in the final alignment decision.

B7R/C9T is noted in the FEIS as \$150 million more expensive than B2M/C9T (it is actually \$140 million). However, the added costs for B2M/C9T mitigation include Bellevue Way widening of \$35 million and an estimated cost of \$35 million for the new 112th Ave SE grade separation and west-side running proposal per issue points 4 and 5. Therefore, with say \$135 million in cost reduction opportunities for B7R and the additional mitigation costs of some \$70 million for B2M/C9T, the B7R alignment now has the cost advantage at some \$65 million ($140 - 135 - 70 = 65$). The decision makers should have the advantage of this information prior to finalizing the ROD, unless there is a favorable decision on issue 12 below, which then takes precedence.

11. FEIS considers B7R/C9T costs not directly comparable to ST’s.

This is believed to be an unstudied position on ST’s part. A great deal of effort reportedly went into maintaining an “apples to apples” comparison with the SDEIS data, even to the extent of having ST prepare the RoW estimates after ARUP had already completed theirs. In fact it is ST’s RoW estimates and practices that are the most problematic for the industry experts. But for the construction cost estimates, we found that ARUP closely followed the ST model and in those cases where the ARUP unit costs varied from ST’s, the ARUP costs were typically higher. This consultant considers that if ST were to carefully examine ARUP’s cost estimate detail it would find this to be true. Since the FEIS cites the B7R project costs as noted in issue 10 above, there is apparently a certain level of acceptance of the estimates. We consider the ARUP estimates to be representative of ST’s cost estimate practices as applied to East Link and are thus used herein for comparison and conclusion purposes.

12. Unexplored benefits of B7R/C14E

Costs

A B7R/C14E combination is not addressed in the FEIS due, it is believed, to late receipt of the ARUP reports. There are a number of advantages to this combination the most significant being the cost, which is lower than B2M/C11A, the ST cost datum. This astounding fact eliminates the need for Bellevue and ST to come up with some \$320 million in additional funds and/or savings for the tunnel. There would be no contribution required from the City or ST.

The cost of C14E per the FEIS is \$495 million, cheaper by \$60 million than C11A and \$295 million less than C9T. And the cost advantage of the B7R/C14E combination versus B2M/C11A, without any "opportunities" adjustment to ARUP's B7R estimate, is now \$85 million assuming the latest B2M mitigation costs of \$70 million. Without the mitigation, the cost advantage is still positive at \$15

million. And with only the RoW "opportunities" adjustments to B7R, the cost advantage is \$30 to \$35 million. In other words ST could save at least \$15 to \$35 million from their baseline budget.

But a more appropriate action would be to allocate those savings for an extension of the C14E moving sidewalk to 104th Avenue which would greatly improve the 5 and 10 minute walk-shed for the NE 6th St station, and thus its ridership. The desirability of that people mover spine has been long recognized dating back to 1976 when a people mover grant application was filed with UMTA (now FTA).

Ridership

On the ridership front, B3/C14E which is similar in stations to B7R/C14E, has a total east link ridership of 48,500 which compares favorably to 49,000 for B2M/C11A and 50,000 for B2M/C9T. The C14E downtown station attracts some 4000 riders under the B3 combo and we estimate that the station will easily pick up another 1500 - 2000 riders with an extension of the moving sidewalk west from 110th to 104th plus a walk link across the freeway on the planned extension of NE 6th St to serve the planned CBD expansion including TOD development of the auto row area. This missing NE 6th Street pedestrian link is an apparent mistake in the SDEIS and is believed to have negatively affected transit share for the NE 6th Station.

The B7R station should also increase by some 500 trips as found in the ARUP documents and which were not used for unexplained reasons. It is quite likely that B7R/C14E with some pedestrian system enhancements per above will have CBD and total system ridership that is superior to all tested alternatives. A modal split run to verify is not a significant expense.

Environmental

With the above modest adjustment to the ridership estimate, C14E is better than C11A or C9T on 17 out of the 24 total comparison criteria used in the FEIS. Construction risks and traffic impacts are substantially moderated with this combination. Regarding B7R, the FEIS does not contain full comparison data but if it did the data should be vastly superior to B2M with adjustment for the substantial environmental and traffic benefits of closure of the South Bellevue Park and Ride lot, plus recognition of the environmental benefits of the gantry construction method for crossing the Slough as discussed in the ARUP study.

In addition, the elimination of substantial residential takings and avoidance of direct noise and exposure impacts on four residential communities cannot be overstated in terms of social and environmental benefit. In addition the elevated C14E substantially avoids impacts on Sturtevant Creek.

With respect to noise, the B7R analysis repeated the same mistakes of the SDEIS in that a cross-over track, which is a major source of noise, is located adjacent to the first apartment complex at the south end of the BNSF corridor. In addition, most if not all, of the existing residential properties in the BNSF corridor have already been mitigated for excessive noise associated with I-405 and the prior railroad use as a condition of building permit approval. No recognition of that fact is given in the FEIS.

Conclusions

B7R/C14E combo is some \$15 to \$35 million less than ST's baseline B2M/C11A budget. With the needed mitigation for B2M, the theoretical difference could be as high as \$85 to \$105 million. This

astounding result means there is no need for Bellevue and ST to come up with some \$320 million in additional funds and/or savings for the downtown tunnel. Accordingly, there would be no contribution required on the part of the City or Sound Transit for this alternative. The budget savings could be used to extend the moving sidewalk to the west for a likely substantial increase in boardings for Link as well as the bus system. With this feature, ridership could be superior to all other alternatives.

In addition B7R/C14E has substantial environmental and community benefits that have only been fully assessed for C14E. The FEIS does not contain full environmental comparison data for B7R, but if so, it should be vastly superior to B2M in light of the substantial benefits for the environment and traffic flow resulting from closure of the SBP&R lot and the avoidance of serious impacts on the four residential communities along Bellevue Way and 112th Avenue SE. And finally, the costs for the B7R/C14E combo are considerably more controllable than other alternatives due to the generally lower construction risks and much lower amounts of utility and traffic interference.

11. Overall conclusion

Summarizing comments 1 thru 10 above, the FEIS does not recognize the traffic forecast underestimate that exists in the Bellevue Way corridor and consequently does not identify the substantial mitigation needed to accommodate the appropriate forecast. The FEIS also does not address the mitigation along 112th Avenue SE that is currently being negotiated between ST and the City. These mitigations being negotiated and/or needed for the B2M/C9T alignment are very costly and result in more residential neighborhood impacts and takings. These revisions represent a substantial change in the proposal and introduce significant adverse impacts to residents, flora, fauna and parks along the west sides of Bellevue Way and 112th Ave SE; and these should be analyzed per SEPA rules.

It should be recognized that with the new B2M costs versus the cost reductions associated with East Main Station elimination in B7R/C9T, and the favorable ridership for B7R, the principle stated obstacles to the ST acceptance of B7R/C9T are eliminated. It should also be recognized that new information regarding the potential SBP&R conversion to park and wetland as well as misinformation due to erroneous data used in the EIS studies have technically reopened the discussion for a potential change in the selection of the preferred alignment.

And in that context, the parties involved in the final alignment decision should also acknowledge and deliberate the potentially immense cost savings, plus environmental, residential and business community benefits that could accrue to all by implementation of C14E with B7R.

Sincerely,

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