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Re: COMMENTS ON : Central Link Light Rail Transit Project -- Initial Segment ("MOS-1") -- NEPA Environmental Assessment (February 4, 2002)

Dear Messrs. Irish and Witmer:

On behalf of Citizens for Mobility, I respectfully submit the following comments on the referenced Environmental Assessment (EA).

Please be advised that Citizens for Mobility has pending, in the United States District Court, Western District of Washington, No. C00-1812Z, a lawsuit naming as defendants Sound Transit and the FTA, among others, and challenging certain aspects of the proposed Central Link Light Rail Transit Project. We reserve all rights with respect to that lawsuit and all claims asserted therein. Nothing in this letter is, or should be construed as, a waiver or abandonment of any of those claims, in whole or in part.

Executive Summary

The subject "project" and "action" are not defined with sufficient clarity to allow for proper analysis under NEPA. The Initial Segment ("MOS-1") plan has significant social, economic, environmental, and transportation impacts not addressed adequately in the 1999 FEIS. The Initial Segment plan contemplates a joint use in the Downtown Seattle Transit Tunnel (DSTT) which is unlike any other operation anywhere else in the world.

This letter sets forth 73 separate points of environmental concern that need to be addressed in a full SEIS before further governmental action on the project proposal is taken.

The FTA should order that an SEIS be prepared for the Initial Segment plan, and that it be prepared in conjunction with the SEIS for Sound Transit's contemplated Northern segment of the light rail line.

Our Contentions

We assert that FTA should make a finding of significant impact and that Sound Transit and the FTA should (a) prepare a Supplemental Environmental Impact Statement (SEIS) for the Initial Segment, and (b) time the preparation of that SEIS to be in conjunction with the SEIS to be prepared for the Northern Segment (downtown Seattle northward) and any environmental documentation for the Southern Segment (extension from S. 154th Street to S. 200th Street). The reasons supporting these contentions follow.

We start with the regulations. In her letter to Sound Transit of October 15, 2001, Helen Knoll of FTA Region X cited Title 23 C.F.R. sections 771.129 and - .130 as calling for an EA related to the proposed Initial Segment. Section 771.130 spells out those situations in which an SEIS is required, where an SEIS is not required, and in subsection (c) where "the Administration is uncertain of the significance of the new impacts."

Importantly, subsection -.130(a) specifies that an EIS "may" be supplemented at any time, and "shall" be supplemented in certain defined circumstances. The regulation, therefore, favors an SEIS in all uncertain cases.

As we will discuss below, we believe that the Initial Segment indicates changes to the proposed action that "would result in significant environmental impacts that were not evaluated in the EIS", within the meaning of subsection -.130(a)(1), such as to require preparation of an SEIS. We also contend that the issues are sufficiently grave in any event that the FTA should exercise its discretion to require an SEIS.

Sometimes pictures are indeed worth thousands of words. We attach hereto copies of cartoons from one of Seattle's local newspapers, depicting the sorry state of affairs regarding Sound Transit's light rail proposals. These cartoons, drawn by a Pulitzer Prize-winning artist, do a remarkably good job of telling the general story. What follows will include a much greater level of detail.

Definition of "Action" and "Project"

Careful definition of the precise nature and scope of the proposal subject to scrutiny is essential under NEPA. This is particularly true where, as here, the nature of the proposal has changed and evolved so much over the years.

In this particular case, it is unclear whether we are being asked to comment on the Initial Segment as its own "project" or "action", or as merely a part or segment of a larger proposed "project" or "action".

Title 40 C.F.R. 1502.4(a) specifies that: "Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined." It continues by requiring that: "Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement."

Title 23 C.F.R. 771.107(b) defines "Action" as: "A highway or transit project proposed for FHWA or UMTA [now FTA] funding."

Title 23 C.F.R. 771.111(f) provides:

> In order to ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated in each EIS or finding of no significant impact (FONSI) shall: (1) Connect logical termini and be of sufficient length to address environmental matters on a

> broad scope; (2) Have independent utility or independent significance, i.e. be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and (3) Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

In the EA, at page 1, in section 1.1 it is stated that the "Initial Segment is a subpart of the original project analyzed in the final EIS. . . . " Similarly, in the FTA's February 4, 2002 cover letter to the EA, the FTA states that: "Sound Transit is proposing changes to the Central Link Light Rail Transit Project, a 21-mile light rail line . . . ." These statements suggest the "project" is the 21-mile line addressed in the 1999 FEIS.

Yet in Sound Transit's latest (October 2001) New Starts Report to the FTA, at page 7, section 2.1 "Project Description Worksheet", Sound Transit states the following: "Sound Transit is submitting the following project definition for consideration by the FTA: The Central Link Initial Segment project from Convention Place to S. 154th Station." This suggests the "project" is just the 14-mile Initial Segment.

We note that in Sound Transit's New Starts Report to FTA of September 1999, Sound Transit confirmed at page 7: "Sound Transit is submitting two project definitions for unique consideration by FTA: (1) a Minimum Operating Segment from N.E. 45th Street to South Lander . . . and (2) the entire project from Northgate to South SeaTac as described in *Sound Move* . . ." The present Initial Segment proposal is not either of the above; nor was it defined as an alternative in any of the MIS or EIS documents. It is a brand new animal.

Accepting the definition in the October 2001 New Starts Report, we would look just at the 14-mile Initial Segment as the proposed project, or "action". This is harmonious with 23 C.F.R. 771.107(b), quoted above, which refers to the "action" as the project as defined in the funding application.

Accepting the definition in the EA, however, we would look at the entire 21-mile project (SeaTac Airport to NE 45th Street), with an option to extend to Northgate, as addressed in the 1999 FEIS, and just treat the Initial Segment proposal as a part of that overall project. This would seem to be harmonious with 40 C.F.R.

1502.4(a), quoted above (calling for linkage of parts of a single course of action) and 23 C.F.R. 771.111(f), also quoted above.

It is beyond peradventure that the discussion in an EIS must relate logically and closely to the substantive decision-making at issue. "An environmental impact statement is more than a disclosure document. It shall be used by Federal officials in conjunction with other relevant material to plan actions and make decisions." 40 C.F.R. 1502.1.

Here, it is difficult to fathom how the FTA can sensibly use the 1999 EIS document in its decision-making if, as Sound Transit indicates in its October 2001 New Starts Report, the defined "project" is the 14-mile Initial Segment -- which is not discussed at all in the 1999 EIS. There seems to be a fundamental disconnect here: Comparison of an "apple" (the 21-mile project as defined in the 1999 EIS) with an "orange" (the 14-mile Interim Segment project as defined in the October 2001 New Starts report). This "disconnect" must be resolved before further, let alone final, decision-making.

If the Initial Segment is treated as merely a part of the larger, 21-mile "project", then 40 C.F.R. 1502.4(a) controls: It requires addressing the full project in a "single impact statement". Because by its own admission Sound Transit intends to prepare a further EIS on the Northern Segment, and it will presumably go through additional environmental analysis related to the Southern Segment from S. 154th Street to S. 200th Street, it is simply premature to proceed now with this EA on the Initial Segment, a mere part of the presumed whole.

Please note that section 1502.4(a) is mandatory: It states that related parts "shall" (not "may", or even "should", but "shall") be evaluated in a single document. This requirement fleshes out one of NEPA's most important policy concerns, which is to avoid piecemeal analysis of important governmental proposals.

What follows is a discussion of significant impacts not addressed in the 1999 EIS. The first section, below, addresses the Initial Segment plan generally. A second and separate section, following that, specifically addresses impacts associated with the proposed joint bus-rail use of the Downtown Seattle Transit Tunnel (DSTT).

Significant Environmental Impacts of Initial Segment not Evaluated in the EIS

The FTA, in its October 15th letter, at page 1 asks ST to address the social, economic, environmental, and transportation impacts of MOS-1 vis a vis the "corresponding segment of the preferred alternative in the FEIS". At page 2 of its letter it asks Sound Transit to address those same issues in the context of comparing the new MOS-1 with the prior, preferred alternative project. We address these impacts, as we see them, below.

A. Social

The alleged purpose of and need for the project is an essential part of the social analysis. Whether the Initial Segment plan fulfills the identified purpose and need is a social impact question.

The "Purpose and Need" section of the 1993 planning EIS, at page xvi, suggests the need for, and purpose of, building a "regional rapid transit system". MOS-1 will not assist in meeting this need. In fact, it will actually do the opposite; it will serve primarily local transit users, and make regional commutes for outlying residents longer and more difficult.

The 1993 planning FEIS, at page xii, identifies four goals of the Regional Transit Project:

- Ensure the ability to move around the region;
- Preserve communities and open space;
- Improve the region's economic vitality;
- Preserve environmental equality.

The MOS-1 proposal will not further any of these goals. It will frustrate accomplishment of each of them.

On the 1993 FEIS "Cover Memo", the drafters state: "The analysis in this programmatic EIS will be used to narrow the range of alternatives to be considered in subsequent environmental review." The presumption is that follow-on project EISs would select among the range of alternatives nominated in the programmatic EIS. Yet

the current, at-surface, mixed-traffic, low capacity, and low speed plan identified as the "Initial Segment" or "MOS-1" was not among the alternatives identified in the 1993 FEIS. More than that, it was rejected therein as unsuitable.

The 1993 FEIS at page xxiii states that: "Project-level review will analyze in detail the alternative adopted during the system planning process, either by corridor, or beginning with a 'core' system of improvements." But this MOS-1 or Initial Segment plan was not an alternative adopted during the system wide planning process; so the above promise is being frustrated by advancement of the current proposal.

Notice that the statement references in the alternative a "core" system of improvements. Is MOS-1 a "core" system of improvements? If so, a "core" of what? The route north of downtown Seattle is not defined, planned, designed, or funded, so that cannot be part of the system of which MOS-1 is the "core". Likewise, MOS-1 is not the "core" of any system involving trans-Lake Washington routes, because again they are not defined, planned, designed, or funded, and indeed, latest evidence is that the I-90 floating bridge was not designed to accommodate Sound Transit's light rail line, and may ultimately prove unsuitable for that purpose, necessitating a complete reversion "to the drawing boards" on this element. And, there are no light rail routes into Snohomish County, or connecting SeaTac Airport to Pierce County, that are anything more than pipe dreams at this point.

In other words, for MOS-1 to be a "core", there must be a defined perimeter or shell, and there isn't one. It is like the core of an apple with no apple. The underlying point is that MOS-1 is a project proposal not contemplated by, and not authorized by, the 1993 planning FEIS.

The 1993 FEIS explains that the rapid rail alternative described therein evolved "from years of evaluation and public involvement", and that: "Screening has taken into account comments gathered from more than two years of meetings with agencies and community groups and public forums." Id. at xxxvi. As a result of that extensive process, the FEIS authors determined that rapid rail would "provide enough capacity to meet the high end of projected transit demand."

We know that MOS-1 looks nothing like the rapid rail plan described in the 1993 FEIS, was subjected to none of the review and comment process described in the foregoing paragraph [having just been hatched in approximately September, 2001], and manifestly will not meet the high end of projected transit demand.

The 1993 FEIS at page xl states: "The most important decision involves which alternatives should be carried forward into more detailed, project-specific planning analysis and environmental review." This expectation, this part of the social compact, is now frustrated; the MOS-1 plan is not one of the alternatives contemplated in 1993 as eligible for further, project-level review. In other words, it was not part of the plan.

The 1993 FEIS states that MOS decisions -- i.e., decisions "as to the minimum operating segment length in each corridor" -- "will be made during project-level planning." Id. Sound Transit identified MOS-A, MOS-B, and MOS-C in its project level planning, in 1998 and 1999. Not MOS-1. Thus, MOS-1was not addressed in the *conceptual* plan in 1993 (except as a rejected approach to problem-solving), and was not addressed in the *project* planning in 1998-99.

The 1993 FEIS at page 1-21 notes that the systems plan EIS "addresses the potential impacts of the alternatives on a regional and corridor-wide level." MOS-1 was not addressed in this fashion at the planning stage. "The System Plan considers the expanded system that would be in place by the year 2020." Id. Now, we are asked to contemplate that only MOS-1 may be in place by year 2020. But this has never been considered, in a system plan EIS or in a project EIS.

Turning to the 1999 project EIS, at page 1-13 it is explained how, through the MIS and MTP process, the preferred alternative and other alternatives were selected for analysis. The Initial Segment was not subjected to any of that analysis. This issue is not addressed in the EA.

At page 1-14 of the 1999 EIS, it is explained that the 1996 *Sound Move* plan approved by the voters included as a component: "Approximately 24 miles of a starter light rail transit system (the subject of this Final EIS)." The Initial Segment is not one of the defined components approved by the voters in 1996. This is not addressed in the EA.

More specifically, at page 2-46 of the 1999 FEIS the FTA and Sound Transit note that the "identification of a preferred alternative by the Sound Transit Board was a specific step in the project development process. The selection followed the public review and comment process on the Draft EIS." The Initial Segment plan was not part of that process, and did not result from any public review and comment period on any Draft EIS.

In the 1999 EIS, at page 2-3 and Figure 2.1-2, Sound Transit and the FTA described MOS-A as proceeding from NE 45th Street to S. McClellan; MOS-B as proceeding from Capitol Hill to S. Henderson; and MOS-C as proceeding from NE 45th Street to S. Lander. Each of MOS-A, MOS-B, and MOS-C has now been rejected by Sound Transit as economically not feasible. MOS-1 is unlike any of the prior, now rejected, MOSs. MOS-1 was not addressed as an alternative in the FEIS.

At page 2-43 of the 1999 EIS, it is stated: "The EIS provides project-level environmental review for the electric light rail system approved in the *Sound Move* plan." The Initial Segment was not approved in the *Sound Move* plan, and was not evaluated in the 1999 EIS. This fact is not addressed in the EA.

The 1999 FEIS, at page S-17, identifies the purpose of the then-proposed Central Link light rail system as follows: "The purpose of the proposed light rail project is to construct and operate an electric light rail system connecting the *region's* major activity centers." (Emphasis added.) It indicates that: "The [Central Link] light rail line is envisioned as the initial phase of a long-range *regional* transit system with future phases extending to the north, east, and south." Id. (Emphasis added.) The Initial Segment is not a regional line. It does not fulfill the essential purpose identified in the 1999 FEIS.

The "major activity centers", identified at page S-17 of the 1999 FEIS, include Northgate, Roosevelt, the University District, Capitol Hill, First Hill, Seattle Center, and the Sea-Tac Airport. See id. at 1-1; 1-7. The Initial Segment line will not touch any of these major activity centers. Once again, it fails to implement the essential purpose identified in the 1999 FEIS.

At page 2-47 of the 1999 EIS, Sound Transit addresses the benefits and disadvantages of delaying project implementation. It identifies as a benefit "allow[ing] additional time to resolve currently unresolved issues." It goes on to state that this is not necessary in this case. Today, however, there are more unresolved issues than at the time of the writing of the 1999 EIS. And Sound Transit has not explained how these issues can be resolved now, or what the resolution of those issues may be. This topic is not addressed in the EA.

And, of course, it is evident the FTA's ROD of January 2000 was and is specific to the preferred alternative project, not to this Initial Segment project. Note, for example, the ROD's description at pages 2 and 3 of route portions between

Northgate and the DSTT, of planned exclusive rail use of the DSTT, and of route portions extending to S. 200th, none of which are pertinent to the newly crafted Initial Segment proposal. Similarly, the Initial Segment proposal is not mentioned among the five different length alternatives on page 5 of the ROD. And, while the ROD examined seven different potential termini, the Initial Segment planned termini at Westlake Station and S. 154th Street were not among those examined or even mentioned.

B. Economic

In 1996, the local voters approved a plan calling for light rail from N.E. 45th Street to and including SeaTac International Airport, to be completed by year 2006 and for a certain capital budget, expressed in 1995 dollars as approximately $1.7 billion. MOS-1 was neither presented to, nor approved by, the voters at that time. What they did approve cannot and will not be delivered.

In the 1999 FEIS at page 1-7, FTA and Sound Transit offered that the proposed preferred alternative plan "would optimize use of this previous investment [the DSTT], providing a very significant increase in passenger-carrying capacity . . . ." The Initial Segment plan stands in stark contrast: it will not optimize use of the DSTT and will not produce a significant (if any) increase in passenger-carrying capacity.

In the 1999 FEIS at page 1-13, FTA and Sound Transit explain that the 1997 Major Investment Study (MIS) "evaluates effectiveness and cost-effectiveness of alternative investments and strategies in meeting certain goals and objectives." They explain that the MIS serves as an alternatives analysis, and its output is a "preferred transportation strategy, including a decision on mode and alignments . . . approved by the MPO and incorporated into the MTP." It is then compared with alternatives in the EIS. Id.

The "Initial Segment" plan was never mentioned, let alone analyzed or recommended, in any of the MIS, MPO or MTP documentation leading up to the 1999 FEIS, either as a preference or an alternative. It simply has not been examined as required in the normal planning regimen. Its promotion now as the preferred plan frustrates all of the regulations and policies dictating its prior review through the MIS process described above. Lack of that review makes it impossible for the public agencies or the reviewing public to consider properly the "effectiveness and cost-effectiveness of alternative investments and strategies" as required.

In the 1999 New Starts Report, at page 111, Sound Transit stated: "The most costly segments of the Central Link project (including the Capitol Hill tunnel) have been carefully planned for the past nine years. The cost estimates for these segments are stable and have received intense scrutiny. The Link MOS project lies primarily within the bounds of this stable project scope." Events have now proved this statement to be materially incorrect. (Indeed, the prior Executive Director and Light Rail Director of Sound Transit resigned, principally because of the material mistakes made in the cost estimations on the original MOS.)

Further, the current MOS-1 (the Initial Segment) is very different in location and type from the MOS referred to in the above quotation. Assuming arguendo that the original MOS route was carefully studied for cost, this new MOS-1 includes: (a) a joint use plan in the DSTT, (b) a Beacon Hill tunnel plan, and (c) a new "Tukwila freeway" route, all of which are Johnny come latelys, figuratively speaking, in terms of component proposals. They have received nowhere near the scrutiny received by the earlier MOS; and, as we now know, that allegedly intense scrutiny of the earlier MOS plan proved in the end to be grossly inadequate. So there is no assurance that these Johnny come lately components are properly or reasonably cost estimated.

In the 1999 FEIS at page 2-47, the FTA and Sound Transit affirm that "the revenue stream approved by regional voters provides a committed source of funding that assures implementation of the light rail project. . . ." At page 5-21 the theme is reiterated: "Sound Transit will have adequate financial resources to build and operate light rail within the ten-year initial phase."

The above statements were made in reference to the then "initial phase" preferred alternative project, from NE 45th Street to S. 200th Street. The "ten year initial phase" was to be from 1997 to 2006. In other words, FTA and Sound Transit wrote an FEIS in 1999 for an "initial phase" project from N.E. 45th Street to S. 200th Street, to be completed by 2006 or earlier. That project is no longer being proposed. Recent events have shown that in fact there is insufficient funding assurance for that project. Stated more simply: FTA and Sound Transit were wrong when they suggested we could afford that project; we can't.

The "Initial Segment" project now being proposed for completion by 2009 is from the DSTT to S. 154th Street. This "Initial Segment" project is different than the

"initial phase" project that has been rejected as too costly. (It is, in fact, the initial segment of the initial phase.)

We are now told that we can afford this new, Initial Segment project. But this is not an affirmation that has passed through the rigors of public review and comment and appropriate environmental analysis. Stated more simply: There is little to prove that the latest affirmation of economic viability is much more than guesswork.

But even assuming we can afford it, we need to examine its cost-effectiveness. Sound Transit states at page 2 of the EA that it selected the Initial Segment for its ability to meet identified goals and objectives, including the goal of "providing a cost-effective system". But there is no analysis of its cost effectiveness, or lack thereof, in the EA. The "Financial Analysis" section of the EA contains discussions of contemplated capital and O&M costs, and of revenue sources, but no cost-effectiveness discussion.

We are considering now an Initial Segment project that will generate only 42,500 daily boardings (EA at page ix, Table S-1), about one third of the boardings contemplated in the 1999 preferred alternative plan. (See 1999 FEIS, at page 3-21.) Thus, we are presented with a proposal to board only one third as many passengers as the preferred alternative addressed in the 1999 FEIS, for a capital cost greater than to the original proposed capital cost for the preferred alternative, without any analysis whatsoever of the "cost-effectiveness" (as that term is used at page 1-13 of the FEIS) of this new, Initial Segment proposal.

At page 6-5 of the 1999 FEIS, FTA and Sound Transit set forth the projected cost-effectiveness of the preferred alternative light rail project (NE 45th Street to S. 200th) against the FTA index. These calculations, even assuming their accuracy at the time, are no longer operative and need to be re-examined in light of the switch to the Initial Segment project. It is estimated that the cost-effectiveness of the Initial Segment project would be approximately one-third of that of the preferred alternative project, using the FTA index method of calculation.

Moreover, the cost-effectiveness of the Initial Segment plan when compared to Baseline is also very much in doubt, given the Sound Transit New Starts submission of October 2001. In the "Operating Efficiencies" discussion at page 29 of that New Starts Report, Sound Transit calculates costs per passenger mile at $ 0.521 for the

Baseline, and $ 0.512 for the Build alternative (Initial Segment). This, on its face, gives the Build alternative a very small apparent advantage.

Yet in the "Annualization of Capital Coasts – Supplemental Worksheet" four pages later in the same New Starts Report, Sound Transit calculates total costs for new buses for the Build alternative at $1.158 billion, and for the Baseline at $1.603 billion -- a difference of $445 million for this one cost factor.

While perhaps some of this difference can be rationally explained, it is highly doubtful that all $445 million can be so explained. It appears highly probable that Sound Transit has "stacked the deck" against Baseline by loading improper costs (and/or loading costs based upon improper assumptions) into the Baseline capital cost worksheet.

Further, as discussed elsewhere in this submission, King County Metro's recently promulgated six-year plan, including BRT component, requires an adjustment in Baseline assumptions from those presently being utilized by Sound Transit.

Close examination of this important issue regarding cost-effectiveness is needed in order to properly and fully analyze Sound Transit's cost-effectiveness claims pertaining to the Initial Segment.

C. Environmental

In the discussion of air pollution, in the 1999 FEIS at page 4-82 the FTA and Sound Transit state that the then-studied alternatives "would result in lower mobile source pollutant emissions as compared to the No-Build Alternative." While we do not agree with this conclusion, particularly regarding downtown Seattle, in any event Sound Transit now estimates (EA at 23, Table 3.1-5), that under the Initial Segment plan there would be 34,000 auto trips vs. 32,400 for the prior, preferred alternative, and 34,400 for No Build. And since there would be a significantly greater volume of buses on downtown streets under the Initial Segment plan compared to No Build, there is the real likelihood that the Initial Segment plan would produce a *higher* level of mobile source pollutant emissions in downtown Seattle compared to No Build. This issue has not been submitted to public or agency review by Sound Transit.

To make its Destination 2030 MTP meet air quality standards, the Puget Sound Regional Council (PSRC) has adopted a new set of emission standards that

significantly reduce the permitted emissions in the subject area. These new standards are not addressed in the 1999 FEIS or the EA.

While detailed discussion of the DSTT will follow below, we should identify here one significant environmental issue related to the present uncertainty regarding a Northern route. Presently, as we understand it, Sound Transit plans to terminate rail passengers at the Westlake Station, and use the Convention Place station as a rail car terminus and turn-around area. Yet if Sound Transit ever fixes the Northern plan, that plan may call for a major reconstruction of the Convention Place station to facilitate transition out of the DSTT and Northward on the approved route. This would be, then, a *second* major disruption of the downtown Seattle area, following the planned two-plus years of disruption caused by closing the DSTT for conversion to joint use. This scenario has not been addressed by FTA or Sound Transit in the 1999 FEIS, or in the EA.

The Initial Segment plan for closing Convention Place station to passengers is important in yet another respect. The City of Seattle has formally encouraged intensified land use in the area immediately adjacent to the CPS station, including use of transfer of development rights from other parts of the city for increased commercial, retail, and housing density; yet if there is to be no rail passenger access at this station, for land use purposes there is no purpose served in increasing allowed densities. Thus, we have a major deviation or "disconnect" between the local jurisdiction's land use policies and the Initial Segment plan.

D. Transportation

The 1993 FEIS states that regional rail ("rapid" rail) would produce "increased mobility" for those choosing transit. Id. at page xv. This is not true of the MOS-1 plan. In fact, as discussed below, it will result in decreased mobility for most patrons.

The 1993 FEIS, in recommending rapid rail, assumed a line "operating in exclusive right-of-way [that] has a theoretical capacity to carry over 22,000 persons *per hour* [PPH] in each direction past a single point." (This is based on an assumed four-car train operating in exclusive right of way on 90 second headways. See id at page 1-10.) By way of contrast, the Initial Segment proposal calls for four car trains on six-minute headways. By this measure, the Initial Segment rail capacity, therefore, is actually only 25% of the rail capacity assumed in 1993, or about 5,500 passengers per hour, each direction. (Ninety seconds is 25% of six minutes or 360 seconds.)

Lest we miss the significance of this point, note that the 1993 FEIS calculates bus capacity in the DSTT at 13,400 persons per hour, each direction. [1993 EIS at 1-10.] So, calculated capacity of the Initial Segment plan at 5,500 rail passengers per hour is only about 41% of calculated bus capacity of 13,400 persons per hour.

Because the central purpose, or certainly one of the central purposes, of a rapid rail or light rail proposal, as articulated in the 1993 FEIS, is to increase mobility vis a vis other modes of mass transit -- and because MOS-1 manifestly will not do that -- a pivotal question is raised: How, if at all, does MOS-1 advance the plan articulated in 1993? This fundamental question remains unanswered.

The 1993 FEIS refers to "system needs [that] have been defined as a minimum set of operating characteristics that any rail technology would have to meet to be effective in this region." Id. at xli. MOS-1 does not meet them. Thus, the 1993 FEIS "assumed that the . . . rail system will run on mostly exclusive rights-of-way with no at-grade crossings. . . ." Id. Yet MOS-1 will run mostly on the surface, with many at-grade crossings.

The FEIS in 1993 assumes maximum speeds will be 55 to 70 MPH, "with average speeds (including station stops) around 35 to 40 MPH." Id. at 2-24. Yet MOS-1 will not come close to that average speed. Note that in the 1993 FEIS the planners spoke unfavorably about the Portland MAX surface LRT system, operating "at average speeds of 18 to 20 mph, relatively slow compared to the grade-separated . . . alternative, which would average 35 to 40 mph." Id. at 2-50. In MOS-1, Sound Transit proposes precisely that which was disfavored by the planners in 1993.

The 1993 FEIS summarizes, at page 2-50, that "surface LRT is unlikely to satisfy the demands of a three-county system." Yet surface LRT is mostly what we get with MOS-1. Thus, we have a proposal not destined to meet our regional transportation demands.

Transportation planning and implementation issues are seriously impacted by Sound Transit's abrupt shift to a new Initial Segment plan. It is a new proposal that by itself has never been subjected to any prior planning or environmental review on transportation issues.

On page 2-50 of the 1993 FEIS, it is stated that the light rail plan would "expand transit capacity within the region's most dense and congested corridor."

Similarly, in the "Purpose and Need" section of the 1999 EIS, at page 1-1, it is stated that implementation of the light rail element of the *Sound Move* plan would "expand transit capacity within the region's most dense and congested corridor". . . . While these words are sufficiently general to allow for some interpretation, it is clear that the new, Initial Segment plan will not include the important University District – Capitol Hill – Downtown section. So, in those dense areas, the newly proposed project -- the initial segment -- will not expand transit capacity at all. There is no discussion in the 1999 FEIS or EA as to whether a project like the Initial Segment would fulfill this core purpose.

At page 1-6 of the 1999 EIS, it is stated that: "The light rail line would allow the re-allocation of 400,000 bus service hours annually to local routes without adding more buses." This is not true with respect to the Initial Segment. There is no discussion in the EA of this issue.

And, in light of King County Metro's recent promulgation of its six year plan with BRT proposals, it is unclear that Sound Transit is using correct or current Baseline assumptions in the EA.

At page 1-7 of the 1999 EIS, it is stated that: "The projected light rail ridership of over 133,000 daily riders would be difficult to serve with conventional bus service." Yet the Initial Segment proposes only about 42,000 daily riders. As discussed in the *DSTT* section, below, this volume could easily be accommodated by bus service. There is no discussion of this point in the EA.

At page 1-7 of the 1999 EIS, it is also stated: "The proposed light rail project would optimize use of the [DSTT] investment, providing a very significant increase in passenger-carrying capacity. . . ." As discussed in the *DSTT* section, below, this is not true of the Initial Segment. There is no discussion of this point in the EA.

At pages 1-10 and 1-11 of the 1999 EIS, Sound Transit refers to use of light rail to service the University of Washington's Husky Stadium and Seattle Center. The Initial Segment will not serve either. It also refers to a planned station at Royal Brougham that would improve access to the stadium district. That will not happen under the Initial Segment proposal. Nor will light rail trains serve the Washington State Convention Center under the Initial Segment proposal. These issues are not addressed in the EA.

Correlatively, one of Sound Transit's overarching objectives is to connect 21 regional centers in the Central Puget Sound Region. The Initial Segment plan connects but two of those centers.

At page 3-4 of the 1999 EIS, Table 3.1-4, there is a comparison of vehicle miles traveled (VMT) and vehicle hours traveled (VHT) for year 2010 and 2020, for No-Build and various build alternatives. It is stated at page 3-3 of the EIS that: "In both 2010 and 2020, light rail alternatives with a Northgate terminus or a N.E. 45th Street terminus would result in improved conditions, compared to the No-Build alternative."

In the EA, there is no comparative analysis of conditions in 2010. There is no evidence that the Initial Segment will result in improved conditions in 2010. At page 20, Table 3.1.1, of the EA there is an analysis suggesting that in 2020 the Initial Segment would result in slightly improved conditions (00.001%, in the case of both VMT and VHT) compared with the No-Build alternative. The EA contains no discussion of why the region should spend an estimated $3 billion or more for the Initial Segment plan, to realize no identifiable improvement as of 2010, and an infinitesimal improvement (if any) as of 2020.

At page 3-6 of the 1999 EIS, it is stated that, "each light rail hour provides much more capacity than a bus hour." And, it is further stated, "light rail service will result in a substantial increase in the region's public transportation service levels." As discussed in the *DSTT* section, below, neither of these statements is true with respect to the Initial Segment plan. The level of service issue is not addressed in the EA.

The EA makes some assertions about transportation impacts of the Initial Segment that bear close scrutiny. Thus, at page 2 it is suggested that: "Implementing the light rail element of *Sound Move* would expand transit capacity within the region's most dense and congested corridor . . . ." Sound Transit does not here define "the light rail element". Certainly if this statement is meant to apply to the Initial Segment, it is false: The Initial Segment will *not* expand transit capacity within the region's most dense and congested corridor. By Sound Transit's own prior analyses, in a "Baseline" scenario buses alone could carry more passengers than under the Initial Segment plan. This issue needs to be ventilated in a full SEIS.

This issue is further complicated by the fact that in November 2001 King County Metro promulgated a new, detailed "Building for Success -- Six-Year Transit

Development Plan for 2002 to 2007", including a development plan for a Bus Rapid Transit (BRT) corridor. Given adequate funding, this could be part of the region's "Baseline" scenario, but has not been included in Sound Transit's October 2001 New Starts Report to FTA for the Initial Segment, or in its EA analysis. It is suggested that with the BRT plan as part of the baseline, Sound Transit's Initial Segment plan should be compared with that baseline in the same corridor for environmental effects, but that never has been done.

At page 2 of the EA, Sound Transit also states that: "The Initial Segment was selected by Sound Transit for its ability to meet the project's goals and objectives." That statement is false. As the 1999 FEIS demonstrates, the 21-mile preferred alternative plan was selected to meet project goals and objectives. Id. at pages 1-1; 1-6 to 1-7. Joint use in the DSTT was rejected at that time as not fulfilling project needs. Further, no MOS option identified as of 1999 excluded all of the light rail segment north of downtown Seattle, as does this Initial Segment, again because excluding all of that segment was inconsistent with the project purpose and need.

Sound Transit, in its EA at page 2, seems to be confusing the scope of the 1999 project with the scope of the current Initial Segment project for which it is now seeking federal funding. This confusion must be removed in order to fully understand and assess the significant impacts of *this* Initial Segment project.

Downtown Seattle Transit Tunnel (DSTT) -- Substantial Impacts of the Initial Segment Plan Not Addressed in the 1999 EIS

The DSTT issue is one that deserves -- and has not yet received -- serious attention. Downtown Seattle is the transit service bottleneck of the Interstate 5 corridor in Central Puget Sound. Existing capacity and use must be preserved and new capacity added.

There seems to be little dispute among experts that the DSTT could be carrying up to twice as many bus passengers as it does currently -- had the region continued with the bus development plan initiated in the 1980s. By contrast, the proposed Initial Segment project will add no new transit capacity through downtown Seattle in the foreseeable future. It will cause higher surface street bus volumes out to 2016 or beyond compared to baseline, even under a joint rail/bus tunnel plan.

In the October 15, 2001 letter to Sound Transit, the FTA asks it to address a number of important issues associated with the apparent change from a prior plan to use the DSTT exclusively for light rail trains, to the current plan to use the DSTT jointly for bus and light rail operations. These issues include: reasons for the change; whether joint use minimizes downtown Seattle business disruption or surface traffic impacts; extent that joint use diminishes rail capacity; implications of joint use for potential Northward extension; implications of joint use for King County Metro; and safety implications. These issues are addressed below:

A. Reasons for the change

In order to address the issue whether any of the prior assumptions have changed, and if so how, let us recite the prior assumptions below. The following is as set forth in the 1999 FEIS, at page 3-12:

> "The report [Sound Transit's DSTT Report of September 21, 1998] made several findings concerning joint/bus operations as outlined below:
>
> - "*Limited time* – Depending on the growth in rail ridership and the timing of future rail extensions, joint operation might be possible for a period of no more than 2 to 10 years.
>
> - "*Fewer buses* – Currently 70 buses per hour per direction operate in the tunnel during the peak hour. By 2004, that number is expected to increase to 80 buses per hour. Under joint operation a maximum of 30 buses would be able to operate in each direction.
>
> - "*Safety concerns* – The system must depend on operator judgment to maintain a safe stopping distance due to the lack of a fail safe signal system.
>
> - "*Slower* – The travel time for light rail vehicles would be two minutes slower with joint operation and buses would operate 2 to 4 minutes slower than they do today with joint operation.

- "*Less reliable* – Buses could not pass each other or light rail trains and there would be additional conflicts in the staging areas, resulting in less reliable service for both buses and rail.

- "*Costs more* – The overhead conductor system and signal system would cost more to install with joint operation.

- "*Replace buses* – To maintain joint operation, King County Metro would need to replace a portion of their tunnel fleet."

The EA does not explain how the above reservations have been removed by the Initial Segment plan, and the EA otherwise fails to identify or address the significant environmental impacts suggested by a joint bus-rail operation in the DSTT. Sound Transit does cite to the *Evaluation of Joint Operations in the Downtown Seattle Transit Tunnel (August 2001),* but that document is not a part of the environmental record and Sound Transit does not explain how, if at all, that document details any changes in the assumptions quoted above from the 1999 FEIS.

Indeed, the disparity in treatment between the September 21, 1998 DSTT Report [given full treatment in the 1999 FEIS, and included officially as one of the documents of record in that EIS process] and the August 2001 DSTT Report [an apparently public document, but one not widely disseminated, only referenced in the EA, not subjected to full treatment and not included officially as one of the documents of record], coupled with the starkly contrasting conclusions of those two reports, generated just three years apart, speaks volumes. In 1999 the FTA and Sound Transit, following extensive environmental review, reached certain conclusions and recommendations regarding use of the DSTT. Now, three years later, they reach the *opposite* conclusions. Why? The EA hints at, but does not address in sufficient detail, the apparent reasons. And, there are significant environmental effects of the new plan not addressed in the 1999 FEIS.

Limited time -- With respect to *limited time,* the EA at page 8 suggests: "Future extensions of the light rail system will not occur as early as first assumed, resulting in the potential for more years of joint operations, making a tunnel retrofit more economical." This statement raises as many questions as it purports to answer.

First, Sound Transit does not know when future extensions might occur. On page 9 of the EA it suggests 2016, or 2020. But it does not know. Obviously Sound

Transit would prefer an earlier date, but the earlier the date for future extensions, the more forceful Sound Transit's original point, in the 1999 EIS at page 3-12, that a joint operation of short duration does not justify the added expense of a joint tunnel retrofit. Conversely, if future extensions do not occur until 2020 or even later, which is possible, this begs the question of why Sound Transit goes to the expense now of having joint operations at all. If future extensions are as far off as 2020 or later, why not just continue, for now, to run all buses in the DSTT? Running all buses (an estimated 80 buses per hour per direction, see 1999 FEIS, page 3-12), compared to the Initial Segment plan of 60 buses per hour per direction, plus 10 trains, would seem an elegant solution given the resulting savings in avoiding a tunnel retrofit for joint operations. Yet such important issues are not addressed in the EA.

Second, and correlatively, Sound Transit's statement in the EA that a tunnel retrofit would be "more economical" does not specify its point of reference. More economical compared to what? This is not answered. A tunnel retrofit arguably could be considered more economical if a given capital cost is spread over a greater number of years of operation. But in the present context, this is a big "if". Sound Transit has already acknowledged that tunnel retrofit for a joint operation is more expensive than for rail only operations. (1999 FEIS at page 3-12.) And, it goes without saying that a tunnel retrofit for joint operations is more expensive than a continuation of bus-only operations, which requires no tunnel retrofit. These aspects of the tunnel retrofit issue are not addressed in the EA.

Fewer buses -- The EA at page 8 suggests that a "computer simulation model estimates" that with six minute rail headways the DSTT could handle up to 60 buses per hour, per direction. Yet in the 1999 FEIS, at page 3-12, Sound Transit stated that: "Under joint operation a maximum of 30 buses would be able to operate in each direction."

Notice that the earlier, 1999, statement is *not* qualified by any assumption about rail headways; rather, it is an *unqualified* statement. So now, somehow, Sound Transit would have us believe, per the EA, that the previous, unqualified statement is inoperative, because a new "computer simulation" suggests the DSTT could handle 60 buses assuming six minute rail headways. But there is no analysis of this point, and no opportunity for public or agency comment, as would be afforded in the SEIS process.

Even accepting Sound Transit's numbers, there is a correlative problem presented by the Initial Segment plan: With rail at six minute headways, Sound Transit claims that up to 60 buses per hour per direction could traverse the DSTT. Yet if five minute rail headways were achieved, only "approximately 30" buses per hour per direction could be maintained. Thus, the bus capacity drops dramatically as the rail capacity increases moderately. This needs further review and analysis.

Using Sound Transit's own numbers, the capacity of the DSTT under joint operations, regardless of rail headways, is less than either an all bus operation or an all rail operation. This is one of the reasons why joint operations were rejected in the 1999 FEIS. These issues regarding significant impacts of joint operations are not addressed in the EA.

Safety concerns -- In the EA at page 8, Sound Transit states that an "improved signal system has been developed to . . . increase safety", and that: "Analysis has shown fire/life/safety and other issues can be addressed with joint operations." It states that agencies "have developed solutions" regarding "fire/life/safety. . ., signaling, and other issues." Id. The EA does not include the details of the new signal system. It does not include the "Analysis" referenced. It does not delineated the "solutions" or define "other issues".

At pages 9 and 10 the EA discusses the broad outlines of the "Bus/Train Separation and Signal Systems" proposed for the Initial Segment. The statement that both trains and buses, "would remain under the control of on-board operators" frames that discussion. Thus, the joint operations of the Initial Segment plan would appear to be burdened with the very same concern raised in the 1999 FEIS at page 3-12: "The system must depend on operator judgment to maintain a safe stopping distance due to the lack of a fail safe signal system."

The Initial Segment plan depends on operator judgment, just like the joint operations plan in the 1999 FEIS. There is no showing, or even assertion, that operator judgment in 2002 is better than it was in 1999, or that operator judgment would be better in the Initial Segment plan years than in the plan years of the project identified as the preferred alternative in the 1999 FEIS.

The Initial Segment plan depends on a signal system that is not fail-safe; hence the need for human operators. There is no discussion in the EA of the safety concerns raised in the 1999 FEIS with respect to the lack of a fail safe signal system.

To our knowledge there is no working example, anywhere in the world of a revenue joint bus-train tunnel operation, with joint bus-train stops in the tunnel. There is simply no other example in human experience against which safety concerns properly can be tested. This, along with the fact that Sound Transit's own concerns about the lack of a fail safe signal system and the need to rely on human judgment have not been addressed in any detail, let alone resolved, in the EA, combine to raise numerous important issues about significant safety impacts.

Slower -- In the EA at page 9, Sound Transit suggests there would be "one additional minute of travel time" in the tunnel for trains in joint use mode as opposed to rail only mode. There is no discussion in the EA of the effect of joint use on bus travel times. In the 1999 FEIS at page 3-12 Sound Transit stated that buses would operate "2 to 4 minutes slower" in joint operation.

Presuming that the deterioration in speed of bus operations, as a result of joint use, would be as predicted in the 1999 FEIS, there is no discussion in the EA of this negative impact or how to mitigate it. This is a significant impact not addressed in the EA.

Less reliable -- In the EA at page 10, Sound Transit suggests that with "the [DSTT] platforms left as they are, buses would be able to pass [each other?] without crossing over rail lines from the opposite direction." Yet in the 1999 FEIS at page 3-12, as quoted above, Sound Transit stated: "Buses could not pass each other or light rail trains and there would be additional conflicts in the staging areas. . . ." Because there is a common assumption in both analyses, namely that station platforms would be "left as they are", these statements cannot both be true. For purposes of the current EA analysis, one should assume the statement in the 1999 FEIS is true, as it has passed all the way through the rigors of the impact statement process. Sound Transit offers no support for the proposition that under the Initial Segment plan buses would be able to pass each other.

Hypothetically, the ability of buses to pass one another (or trains) in the DSTT might turn on what *type* of bus is used. But Sound Transit makes no such differentiation in the EA, despite a lengthy discussion of types of buses at pages 11-12 and in Appendix J. This reliability issue is not addressed or resolved in the EA.

Costs more -- In the EA, Exhibit J, page J-3, Sound Transit estimates tunnel retrofit costs at $43 million for dual power trolley bus, and $36.7 million for hybrid

diesel electric bus. At page 11 of the EA, however, Sound Transit acknowledges that the "specific type of [hybrid diesel] coach required for use in the DSTT is not currently in revenue operation." Thus the viability of the cheaper alternative is in doubt. (Sound Transit cites to a New York example of hybrid diesel/electric buses, but there is no showing that it is applied in a joint use tunnel with joint use tunnel stations.)

With the viability of the cheaper alternative in doubt, Sound Transit is left with the issue, identified in 1999, that an overhead conductor system and signal system would cost more to install in joint operation. This important issue remains unresolved.

Replace Buses -- This issue is related to the cost issue, discussed immediately above. Under the Initial Segment plan, according to Sound Transit's discussion in the EA at page 12, King County Metro necessarily will have to replace a portion of its fleet. This is an impact not addressed in any detail in the 1999 FEIS, because under the then preferred alternative plan, involving rail only in the DSTT, and given the proposed timing of that preferred alternative, King County Metro would have avoided the need for much or all of the contemplated bus replacement. This need to replace buses is a new and significant impact related to the Initial Segment plan. It is not adequately addressed in the EA.

A review of the details in Sound Transit's October 2001 New Starts submittal shows that apparent significant discrepancies are present in the prediction of capital costs for buses under the "Baseline" as opposed to "Build" alternative. These apparent discrepancies amount to several hundred million dollars. The important point here is that the issue is not addressed or resolved in the EA.

B. Whether joint use minimizes downtown Seattle business disruption or surface traffic impacts

In the 1999 FEIS, at page 3-14, Sound Transit offers: "[O]verall congestion levels for the downtown intersections *would likely improve* or remain the same compared to the No-Build Alternative, due to the decrease in downtown auto vehicle trips." Although we do not agree with this statement, even accepting it as true for the moment, it should be compared with the following from the EA at page 23: "Overall congestion levels for the downtown intersections *would likely remain the same* compared to the No-Build conditions, due to this small decrease in auto vehicle trips." (Sound Transit states at page 2 of the EA that joint operation in the DSTT "meets the

project goals by *minimizing* congestion on downtown surface streets . . . ." It does not explain the apparent discrepancy between this statement and the assertion at page 23 that downtown surface congestion levels "would likely *remain the same* . . . .")

In other words, the Initial Segment plan approved by Sound Transit in the autumn of 2001 is likely to increase, not minimize, downtown Seattle business disruption and surface traffic impacts, compared with the preferred alternative approved and analyzed in the 1999 FEIS.

The figures tend to support this conclusion as well. Note that under the 1999 preferred alternative plan, at tunnel closure in 2004, there would be a projected 32,400 cars and 612 buses on downtown surface streets, per peak hour; by contrast, under the 2001 Initial Segment plan, there would be a projected 34,000 cars and 526 buses. (EA at pages 22-23, and Tables 3.1-4 and 3.1-5.)

Which is better, the Initial Segment plan with 1,600 more cars and 86 fewer buses on the surface, or the preferred alternative plan with 1,600 fewer cars but 86 more buses on the surface? Sound Transit has suggested an answer by stating the Initial Segment plan would mean downtown congestion levels would "likely remain the same", whereas the preferred alternative plan would mean such conditions "would likely improve" or remain the same. Whether or not we agree with the ultimate characterizations, it does seem evident that congestion problems with the Initial Segment plan will be worse, not better, than with the preferred alternative plan.

The Initial Segment plan may also be worse than the No Action alternative in this regard. Note that the No Action alternative contemplates 480 buses and 34,400 cars on surface streets in downtown Seattle at completion of the project proposal. (1999 FEIS at page 3-19, Table 32-6; EA at 23, Table 3.1-5.) Which is better, the Initial Segment with 400 fewer cars and 46 more buses, or the No Action plan with 400 more cars and 46 fewer buses? This is not addressed or answered in the EA.

Note that in the 1993 planning EIS, at page 3-88, it is stated that "the street capacity of downtown Seattle for buses during the peak periods" is "about 450 surface . . . buses per hour in the peak direction." Obviously the Initial Segment plan of an estimated 526 buses greatly exceeds this street capacity, in fact by about 17 percent. The EA does not explain how downtown can accommodate 117% of estimated capacity for buses under the Initial Segment plan. This significant issue needs to be addressed in an EIS.

This issue of surface bus use further is complicated by the presence of fundamental inconsistencies between Sound Transit's prior and current analyses of DSTT joint use operations. Thus, in September 1998 Sound Transit, in cooperation with King County Metro and the City of Seattle, published its *Downtown Seattle Transit Tunnel (DSTT) Report* in which, according to the 1999 FEIS at 3-12, the conclusion was that under joint operations "a maximum of 30 buses would be able to operate [in the DSTT] in each direction [per peak hour]." That would be 60 buses per peak hour, both directions.

Yet in the EA at pages 21-22, and Table 3.1-4, and apparently relying on the August 2001 *Evaluation of Joint Operations in the Downtown Seattle Transit Tunnel,* Sound Transit calculates that 120 buses can operate in the DSTT, per peak hour, both directions. Thus, somehow between 1998 and 2001 it has determined that *double* the number of buses previously projected could operate in joint mode in the DSTT.

If the figure of 60 buses per peak hour, both directions, is correct, as recited in the 1999 FEIS, it throws into question all of the joint use and downtown surface street assumptions set forth in Sound Transit's EA. If the figure of 120 buses per hour, both directions, is correct, it raises further questions. Why didn't the FTA and Sound Transit use the 120 buses per peak hour figure in the 1999 FEIS? If Sound Transit concludes it is necessary or appropriate to continue running 120 buses per peak hour in the DSTT, compared to the current 140, what is the point of the "Initial Segment" project? Or, at least, of the Initial Segment project *now?*

These questions about the most important single mass transit facility investment in the state of Washington -- the DSTT -- are substantial, and are unresolved.

C. Extent that joint use diminishes rail capacity

The Initial Segment plan calls for four-car trains and six minutes headways in the DSTT. The 1999 FEIS preferred alternative plan called for four-car trains and 90-second headways. Simple mathematics tells us that the Initial Segment plan has only 25% of the rail capacity of the preferred alternative plan (90 seconds is 25% of six minutes). The EA does not address the significant effects of a plan having only one quarter the rail capacity of the prior preferred plan.

We suggest this inquiry also really should be broadened to examine the extent to which joint use diminishes not just rail capacity, but DSTT capacity generally. The DSTT design capacity for an all bus system is at least 19,000 passengers per hour, both directions; and, following the analysis in the 1993 planning EIS, 26,000 passengers per hour, both directions. The Initial Segment calls for approximately 12,000 passengers per hour, both directions, riding both bus and rail. This is nowhere near even the all-bus design capacity of the DSTT.

Under no identified scenario will Sound Transit be able to put as many as 19,000, let alone 26,000, passengers per hour, both directions, through the DSTT with the Initial Segment plan. In an apparent effort to circumvent this obvious fault in the Initial Segment plan, Sound Transit attempted simply to change the equation: Thus, in its August 2001 DSTT study, at page 27, it states that: "The one-way, peak-hour capacity for buses only in the transit tunnel is estimated at 5,700 riders." Presto-change-o, the Initial Segment plan looks good. Yet nowhere in the EA does Sound Transit *explain* how all of a sudden the number becomes 5,700. Which figure is correct? Here is a fundamental question about the comparative benefit and transportation impact of joint use, which is left completely unresolved.

As noted above, in the 1999 FEIS at page 3-12, Sound Transit observed that joint use would mean that travel time through the DSTT for light rail vehicles would be two minutes slower, and for buses two to four minutes slower, compared to either operating in exclusive mode. Clearly then, joint use diminishes capacity in this aspect as well.

Given the above facts, we find most puzzling Sound Transit's assertion at page 2 of the EA that "joint operation meets the project goals by . . . allowing more efficient use of the DSTT until the rail system is extended beyond the Central Link project." As seen, it is not more, but rather less, efficient than either all-bus or all-rail use in the DSTT. Accordingly, it would seem joint use does *not* meet this important project goal. In all events, whatever the ultimate truth may be about this significant, nay critical, impact, it is not adequately examined in the EA and should be fully examined in an SEIS.

D. Implications of joint use for potential Northward extension

To the extent North express bus routes are re-routed to the surface in downtown, it is likely some percentage of those passengers will be deterred from bus-

riding as a result; patterns will change to SOV, carpooling, or other methods. To the extent this occurs, it will render the development of future demand in the North and particularly in the East that much more difficult, as riders opt out of the mass transit system.

The above will be exacerbated, of course, by the two to three years the DSTT is closed for reconstruction, during which time all buses will be on downtown surface streets.

E. Implications of joint use for King County Metro

The implications of joint use for King County Metro are numerous. The most evident include the bus routing decisions (which routes will stay in the DSTT, which will come to surface); the hardware decisions (what rolling stock must be purchased, at what cost, to accommodate joint operations); and the taxpayer investment decisions (is King County Metro fulfilling its public trust duties to allow conversion of a valuable capital asset to joint use, given the disruption and expense of the conversion process, the apparent diminished use of the DSTT under joint use compared to current exclusive bus use, and other factors).

Further, the EA fails to address or resolve key questions raised in King County Council Motion No.11291, Sept. 24, 2001. That Motion resolved that the DSTT Transfer Agreement not be modified for the Initial Segment plan absent fulfillment of the following conditions, among others:

- Confirmation that the joint use plan will not produce "significant degradation of existing bus service on the surface streets" in downtown Seattle or in the DSTT;

- Preservation of regional bus service in the DSTT from routes from the I-90, SR 520, SR 522, and I-5 corridors;

- Sound Transit adoption of a "light rail plan for extending the light rail line north at least as far as Northgate in Seattle which identifies an alignment, approximate total cost, construction and funding";

- Confirmation the light rail system will "significantly increase new transit riders in King County and increase the number of new transit riders in the [DSTT] compared to maximizing the use of buses in the [DSTT]."

F. Safety implications

The FTA properly is looking here for a hazards analysis and input from the Seattle Fire Department.

It should be noted, however, that in the 1999 FEIS at page 3-12, FTA and Sound Transit cited the study of their own expert indicating the lack of any available "fail safe signal system" for joint operations. In the EA at page 26, Sound Transit suggests that it will employ a "new signal system that would maintain a separation between light rail trains and buses." Yet it does not affirm such a system would be fail safe, and does not disaffirm the FTA/Sound Transit assessment, in the 1999 FEIS, that lack of a fail safe system creates a joint use safety problem.

In this regard, we know of no other place in the world where a system of joint operations of buses and trains through a tunnel comparable to Seattle's is now operating, or has ever been attempted. Pittsburgh, Pa. has a joint system but has no in-tunnel station stops. Essen, Germany had a joint system involving guided buses (i.e. buses automatically operated, not operated by humans), but the joint system feature has now been terminated. Thus Sound Transit has no precedent upon which to base a statement that we need not concern ourselves with joint use safety issues. And, because it has never successfully been done anywhere else in the world, the best Sound Transit can do now is theorize -- guess -- how it might work in the future.

We cannot responsibly ignore the aftermath of September 11, 2001 in this context, either. There is a substantial and growing body of evidence in the technical literature indicating that responsible professionals are actively pursuing methods of deterring or thwarting terrorist attacks -- biological, chemical, or other -- in mass transit subway systems throughout the United States. To our knowledge Sound Transit has not adequately prepared any such plans, let alone subjected them to public review and comment. This is essential.

Conclusion

Sound Transit and the FTA should proceed to prepare an SEIS for the Initial Segment project. The SEIS should be timed and prepared in conjunction with the SEIS for the planned Northern segment of the light rail project and any further environmental analysis associated with the Southern extension to S. 200th Street. The FTA should suspend all further project decision-making until completion of the above environmental analysis.

Respectfully submitted,

CITIZENS FOR MOBILITY

By: _____
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