New Starts Rating and Evaluation Comments For Docket Number FTA-2005-20585

The Breakthrough Technologies Institute (BTI), Environmental Defense (ED), and the Coalition for Effective Transportation Alternatives (CETA) are actively engaged in the promotion of cost-effective public transportation alternatives. On behalf our members and supporters, we hereby submit the following comments for your consideration.

Critical New Starts Reforms

We applaud FTA's efforts to revise the New Starts rating and evaluation process. As you know, the Inspector General, General Accountability Office, and others have raised serious concerns about the program, particularly the project rating system. Unfortunately, the reforms discussed in your March 9 letter do not go nearly far enough.

The first and most important reform in the New Starts program is to ensure that the alternatives analysis process does what the law requires – provide an objective, "apples-to-apples" comparison of transit technologies, thus ensuring that the public can make an informed choice about how best to spend limited public transportation resources. We are concerned that none of your proposed reforms address this critical issue. We believe that without fixing the threshold problem of program integrity, other reforms are largely meaningless.

Although the alternatives analysis typically is conducted by local agencies, the FTA must approve the analysis before the project can advance through the New Starts process. FTA's role is to ensure that local governments conduct an analysis that complies with the requirements of the New Starts statute, and thus that gives the public a fair and honest assessment of the various investment options available.

Unfortunately, in two of the most expensive transit projects currently proposed, FTA has completely failed to fulfill this role. In fact, the FTA approved studies that were clearly rigged to select a pre-determined result. We understand that FTA approved similarly biased studies in other cities as well.

As a direct result, residents are not receiving the congestion relief they otherwise could have received. Moreover, they are paying higher taxes that may not have been necessary if FTA had insisted upon a more rigorous analysis.

For example, in Northern Virginia, FTA approved the selection of a \$4 billion extension of the Washington Metrorail system into the Dulles Corridor, without insisting upon a meaningful alternatives analysis. Although a bus rapid transit (BRT) system was included in the study, that system was deliberately hobbled to make it less desirable than the Metrorail alternative. For example:

- The Metrorail alternatives included numerous stops in Tyson's Corner, the region's job and residential center, and thus the driving force behind the generation of new transit demand. The BRT alternatives completely bypassed Tyson's Corner, thus destroying its ability effectively serve the Tyson's Corner area.
- The Metrorail alternatives included 10-13 stations; the BRT alternatives had only 1-5 stations.
- The Metrorail alternatives were all dedicated right of way; the BRT alternatives had no dedicated right of way.
- The Metrorail alternatives assumed high capacity, 8-car trains; the BRT alternatives assumed low capacity buses, even though larger buses are available.
- The Metrorail alternatives had much more frequent headways than the BRT alternatives.
- The Metrorail alternatives had large stations capable of handling 8-car trains; the BRT alternatives had stations that were almost 1/3 the size, and thus much lower capacity.

The FTA accepted this "analysis" despite skyrocketing capital costs estimates, which have roughly tripled since 1997. As a direct result of FTA's approval, property taxes were raised in a special taxing district and tolls were raised on the Dulles Toll Road to collect the local share of project financing.

A similar situation occurred in Seattle with the Central Link light rail project. There, a 1993 alternatives analysis examined a bus and a rail/bus alternative and determined that rail would have greater capacity. The study assumed that the Seattle bus tunnel could accommodate only 100 buses per hour, even though 6 previous studies had all concluded that the tunnel could accommodate far more than that. Thus, the conclusion that rail has more capacity was based upon an incorrect assumption about the capacity of the bus tunnel.

Moreover, even if 100 buses per hour was correct, the study failed to address any ways to enhance the capacity, either through infrastructure or more efficient operations. Rather, it assumed that 100 buses per hour was absolute, presumably to justify the false conclusion that, despite its enormous cost, rail has more capacity and thus should be built. As a result of this false conclusion, Seattle voters approved a half cent increase in their sales tax.

Other examples of bias include:

- In the 1993 alternatives analysis process, Sound Transit added about 20 miles of tunnel to make the rail alternative function properly, yet not a single mile of tunnel was added to make the BRT alternative function properly.
- In 1999 submissions to FTA, Sound Transit calculated that average travel time would be at most seven minutes per trip faster for light rail versus an all-bus system. However, in the 2001 New Starts submission, the FTA allowed a downgrading of the design and performance of the all-bus alternative to let light

rail provide a 22 minute per trip time-saving advantage compared to bus travel. (This occurred after multi-billion dollar cost overruns forced Sound Transit to build the "Initial Segment," a less expensive and lower performing portion of the Central Link project.) This crucial difference let the Initial Segment rail plan earn a "highly recommended" rating instead of being "not recommended."

• Sound Transit's downgrading of the all-bus alternative between the 1999 version and the revised 2001 New Starts submission for Central Link Initial Segment is further revealed in the undocumented claim that the 15 two-car light rail trains on the Initial Segment would create a transit system that serves 16,000 more new riders per day in 2020 than one that instead deployed 232 additional buses using the existing Seattle BRT right of way under and south of the Seattle CBD.

FTA also repeatedly fails to insist upon including basic, common sense constants in its evaluation. For example, it would be important to know what benefits might be achieved if the \$4 billion necessary for the Northern Virginia Metrorail extension were spent on another technology, like BRT. Instead of a 23-mile heavy rail line, it would be possible to build over 150 miles of very high quality BRT service, providing significantly greater benefits. Yet this analysis was never done, and FTA did not insist upon it.

Similarly, the first phase of the Dulles Corridor project is projected to cost over \$1.5 billion, yet it is projected to attract only 15,100 new riders. FTA should have insisted on an evaluation to determine whether there is a more cost-effective way to attract 15,100 new riders. It is very likely that a transit alternative could be designed that would attract 15,100 new riders at far less cost.

To improve the New Starts evaluation and rating process and to strengthen FTA oversight, we recommend the following:

- Ensure that all studies are done on an apples-to-apples basis, including similar alignments, numbers of stations, locations of stations, service characteristics, etc. Without this, it is impossible to make a meaningful comparison among alternatives, and the resulting studies fail to provide the public with any meaningful information.
- Establish benchmarks and make evaluations based upon those benchmarks. For example:
 - Establish a project budget and conduct an honest evaluation of alternatives against that budget. The technology that performs the best will reveal itself and should be selected.
 - Establish performance targets for each project, such as a certain number of new riders. Then evaluate each technology option against that target to see which meets the target at the lowest cost.

These reforms are common sense approaches that every rational consumer uses on a regular basis. Unless FTA is willing to insist upon simple reforms that improve program integrity, the New Starts process will continue to be misleading, biased, and unreliable.

A second critical reform is to ensure that projects are eliminated for further consideration when they do not meet cost-effectiveness goals. We note that, going forward, FTA has stated that it intends to recommend only projects that achieve a "medium" or higher rating for cost-effectiveness. Although this is a welcome change, we are skeptical that FTA will enforce this policy in a meaningful way.

For example, the FTA continues to advance the Dulles Corridor project, even though it received a "medium-low" cost effectiveness rating in the FY 2006 New Starts report to Congress. Moreover, the law clearly requires that projects undergo a rigorous and objective alternatives analysis, yet we have seen little evidence that FTA enforces this requirement. It seems unlikely that FTA will be able to enforce an internal policy when it cannot enforce statutes enacted by Congress.

Non-Critical Reforms

Each of the potential changes listed in your March 9, 2005 letter are non-critical reforms. We recommend that no action be taken on any of them until the fundamental integrity of the New Starts program is restored.

If action is taken, however, we are particularly concerned about the exclusion of "soft costs" from the calculation of cost-effectiveness. We are unable to find a compelling rational for this exclusion. Some of the "soft costs" you mention, such as start-up and testing costs, are critical measures of the cost-effectiveness of any system. Excluding them will only exacerbate the unreliability and biases in the New Starts process.

For Further Information

Contact:

Bill Vincent
Breakthrough Technologies Institute
1100 H Street, NW, Suite 900
Washington, DC 20005
202 785-4222 ext. 30
vincent@fuelcells.org

Michael Replogle Transportation Director Environmental Defense 1875 Connecticut Avenue, NW Washington, DC 20009 (202) 387-3500

Maggie Fimia and John Niles
The Coalition for Effective Transportation Alternatives
P.O. Box 33045
Seattle WA 98133
206 368-0814
mfimia@zipcon.com;
NilesGT@compuserve.com
www.effectivetransportation.org