

RECEIVED JAN 30 2004

NL 155

Integrated Transport Research

122 NW 50th Street
Seattle, WA 98107-3419
Phone/Fax: 206/781-0915

January 29, 2004

James Irish
Link Environmental Manager
Sound Transit
Union Station
401 S. Jackson Street
Seattle, WA 98104
E-mail to: LINKSEIS@soundtransit.org

Re: Comments on Sound Transit North Link Project Draft SEIS

Dear Mr. Irish,

I wish to have included in the SEIS record the following comments and recommendations. They focus on the following parts of the document: Project Nomenclature, Preface, Executive Summary, Chapter 2 (Alternatives), Chapter 3 (Transportation Impacts), Chapter 5 (Financial Analysis), and Appendix K (No-Build Alternative). They also incorporate information from the North Link Technical Report and the North Link Transit Ridership Forecasting Technical Report. My comments are in no certain order of importance.

Transit Technology Selection

The SEIS (p. xix) indicates that light rail was chosen as the preferred technology as a result of the Regional Transit Project (RTP) carried out in the early 1990s, and that the RTP's FEIS is "incorporated by reference". However, the SEIS fails to acknowledge that the existing bus transit system has greatly changed in the years since the RTP was completed: bus vehicles have been greatly improved in terms of passenger comfort; transit routes have been reconfigured to decrease travel times and increase schedule reliability; major progress has been made to complete the region's "Core" HOV lane network on which Sound Transit express buses operate; the region is about to adopt a regional inter-modal automatic fare system; increased demand for park & ride capacity at transit stations has been met; traffic signals have been synchronized and are under real-time central control, and buses are given priority at intersections; and improved utilization of the DSTT has increased downtown bus capacity and through put. Also, a great deal of experience has been gained in this and other regions involving implementation of bus rapid transit (BRT). If the choice of technology for the North Link travel corridor were made today, BRT (the Transportation System Management alternative in 1993) would compete very favorably with Light Rail Transit (LRT).

1

NL 155 (cont'd)

Recommendation: The SEIS should revisit the choice of transit technology, taking into account the many transportation system and bus transit improvements that have occurred and are now understood to be possible and beneficial if made a part of a regional BRT system.

1 cont.

No-Build Alternative Definition

The No-Build alternative, as defined and constituted, does not fully represent the actions that other agencies, including the City of Seattle, King County Metro, and the Washington State Department of Transportation, are likely to take to improve traffic flow and transit service in the North Link travel corridor in the near term. Further, the SEIS is ambiguous as to which projects were actually included for purposes of forecasting system performance in 2015 and 2030. Although it is stated that these projects are listed in Appendix K, they are not to be found there.

2

At one point (p. 2-1), it states that all projects listed in the Puget Sound Regional Council's (PSRC) Destination 2030 Metropolitan Transportation Plan (MTP) are included for purposes of 2030 forecasts, but only projects that are funded and listed in the PSRC's 2003-2005 Regional Transportation Improvement Program (TIP) are included in the 2015 forecast. At another point (p. K-1&2), the document indicates that some projects are not incorporated in the No-Build alternative because a preferred alternative has not been selected and/or funding has not been identified.

Many of the actions listed in the Puget Sound Regional Council's (PSRC) Destination 2030 Metropolitan Transportation Plan (MTP) have completion dates of 2010 or before. They involve transit related, roadway related, and non-motorized (bicycle and pedestrian) projects that agencies will seek to complete long before the forecasting horizon years of 2015 and 2030.

3

Other potential programs and policies to improve mobility through travel demand management (TDM) are not mentioned. Some of these are described in the PSRC's Regional TDM Action Strategy adopted in 1998. The SEIS does not reference this document.

Further, Metro could truncate or realign some bus routes to feed major bus transfer points in the Non-Build alternative, just as is assumed for the build alternatives.

It is hard to understand why these numerous projects and programs, many of which would have a relatively immediate impact on mobility and mode choice in the North Link corridor have not been incorporated in the No-Build alternative. If uncertain funding is the reason, then the same argument can be used to negate all of the build alternatives. And if sufficient funding for any of the build alternatives is not forthcoming, and if the decision were made not to proceed with the LRT strategy, considerable monies would obviously be available for projects and programs that will improve the performance of the existing bus system.

2

The potential application of these funds to bus service improvements requires reasonable assumptions regarding increased service hours and frequency. The SEIS apparently uses bus level of service assumptions provided by King County Metro. These assumptions, which are crucial for a fair and equitable comparison of the No-Build alternative with the build alternatives, should be clearly explained in the context of revenue assumptions based on the same funding sources potentially available for the build alternatives.

4

In summary, the No-Build alternative should reflect all of the bus system changes in the last decade and possibilities for further improvements supported by Sound Transit funding. The SEIS should not assume a priori that the preferred alternative will be one of the build alternatives. The definition of the No-Build alternative should adhere to the definition provided in the Project Nomenclature (p. xvii): No-Build “represents current conditions and reasonably foreseeable changes in background conditions by years 2015 and 2030.” It seems perfectly reasonable to expect that transportation agencies will act decisively as trips and congestion grow in the corridor, and they will take steps to meet increasing bus transit demand and encourage even more bus ridership. And if No-Build is the preferred choice, Sound Transit will have the means to significantly increase its investment in bus transit in the North King sub area.

5

Recommendation: The No-Build alternative should be redefined and reconstituted to include transportation projects, bus service improvements, and TDM programs that will improve mobility and effect mode choice in the North Link corridor and that are reasonably likely to be completed and in place in the LRT construction period (2004 to 2015). This redefinition should encompass the possible selection of No-Build as the preferred alternative and the revenues that choice will free up. Appendix K should then list all of the projects that were assumed to have been completed and used for purposes of producing revised forecasts for 2015 and 2030.

Performance of All Alternatives

Tables S-4 and S-5 (p. ES-12 & 13) and Figure S-4 (p. ES-15) give performance metrics for each of the build alternatives, but not the No-Build alternative. The titles and footnotes attached to these exhibits, which refer to “system-wide ridership”, are ambiguous. Here, the “system” must mean the Link LRT system and not the total regional transit system. Elsewhere in the SEIS, “system” is used to delineate the total transportation system including roadways and transit.

6

None of these exhibits or the explanatory text clarifies the extent to which LRT riders are drawn from the ranks of bus transit riders. A casual reader could be led to believe that these are all additional (new) transit riders.

Recommendation: Tables S-4 and S-5 and Figure S-4 should include ridership and other performance numbers for the No-Build alternative so that it can be directly and easily compared with the build alternatives. Also, each exhibit should be clearly labeled to indicate that ridership is LRT ridership. And these exhibits, or additional exhibits, should

3

include estimates of the numbers of riders who will shift from bus and other modes to LRT.

Initiation of Service

The SEIS indicates that LRT service under any of the build alternatives would start between 2013 and 2015. It does not clearly say whether these start-up dates are contingent on receiving revenues that allow the full build-out on this schedule. It does say (p. ES-9) that construction and operation could proceed in two or more stages depending on availability of funding, and that funding issues may require the deferral of construction of individual stations. Thus the impact of insufficient funding on completion date(s) and ridership is not fully disclosed.

7

Recommendation: The SEIS should clearly indicate when service would start for all or a portion of North Link under different funding scenarios that do not provide all of the necessary revenues to complete construction and begin operation by 2013-2015. The SEIS should also indicate the impact of staged construction and station deferral on ridership and fare revenues.

Baseline Financial Plan

The SEIS (p. ES-23 and 5-8) states that the “Draft Baseline 2004 Financial Plan will be available to the public and under review by the Sound Transit Board starting in November 2003”. In preparing these comments, I requested a copy of that document but was told that it would not be available until the end of this week at the earliest. Since the end of this week is tomorrow, Friday, January 30th, the deadline for comments on the SEIS, this key document was not available to me and to other interested members of the public. It should have been available so that comments on the SEIS could reflect crucial assumptions about financial resources available to the project.

8

Obviously, future revenues available for North Link have been eroded by events since the 2003 Financial Plan was adopted. These include larger than forecasted Sound Transit expenditures for other projects, voter limitations on MVET revenue, constraints placed on further Federal funding by Congress, and passage of the Monorail ballot measure that, in addition to appropriating a large amount of available transit revenue capacity, appears to have caused some MVET tax avoidance. If resources are severely limited for either Segment A or B, or both, then the public may decide to opt for different alternatives than those analyzed in the SEIS. These include alternatives that could deliver immediate and real rather than increasingly longer-term and more problematic benefits.

9

Recommendation: The public comment period for the SEIS should be extended from the date that the 2004 Draft Baseline Financial Plan is issued to allow an opportunity to weigh costs, available revenues, and the need for additional tax revenues, against the project's benefits, and to add to or amend comments submitted prior to the availability of the 2004 Financial Plan.

4

NL 155 (cont'd)

Full Cost Disclosure

The SEIS (p. ES-22) states that the costs listed in Tables S-6 and S-7 “do not include agency administration, program management, and vehicle fleet requirements.” Surely, these costs can be estimated at some level of confidence and a range of values can be provided just as the ranges of the other construction costs are for each of the build alternatives.

10

Recommendation: Tables S-6 and S-7 should include estimates of all costs to build the rail alternatives. These tables would also provide a good place to present the estimated costs for the No-Build alternative as redefined and reconstituted.

Fare Revenue Estimates

The SEIS states (p. ES-24) that fares would cover 61-68% of operating costs for the completed Central Link from S. 200th Street to Northgate. Fare recovery ratios at these high levels are very unusual for LRT. In fact, according to FTA data, in 2001 only one system in the US, Sacramento RTD, reported a recovery ratio above 60%. Its ratio was 62%. The average for all 23 LRT systems operating was 27% and the mean was 21%. As a familiar and nearby example, Tri-Met’s MAX (Portland, Oregon) recovery ratio was 31%, less than half estimated for Link.

11

Recommendation: The assumptions and method used to calculate fare revenues should be revisited. An explanation should be provided as to why Link would produce high fare recovery ratios compared to all other LRT systems currently operating in the US.

Person-Moving Capacity of Alternatives

Table 3.1-5 compares the person-carrying capacity of the alternatives, including No-Build. For LRT, these are theoretical capacities based on assumed vehicle capacities and headways. The table does not indicate when and how often these capacities will be needed and utilized.

12

Recommendation: Effective, that is to say those that are actually utilized, person-carrying capacities measured in equivalent freeway lanes, as well as theoretical capacities should be presented and compared for the No-Build and LRT alternatives. The No-Build alternative used for comparison should be redefined and reconstituted as indicated above.

Cost-Effectiveness Metric

The SEIS uses capital cost (not including agency administration, program management, and vehicle purchases) to calculate cost-effectiveness values for each of the alternatives (Table S-9 and Figure S-6). This metric and the values do not produce meaningful distinctions. “Effectiveness” implies real benefits including: time saved by transit riders (both for current bus riders and for drivers who shift to transit); reduced direct out-of-

13

NL 155 (cont'd)

pocket costs of travel for drivers who use transit; reduction in excessive fuel consumption and concomitant improved air quality; and reduction and redeployment of bus transit service hours if the existing transit is reconfigured. All of these potential benefits (or costs) can be quantified and used to create a net benefit value that can then be weighed against total costs, operating as well as capital, and compared across all alternatives.

The SEIS acknowledges (p. ES-24) that the FTA’s New Starts definition of cost-effectiveness, which is more inclusive of real benefits, was not used, but doesn’t adequately explain why it wasn’t.

13 cont.

Recommendation: Cost-effectiveness should account for all costs, including operating costs, and all significant benefits, including those accruing to both transit riders and non-riders. The metric should be used for the No-Build alternative, as redefined and reconstituted, as well as the build alternatives.

Dealing With Uncertainty

Uncertainty, which is considerable when using models to forecast more than a few years out, is a major issue that is unaddressed throughout the SEIS. For example, Tables 3.1-4, 3.2-2, and 3.2-4 compare estimated VMT and level of service (LOS) for the several alternatives. The changes for the build alternatives from the No-Build alternative are exceedingly small for each of these metrics, and are certainly well within the error band for this kind of future forecasting. Yet the tables and the text portray the differences (as small as 0.17%) as significant. A more valid conclusion is that the build and No-Build alternatives produce equal transportation system performance results.

14

Recommendation: The SEIS should deal forthrightly with analytical (forecasting) uncertainty. When differences between estimated transportation system metrics for alternatives are small, this should be acknowledged by indicating that the values are the same for all intents and purposes.

Sincerely,

Dick Nelson
Senior Technical Analyst

NL 155 Integrated Transport Research/Dick Nelson

NL 155-1

Please see response to comment PP-1.

NL 155-2

As stated in Section 2.1 of the 2003 Draft SEIS, the No-Build Alternative includes funded projects in PSRC's TIP for 2015 and all projects in PSRC's MTP. The No-Build Alternative incorporates planned changes to land use and increases in population and employment consistent with PSRC forecasts. Appendix K conveys the future land use developments and transportation projects identified as part of PSRC's forecasts.

NL 155-3

Please see response to comment NL 155-2. Bus service increases from the anticipated population growth are included in no-build as discussed in Section 3.2 of the 2003 Draft SEIS as well as Section 5.1.2 of the 2003 Draft SEIS Transportation Technical Report.

NL 155-4

Please refer to Section 3.2.2, Service Coverage and Structure, of the 2003 Draft SEIS regarding bus service redistribution.

NL 155-5

Please see responses to common comment PP-1 and comments NL 155-2 through 4.

The Purpose and Need for North Link is to develop light rail extensions. The No-Build Alternative provides a comparison of expanded bus service, including likely improvements and service expansion by King County Metro.

NL 155-6

Please refer to Section 3.2.3 of the SEIS regarding ridership. The No-Build Alternative includes ridership for the Initial Segment with an extension to South 200th in SeaTac. System-wide ridership extends north to Northgate and south to S 200th in SeaTac. While some riders may otherwise be bus riders without the project, North Link's ridership increases result from improvements for existing riders as well as a competitive mode for new riders.

NL 155-7

Section 5.6 of the 2003 Draft SEIS indicates that specific alternatives identified, the availability of funds, and the utilization of the other resource options listed will determine the phasing of project construction. Project impacts at each potential interim terminus are discussed throughout the document. See the discussion of University Link in Chapter 2 and 5 of the Final SEIS.

March 2006

North Link Final SEIS
Responses to Comments

NL 155-8

Comment noted. The 2004 Draft Baseline Financial Plan was available in fall 2003. However, the information in the Draft SEIS was based on the latest adopted financial plan, which was the 2003 Baseline Financial Plan. The most current adopted financial plan is reflected in the Final SEIS.

NL 155-9

Since the publication of the 2003 Draft SEIS, Sound Transit has identified a Preferred Alternative and also made the 2004 Draft Baseline Plan available, and then issued the 2005 Draft SEIS, allowing for an additional public comment period.

NL 155-10

As discussed in Chapter 5, the purpose of the 2003 Draft SEIS capital cost estimates was to provide a financial comparison between the alternatives. The agency administration, program management, and fleet costs and requirements would not change with the various alternatives except to be non-existent in the No-Build. Chapter 5 of the Final SEIS provides more detailed cost information for the Preferred Alternative based on the additional level of design for this alternative.

NL 155-11

The North Link corridor is one of the highest ridership new rail corridors to be developed in the United States, and higher ridership levels translate into a higher rate of fare box recovery. Fare revenue estimates were reviewed and updated in the 2005 Final SEIS.

NL 155-12

Table 3.1-5 refers to person carrying capacity based on the theoretical vehicular capacity and North Link operation assumptions as stated in the table notes. How often full capacity will be needed is not at issue as this table is intended to demonstrate the overall increases in person carrying capacity with North Link, not ridership. Ridership is analyzed in Section 3.2.3 of the 2003 Draft and Final SEIS.

NL 155-13

Please see response to comment NL 155-10. Transit measures are discussed in Chapter 3. In addition, the cost-effectiveness measures used by Sound Transit are considered the most appropriate to compare alternatives at the EIS stage of the project. Chapter 6 of the Final SEIS provides the FTA measure of cost-effectiveness for the Preferred Alternative.

NL 155-14

With these tables and the accompanying discussion in the 2003 Draft SEIS, Sound Transit provided a relative comparison between No-Build and the North Link alternatives as part of an evaluation of regional transportation factors such as average hours of service, service frequency, and vehicle miles and vehicle hours traveled. Neither the text nor the tables state that the level of improvement is substantial, but they are noted as improved compared to No-build. However, it should be noted that most projects achieve only an incremental change in conditions on a regional basis, however regional change is positive and beneficial.

March 2006

North Link Final SEIS
Responses to Comments

(denoted with “AA”), Segment B (denoted with “BB”), and overall project (denoted with “PP”). Common Comments and responses are provided below.

7.6.1 Common Comments – Project

The following are Sound Transit’s responses to common comments received on the project, but that were not specific to an alternative.

PP-1. Purpose and Need.

Light rail is too expensive. Sound Transit chose light rail as the preferred technology as a result of the Regional Transit Project (RTP), but the SEIS failed to acknowledge that bus transit has greatly improved since the time of the RTP conception.

Response: The purpose of the Central Link project is to construct and operate an electric light rail system connecting the region’s major activity centers. The Central Link Project is an element of the *Sound Move* Ten-Year Regional Transit System Plan adopted by the Sound Transit Board in May 1996. Voters within the Sound Move District authorized local taxes to implement the Plan in November 1996.

North Link is the northern segment of the Central Link light rail project. A substantial history of planning and public decision-making has led to the selection of the alternatives for Central Link. This includes the original Regional Transit planning studies, which were part of the regional transportation planning program defined under the Metropolitan Transportation Plan. The publication of the 1999 FEIS for the project and the subsequent Record of Decision issued by the Federal Transit Administration (FTA), as well as all of the post-FEIS legal decisions, have confirmed the decision-making process that led to the identification of Link Alternatives and the selection of the project to be built.

All-bus and bus-transitway systems are not being considered for the North Link project and were previously screened out early in the process prior to the 1999 project-level FEIS for Central Link. The 1999 FEIS specifically addressed similar comments on the 1998 Draft EIS. See FEIS Section 7, comment group 1, specifically comment 1.3.

Through its future long-range planning and in other business lines such as Regional Express, Sound Transit is participating in ongoing regional planning programs, and is working with other governments and agencies that are moving forward with many of the strategies and approaches that have been suggested in the comments.

The absence of a review of system alternatives in the light rail proposal presented to the voters and in the 1999 FEIS was raised previously by project opponents in a NEPA lawsuit filed in federal district court. Following a review of the administrative record in the case and written arguments by the parties, the court concluded that the environmental review conducted by Sound Transit and the FTA, its timing, and the scope of alternatives and impacts analyzed was reasonable and adequate under the applicable legal standard. See *Friends of the Monorail v. United States*, No. C00-852Z (W.D. Wash. March 30, 2001); see also *Save Our Valley v. Sound Transit*, No. C00-715R (W.D. Wash. July 13, 2001). See also response to comment 1A.

Sound Transit recently reaffirmed its decision to extend light rail beyond the Central Link corridor with the agency’s adoption of an updated Long-Range Plan (July 2005). A supplemental EIS was prepared updating the analysis of the 1993 EIS on the Regional Transit System Plan. The supplemental EIS evaluates alternatives and impacts, including BRT, monorail, light rail, and other technologies, outside of the Central Link corridor. Following the issuance of the final supplemental EIS (June 2005) and public review and comment on a draft plan, the Sound Transit Board adopted its Long-Range-Plan on July 7, 2005. The plan includes light rail in the Central Link corridor and beyond, and it includes BRT and other transit modes for various other corridors.

As stated in the purpose and need section (Draft and Final SEIS Section 1.3), the North Link SEIS is a project-level review focused on route and station decisions for completing the Central Link light rail project to the north. Sound Transit is not reconsidering previous decisions regarding the selection of light rail for the Central Link corridor. The Central Link Final EIS has previously addressed prior decisions in Chapter 2, Alternatives.