



August 2, 2010

U.S. Department of Transportation
Docket Operations
1200 New Jersey Avenue, SE
West Building, Ground Floor
Room W12-140,
Washington, DC 20590

RE: Docket Number FTA-2010-0009

Dear Docket Clerk:

On behalf of the more than 1,500 member organizations of the American Public Transportation Association (APTA), I write to provide comments on the Federal Transit Administration's (FTA) Advance Notice of Proposed Rulemaking (ANPRM); request for comments on Major Capital Investment Projects, published June 3, 2010, at 75 FR 31384.

About APTA

APTA is a non-profit international trade association of more than 1,500 public and private member organizations, including public transit systems; high-speed intercity passenger rail agencies; planning, design, construction and finance firms; product and service providers; academic institutions; and state associations and departments of transportation. More than ninety percent of Americans who use public transportation are served by APTA member transit systems.

General Comments

We suggest FTA adopt the principles outlined below and use those principles to guide the drafting process when designing the proposed rule. These principles reflect the industry's longstanding position that the New Starts process should be flexible, predictable, and locally controlled to the maximum extent feasible.

It is imperative that the New Starts/Small Starts rating process not become a comparison of projects against each other or a competition among projects.

Chair
Mattie P. Carter

First Vice Chair
Michael J. Scanlon

Secretary-Treasurer
Nathaniel P. Ford, Sr.

Immediate Past Chair
Beverly A. Scott

Vice Chairs
J. Barry Barker
Government Affairs
Doran J. Barnes
Human Resources
Linda J. Bohlinger
Research and Technology
Christopher P. Boylan
Management and Finance
Flora M. Castillo
Transit Board Members
Joyce Eleanor
Bus and Paratransit Operations
Joseph Giulietti
Commuter and Intercity Rail
Sharon Greene
Business Members
Delon Hampton
Business Member-at-Large
Angela Iannuzziello
Canadian Members
Michael A. Sanders
State Affairs
Gary C. Thomas
Rail Transit
Peter J. Varga
Small Operations
Alice Wiggins-Tolbert
Marketing and Communications

President
William Millar

References to “comparing project benefits and costs on a national basis” and other similar phrases must be consciously avoided to ensure the process stays focused on the statutory mandate to evaluate whether a project meets the requirements of 49 USC 5309 and is reasonably likely to continue to meet those requirements as established in 49 USC 5309(d)(5)(A). Any attempt to broaden the analysis into a comparison or competition among projects necessarily increases the number of fine distinctions among qualified projects and increases reliance on controversial and likely skewed measures to differentiate among those projects. The rating process is simply not the proper venue for competition.

FTA should establish clear decision points on a schedule that can be relied upon by project sponsors. Predictability is a key element of cost control. Local project sponsors are responsible for explaining the federal New Starts and Small Starts process to community leaders and citizens. Clarity of schedule and decision points is indispensable in both.

The New Starts evaluation and rating process should take into account local goals, priorities, and choices as well as federal priorities, particularly in light of the fact that most projects have at least as much local and state funding as federal funding.

The ultimate rule should allow state and local funds to supplement and enhance projects. The federal process should not discourage or prohibit local efforts to use local funds to cover the additional costs of an enhanced project.

The process should recognize the variability of cost estimates and ridership forecasts by using ranges. While ideally, projects should neither be over-designed nor under-designed, FTA should be flexible in allowing reasonable levels of latitude where project sponsors must exercise judgment.

The evaluation and rating process should have a clear endpoint. There should be a point after which additional analysis and evaluation are no longer required and this point and its significance should be clear and unambiguous.

Small Starts projects are inherently different from New Starts projects, not just in scope but in risk, impacts, and benefits. The evaluation process must account for these differences and allow for simpler, faster analysis and decision making for Small Starts projects.

FTA should allow project sponsors to defer their local shares, consistent with other grant programs. The current practice of drawing down grants at the percentage rate in full funding grant agreements (FFGA) strains agencies' capital programs and increases financing costs, particularly in projects with a large overmatch.

Reasonable changes to an FFGA should be permitted. Once an FFGA has been signed, there must be a clear process for seeking changes due to changed conditions, including changes in project scope when necessitated by external conditions.

Finally, FTA's level of involvement in projects should vary based on the technical capacity of the project sponsor and both the amount and proportion of federal investment. Much like the Federal Highway Administration practice of certifying state departments of transportation to carry out environmental and project development tasks, FTA should take a modified approach when working with experienced project sponsors or where the federal investment is relatively small.

Project Evaluation

In developing its improved New Starts process, we believe FTA should embrace a flexible framework that recognizes the distinctions among different project types, such as new corridors, extensions, or circulators. Such a framework is described in TCRP's Quick Response Project J-06/Task 66 white paper, *Small Starts Justification Criteria*. Although that paper was crafted with a view only to Small Starts, the concepts of simplicity and predictability that inform the paper apply equally well to New Starts. Both New Starts and Small Starts evaluation decisions should be based on multiple measure evaluation, applying a combination of quantitative and qualitative measures.

This multiple measure evaluation would, consistent with the call for a reduced federal role where there is a relatively small federal investment, allow the Small Starts program to be substantially simplified and accelerated while also speeding and simplifying the New Starts process. This alternative framework would work from a list of evaluation measures, with some measures mandatory and others simply scored on a point system. Projects that meet the mandatory measures and score the requisite number of points from among the other measures would be awarded a rating matched to the point range for each of the statutory measures.

In addition to our principles and this general framework for project evaluation, we offer below, potential approaches to cost effectiveness, economic development, and environmental benefits and responses to some of the specific questions in those areas posed by FTA. These comments reflect the deliberations and extensive work of our committees and subcommittees. Of course, any comprehensive proposed rule must account for the interdependent nature of each of the measures and create an evaluation system that fairly considers all manner of projects.

Cost Effectiveness

Cost effectiveness, as currently defined, measures one benefit against cost – user benefits (expressed as the perceived change in transit travel time) against the incremental change in cost. This one-benefit measure comparison does not take into account other important transit project benefits. The current comparison is dependent on calculating the mobility benefits through the regional travel demand model for New Starts projects, in particular. Both the use of only the travel time savings benefit and the application and use of the regional model in assessing that benefit are limiting evaluation techniques. They do not account for the effectiveness of different transit technologies and do not include other valuable benefits that contribute to overall transit “cost effectiveness.” Additionally, the current model values driving to a suburban transit station over walking or biking to the station since it measures only time. Alternative methods of cost

effectiveness that account for the different benefits of a specific project and include reasonable methods of evaluating those benefits for like transit modes or functions should be permitted.

In measuring costs, we recommend that only 49 USC 5309 funds be used in the calculation. This would ensure that the level of federal investment would be the national measurement standard for comparison between projects and the variation that occurs among project sponsors due to local community preferences would be eliminated. This would allow project sponsors the flexibility to *choose* to include those elements that are not essential from a federal perspective but are desired by the local community. Here, as in every aspect of the New Starts/Small Starts program, the federal role must be commensurate with the federal investment.

Improving and changing the “cost-effectiveness” evaluation measure is critical to the success of the New Starts process and will require additional analysis and discussions beyond the ANPRM process since any adjustment to the model will invariably have downstream consequences interdependent with other changes. We recommend FTA work with the industry as it develops the ultimate model to ensure each impact is analyzed and evaluated in the context of the full measure. APTA and its members are prepared, willing, and able to assist in this analytic process.

Specific Cost Effectiveness Questions

How might FTA better evaluate cost effectiveness?

FTA’s approach to cost effectiveness should recognize that there are community benefits associated with the implementation of transit that go beyond the current measure of user benefits. We encourage FTA to review established travel time savings model parameters that seem to give greater weight or preference for benefits resulting from drive-to-transit access rather than bus or pedestrian access. This would help establish consistency with FTA’s focus on livability and sustainability and integrating housing and communities with supporting transit investments.

Additionally, FTA should acknowledge that diverse transit modes and approaches have differing but still valid benefits, necessitating a move away from the current “one size, fits all” measurement.

As discussed above, we recommend the new cost effectiveness measure be modified to consider only those capital costs to be paid for with Section 5309 New Starts or Small Starts funds. The revised measure would significantly simplify and improve the consistency of the project evaluation process, while continuing to enable FTA to distinguish among projects in a fair and consistent manner. Communities have substantial diversity in local requirements and desires and this places significant burden on communities with more stringent local requirements compared to communities with less requirements. Moreover, FTA should explore the concept of allowing some level of credit against the annualized federal share of costs for projects that incorporate some “LEED” types of project components. This would encourage application of sustainability principles.

If you believe that FTA should include the other benefits in the measure of cost effectiveness, how can FTA best measure and quantify these benefits? Please include specifics on how FTA would quantify and measure these benefits?

We believe FTA should include additional benefits in its calculation of cost effectiveness. These additional benefits should reflect the unique characteristics of individual projects that will make those projects successful uses of federal investments. The measurements of these additional benefits should be both qualitative and quantitative.

As an example, double tracking a heavy rail line that allows trains to be run more frequently and reliably offers benefits, but the full effects of this improvement might not be easily captured with just the travel time savings of the user benefit measure thru conventional transportation models. The case for such a project might be made by using annualized data on the time performance and delay mitigation, reduction of capacity constraints in peak hours, easing crowding, and similar quantitative indications.

Another example of an additional benefit and measure could account for accessibility for both low income and all users. Both the measurement of low-income households served within a specified proximity of the alignment, as well as the benefits associated with the increased accessibility created by the changes in the percentages of households and employment within a stated walking distance of a transit stop or station, could be considered. Finally, specific land use changes should also be reviewed – measurement of beneficial changes in average population and employment densities within an area, at a corridor, or at the regional scale; beneficial changes in the percentage of households in single family vs. multi-family housing, again, at each scale; or other measures could be used to measure land use benefits.

FTA should also acknowledge that some benefits do not lend themselves to quantification and incorporate a qualitative rating system. As with other aspects of cost effectiveness, we are prepared to assist FTA as it expands the definition of benefits and creates a rating system that is fair to all project sponsors.

Are there simpler measures of cost effectiveness that FTA could use? If so, what are they?

Although not necessarily simpler, the measurement of cost effectiveness should be comprehensive and reflect the value of the specific transit investment to meeting both federal and local goals.

How should FTA evaluate projects across cities with varying levels of transit service? In other words, should FTA continue to compare projects against a baseline alternative? What is the most appropriate "Baseline Alternative" for comparing project benefits and costs on a national basis? Should FTA consider additional benefit categories such as convenience for riders, reduced congestion, reduced travel times as a result of reduced congestion, reduction in the number of accidents due to reduced congestion, fuel costs (or other variable cost) savings for individuals would be using the projects and/or the benefit to national security of additional transportation options? If so, how should these be measured?

As noted above, FTA should not compare projects against each other or foster a competition among projects within the New Starts/Small Starts rating process. FTA should eliminate use of the "Baseline Alternative" in all projects. Additionally, APTA supports the concept of using the "No Build" alternative and, in some cases, the Transportation System Management (TSM) alternative, as the basis for comparison to the proposed New Start project.

For Small Starts, the comparison should always be "No-Build" versus "Build," as the very nature of a Small Starts project is that it is a low cost improvement and therefore the comparison to a "No-Build" is always appropriate. Use of the TSM (defined as the "best that can be done" absent a major investment) would be counter-productive when, as in a Small Start, the "Build" alternative itself is not a major investment.

For a New Starts project, the TSM can be effectively communicated to local leaders and citizens since it specifically relates to the context of the specific corridor's purpose and need. However, reliance on the TSM is only useful when what constitutes the TSM for a project is defined in a timely manner during the definition of alternatives and not revisited later in the process. This timely definition and certainty is critical to avoiding delay and the additional costs that invariably accompany delay. Moreover, while the TSM is a useful standard in the short term, decades of experience have demonstrated the shortcomings inherent on it. Therefore, we recommend FTA undertake a study to explore alternatives to the TSM that could be more efficient as the New Starts program evolves.

We also believe additional benefit categories to measure the effectiveness of the build alternative should be used to facilitate evaluation and that evaluation measures should be qualitative as well as quantitative. APTA's measure of the cost saving benefit for people taking public transit is but one example of such a measure. The additional benefits enumerated in FTA's question, while reasonable, have not garnered industry consensus on their value to the process and, in many cases, would be difficult to value at all. Data collection activities required to support claimed benefits could be too burdensome to make evaluation of individual benefits practical. We stand ready to assist FTA in further exploring the potential of measuring and employing these benefit measures as FTA's process evolves.

Should FTA measure project benefits on opening year for those projects or retain the current methodology which is based on the planning forecast year (which is approximately 20 years in the future)? Please explain the rationale for your response. If 20 year estimates are used, should FTA require project sponsors to support the reasonableness of their land use forecasts 20 years in the future? If so, how might project sponsors support their conclusions? Should FTA consider using forecasting periods other than opening year or 20-year? If so, what forecast year should FTA consider, and why?

We believe the forecast year, defined as approximately 20 years in the future, is appropriate. The typical major capital investment project is a 20+ year investment so comparing this long term investment to 20+ year (long term) benefits, including land use, is appropriate. This would also account for the fact that land use and economic benefits often take time to mature. However, to account for the differences between New Starts and Small Starts, we believe project sponsors should be afforded the option of employing a shorter time frame for Small Starts projects.

Economic Development

In response to FTA's questions concerning economic development, we have compiled a list of fundamental considerations that should inform FTA's rule drafting process, including:

- The significant variability in economic growth among metropolitan areas across the country – due to the multiple factors which *affect* economic development -- make it difficult to isolate the effect of a discrete, specific transit investment and therefore lead to potential inequalities in how projects are rated and evaluated.
- FTA should consider allowing a project to be justified on the basis of qualitative factors rather than quantitative projections. The latter are based on prior trend analysis and are often proven unreliable, since many land use policies are specifically intended to change “conditions as they have been.” Predictions based on prior trend modeling fail to account for these intended changes.
- The economic effect of industry clusters or geographic concentrations of interconnected employment centers - a striking feature of virtually every national, regional, state, and even metropolitan economy - and the role of transit fixed guideway investments in enhancing the linkages *among* such clusters – should be measured qualitatively since quantitative measurement is difficult.
- The *lack* of a significant infrastructure or transit investment that would improve the movement of people and goods within a region as an *impediment* to economic growth in a particular region, i.e., the absence of the transit investment, should be considered.
- The underlying economic development strategy of the region, and the extent to which policies and plans are in place to foster economic growth and related land use changes that would support it is an important consideration.
- The recognition that public transit agencies have limited direct impact on land use policies and land uses (via the properties that they actually own) versus the

tremendous indirect impacts that follow-on from their investments in new fixed guideways must be recognized.

- FTA should assess the extent to which a more efficient *network* which links multiple centers (as opposed to a discrete investment, either as an initial starter segment or an extension to an existing system) will enhance economic development.
- The measure of economic development must be commensurate with the scale of the proposed investment. Small Starts will almost always have a more localized impact and analysis of Small Starts projects must focus on these narrower impacts.

These considerations guided our answers to the specific questions below and should also guide FTA as it develops the updated New Starts/Small Starts program.

Specific Economic Development Questions

How should FTA address project impacts on land use and/or economic development?

FTA should view project impacts on land use as a more localized or corridor-level impact. For New Starts, economic development should be viewed on a more regional level, since impacts are more easily measured on a regional level. For Small Starts, economic development is necessarily measured on a localized or corridor basis, since few Small Starts projects would likely cause regional impacts.

Should FTA continue its current approach?

FTA should modify its current approach, since it is limited. Essentially, the FTA approach is based on a theory that the amount of capital investment is limited, and therefore increases in investment in one location are made by shifting resources from another. In other words, it appears to assume that economic development is a zero sum game that occurs within a region. This fails to take into account regional growth that might be a function of significant improvements in regional mobility from connecting major population and employment centers.

An identical amount of capital invested in two different locations may have drastically differing total returns, depending on local conditions. Capital invested in a greenfield may produce some return, which is otherwise reduced by the proportionally higher automotive costs of the employees or residents there. A similar investment in transit infrastructure and infill may generate the identical return, but also achieve transportation efficiencies, greater home affordability, and more disposable income for the employees or residents there.

Should FTA define economic development differently?

Yes. For New Starts, economic development should be separated from land use and should refer to increases in underlying economic strength, as measured by increases in employment, increases in gross domestic product, or increases in wealth. Such increases in employment, productivity or wealth may result, in part, from the increased accessibility and reductions in the cost of travel provided by a specific new transit investment or set of investments. Impacts are almost always observed and measured regionally, not just in the area of the investment, since the measures are “macro” in nature and lend themselves to regional measurement.

Since Small Starts will rarely have regional effects, economic impacts of a Small Starts project should concentrate on localized, corridor level impacts. For Small Starts, economic development must be defined flexibly enough to account for less precise indicators, such as increased foot traffic (i.e., shoppers) in a corridor shopping area.

Should FTA use quantitative or qualitative approaches, or both?

FTA should use quantitative approaches for summarizing changes in land value, percentages of developable or re-developable land, or Gross Regional Product statistics. Qualitative approaches should be used to compare the extent to which economic development strategies, regional blueprints, corridor-level plans and transportation plans are integrated and coherent. Such plans are intended to change circumstances “on the ground.” Estimating the potential quantity and direction of the actual changes ten to twenty years in the future must be a qualitative factor – an attempt to estimate how the future pattern of growth will in fact differ from the current trend.

What scale should be used to measure economic development – corridor, or region?

We believe that economic development should be measured at both the corridor and regional levels. Possible measures of economic development at the regional scale include:

- Standard measures of gross domestic product at the regional scale - gross regional product;
- Growth in total employment; and/or change in the percent of unemployment;
- Change in average household income or total regional income; change in sales tax receipts; change in assessed valuation of properties in region; and other measures of wealth; and
- Changes in transportation/housing combined affordability index.

As noted above, analysis of Small Starts projects is best focused at the corridor level, such as the “number of shoppers” example above.

How can FTA distinguish between land use and economic development effects?

Land use impacts are the changes that occur on real property in specific geographic areas, either at the parcel level, or at larger area-wide level. They may occur, in part, as a result of new transit investments. Some of those land use changes may be in “brownfield development.” Brownfield development may result from changes in the way existing buildings are used (for example, the conversion of warehouses to residential lofts) or they may involve removal of existing built facilities and construction of new residential, commercial, or industrial facilities on the previously occupied land. Other land use changes may be “greenfield,” or the construction of new facilities on land not previously used, or used only for agriculture.

New or brownfield land use development may *also* result in economic development, i.e., by taking it to a “higher and better use” with the potential for increases in regional employment, wealth or productivity, either in the short term or the long term. However, the two terms really refer to two different things, and are measured differently.

Possible measures of land use change in addition to those proposed by FTA include:

- Average population and employment densities within an area, a corridor, or at the regional scale and their relationship to planning ideals such as LEED-ND (neighborhood development);
- Changes in percentage of households in single family vs. multi-family housing, again, at each scale and their relationship to planning ideals; and
- Changes in percentages of households living within stated walking distance of a transit stop or station, at each scale, again as related to planning ideals.

How can FTA distinguish between development new to a region caused by the project and development relocated due to the investment?

This is a factor that cannot be practically estimated by FTA or by the project sponsor with regard to any particular investment. The question would have to be posed to each potential developer or city official, and might have to be posed at several points during the development process, depending on market conditions at the time. It also does not address the difference between investments from outside the region versus from inside the region. More importantly, however, it begs the question of corridor and location efficiencies (i.e., the premise that housing and jobs located near good transit service result in shorter trips generally, and fewer trips by auto due to greater proximity of other travel choices).

It should not *matter* to FTA whether the investment is “relocated” due to the transit project. Rather, it matters that the investment may yield a higher return, both to the developer and to society, through increased or enhanced economic returns from location efficiency. This location efficiency could be measured through measurement of jobs, homes, and services brought within a specified proximity of transit.

Should FTA assess how plans, policies and incentives are likely to lead to employment increases?

Yes. It is reasonable to assess the extent to which the region has a coherent, cohesive set of policies or a “blueprint” in place which is based on a rational assessment of what is realistic given the region’s existing development and its specific attributes (locational, natural, institutional, etc.). The goals of the HUD-DOT-EPA Partnership to help regions and communities achieve livability and sustainability, include economic sustainability. Reasonable qualitative judgments can be made about the likely effect of combined land use, transportation and economic development policies on not only employment increases but other economic vitality factors. This is more intuitively logical, and is more easily explained to community leaders and citizens, than forecasting from trend analysis.

We believe it is also reasonable to evaluate the extent to which the region as a whole and the jurisdictions within it have developed a consistent set of strategies designed to achieve regional economic development objectives. Finally, a significant and relevant indicator would be the extent to which the region’s economic development blueprint is integrated with its transportation strategy, i.e., are the region’s key employment centers to be linked with a fixed guideway investment?

Are land value increases a good measure of economic development potential?

Economic development potential cannot ignore the marketplace. Dependence on increases in land value alone, however, does not provide a useful measure, since many other factors contribute to those values. Land values are subject to the effects of market cycles, independent of transit and do not move consistently over time. They depend a great deal on the actual use to which the land will be put. Land value increases are primarily a measure of local impact on the tax base and personal or corporate wealth. These may contribute to overall returns from economic development, but they cannot predict potential. It is a community’s land use policies and strategies, in conjunction with land value increases, which provide the reliable measure of future economic development.

Should economic development benefits be part of the cost-effectiveness measure?

No. Congress intended that economic development impacts be measured separately from cost-effectiveness – not wrapped up and hidden within an already complex calculation reduced to a single number.

In addition, we do not believe that it is possible to realistically predict in a quantitative fashion, what the effect of any given project – or even any set of projects – will be on economic development. There are multiple factors which affect a region’s economic development over a long period of time (national economic policies, interest rates, technological innovations, etc.) that can dwarf the effect of a single discrete transit investment. Because of that, we do not believe it is possible to project or quantify economic development benefits over a 20-year period with any reasonable sense of accuracy. Therefore, we believe that a more qualitative approach

that focuses on the region's policies and strategies for economic development – and the extent to which a fixed guideway investment is an explicit element of that strategy – would yield a more reasonable assessment of what effect the investment might have on the region's economy.

Environmental Benefits

The development of criteria to measure environmental benefits is challenging as a result of the diverse characteristics associated with project sponsors, project characteristics, and contexts in which projects occur. What is an environmental benefit associated with one project or location may not provide an equivalent degree of environmental benefit under different circumstances. Consequently, the criteria must provide a way for environmental benefits to be rated in a flexible manner, free of bias related to project size, mature versus new systems, or large versus small systems, for example,

As there is no "universal" environmental measure that would be applicable to all sponsors, projects, and contexts, flexibility in the criteria, and rating approach are essential. Projects should not be "penalized" for context, but rather rewarded for being sensitive to the project context. In short, a project should not be subject to a poor rating because of existing conditions, or projects in urban environments should not be favored over those in suburban environments or vice-versa. Rather, the environmental criteria should rate projects based on things that project sponsors can control, and responsible project development to encourage environmental benefits.

In addition to flexibility to accommodate a wide range of circumstances without bias, guiding principles essential to criteria and rating process development are:

- The environmental criteria and rating process should be simple and easily understood by those without extensive, specialized environmental knowledge.
- The environmental criteria should be based on readily available information already produced in the project development process.
- The criteria and rating process should be a combination of qualitative and quantitative measures
- While a few specific measures might lend themselves to being monetized, for the most part environmental factors should not be monetized. Given that there is not a universal agreement as to all the factors that could or should be included in the monetization of any metric, trying to apply a cost value to any environmental benefit can be difficult for agencies and can be subjected to manipulation that would obscure what should be as simple and clear as possible.
- The criteria should promote and advance environmentally beneficial projects, addressing the definition of "environmental" in a broad context to include not just the natural environment, but also the human and social environment in order to address both a wide range of contexts.

Potential Environmental Benefit Framework

We have outlined a potential environmental benefit framework that responds to the questions posed by FTA in the ANPRM related to environmental benefits. This potential framework reflects the types of issues that may be appropriate for consideration in project rating. The potential criteria and rating approach has been constructed to promote flexibility and enable environmental benefits/merits of projects to be recognized across different contexts. The framework consists of a point based rating system based on 3 major criteria:

- Environmental and Community Preservation;
- Environmental and Community Enhancement; and
- Environmental Management

Projects would be rated based on representative measures under each of these criteria. The "points" awarded for each measure under each criteria would establish the "rating" (high, medium high, etc.) under each of these 3 criteria, and then the rating for each criteria would be rolled up into an overall environmental rating in accordance with the New Starts scale of high, medium high, etc.

The Environmental and Community Preservation portion of the criteria would be based on questions such as:

- Does the project avoid "taking" of endangered species or endangered species habitat? This would be an indicator of protection of natural resources, including essential habitat.
- Does the project provide a pedestrian oriented environment that would promote livability and enhance air quality by providing an alternative to automobiles and promote reduction of vehicle miles traveled? Similarly, is the project being constructed in an environment that currently exhibits characteristics of a livable community and will help retain existing high levels of transit ridership?

Another consideration would be the extent to which the proposed project provides access for environmental justice populations. Such a measure, which would indicate support of existing communities, could be included here or could be incorporated under another New Starts criteria relating to mobility or accessibility. If such a measure is addressed within the environmental criteria, it must be clear in its calculation, such as a provision of a stop or station in neighborhoods characterized by environmental justice populations.

The Environmental and Community Enhancement portion of the criteria would be based on measures such as:

- The project or corridor bus fleet emissions expressed in terms reductions in greenhouse gases per passenger mile, as an indicator of air quality;
- The agency's fleet average age and/or fleet composition (i.e., percentage of hybrid or clean fuels vehicles) as indicators of air quality, energy consumption, and reduction of dependence on carbon based fuels and foreign oil;

- Stations built to LEED standards, as an indicator of energy and overall environmentally responsible development, including considerations such as water quality, storm water management, and avoidance of infrastructure investment in flood plains; and
- Maintenance of facilities built to LEED standards, as an indicator of energy and overall environmentally responsible development, including considerations such as water quality, storm water management, and avoidance of infrastructure investment in flood plains.

The Environmental Management portion of the criteria is intended to assess the project sponsor's commitment to environmental management of the project. Consideration should be given to those agencies that have or are implementing an Environmental Management System (EMS) specific to the project. Scoring would be based on evaluation of whether the project sponsor is applying EMS principles to the project.

Agencies should be encouraged to look at their on-going environmental impacts and to identify means and measures to reduce those impacts; and EMS is a generally accepted approach to doing this, and encouraged by FTA. An agency with an EMS covering a project would be required to provide less documentation on the specific project than an agency without a broader EMS however any agency could earn all available credit in this portion of the criteria if properly documented.

Specific Environmental Questions

How might FTA better measure environmental benefits?

This question is answered through the proposed criteria and rating approach. It is generally recognized in the industry that the existing measures do not provide any useful decision-making information, and need to be replaced. In replacing the existing measures, it is essential that the replacement criteria are simple and clear, should be something that agencies are capable of executing in house without reliance on consultants, and must draw on information that would already be generated during project development, as opposed to adding the need for additional analysis. Finally, it is essential the criteria be easy to interpret by elected decision-makers and the public without elaborate explanation and caveats.

In measuring environmental benefits, should FTA consider a broad range of definition of the environment, as does the National Environmental Policy Act, which includes consideration of both the human and natural environment? Or should FTA focus on the environmental performance in specific areas such as air quality emissions, energy use, greenhouse gas emissions, or water quality? Should FTA look at project specific environmental benefits such as change in energy use and/or pollutant emissions? Should FTA consider characteristics such as assessing the degree to which a proposed New Starts project fits into a State or Regional Sustainability Plan, or whether a transit agency's capital program is operating under an official Environmental Management System (EMS) or has attained the EMS certification of the International Standards Organization (ISO 14001)? Would it be best to have a combination? Please be specific in what metrics you think should be considered

The framework proposed above addresses a potential balance regarding the definition and breadth of environmental considerations, and the specific measures that should be considered. Inclusion of all the factors traditionally covered as part of NEPA analysis would be too broad. In addition, some of the broader NEPA factors would be inappropriate for use because of their potential to bias ratings based on the context in which the project occurs (urban versus suburban areas for example), as opposed to focusing the rating on the actual project performance. While in one sense the definition of environmental considerations could be confined only to natural elements since social and economic factors are considered under other criteria in the rating process, project performance relative to the human environment could also merit consideration under the environmental criteria. To avoid duplication or double counting, emphasis regarding human and natural factors could be handled through weighting of the factors under the environmental criteria. In this case, greater weight could be attributed to natural factors than human environment factors, since the human environment factors are also considered under other project justification criteria including economic development and land use. The proposed framework recognizes project specific considerations regarding application of environmental management systems principles and LEED certifications to project development. The specific measures proposed also include consideration of air quality pollutant emissions, energy consumption, habitat preservation, livability, and equity.

Should the environmental benefits evaluation consider the steps a sponsor takes to mitigate the construction of New Starts project impacts in addition to the environmental effects of their operation? Should the origin and methods to obtain construction or vehicle materials; energy type and use; and water consumption be considered in the overall evaluation of environmental benefits?

Mitigation is more appropriately addressed as part of the NEPA process, and the comparability of mitigation measures across projects would be virtually impossible to compare nationally across diverse project contexts. By incorporating LEED design criteria for stations and maintenance facilities, the origin and methods to obtain materials, energy type and use, and water consumption would be considered in the overall evaluation of environmental benefits.

Should FTA consider the reduction in single occupant vehicle usage as part of the evaluation of environmental benefits? What method should be used to measure the changes in vehicle miles travelled resulting from implementation of a project? Please be specific about how FTA should measure this.

Reduction in the use of single occupant vehicles and vehicle miles traveled is a very important indicator of a project's environmental benefits. This measure can be derived from the transit demand forecasting model. However, it should be noted that many projects, particularly those in densely-developed areas with an existing high transit mode share may not result in a reduction of VMT. In many cases, these projects address problems of transit congestion or seek to improve system efficiency, and their implementation will serve to help retain existing ridership. For these types of projects, it should not be necessary to show a reduction in VMT if the transit mode share is above a certain threshold. In the alternative, the VMT reductions alone should not be the singular measure to determine the project's environmental efficacy. FTA should consider the use of the VMT reductions plus the use of a land use multiplier which would capture the additional benefits of a more compact/high density land use. This could result in a relatively simple method of capturing the benefits of transit in high density areas. We would welcome the opportunity to work with the FTA to establish an appropriate threshold or perhaps an alternate means to ensure that all of the benefits of a project are captured and not only those that might be captured through the use of a VMT reduction.

Should FTA consider certification of the planned facility through the Leadership in Energy and Environmental Design (LEED) Green Building Rating System; low impact development of transit facilities, or energy production with windmills or solar panels?

Yes, and measures relating to LEED certification have been incorporated into the framework proposed.

In measuring the environmental benefits of the project, how might FTA take into account the goals and objectives of Executive Order 13514? Should a project be evaluated and rated on how well it maximizes the land use efficiencies created through locating the project in areas that facilitate sustainable development?

The framework proposed promotes the goals and objectives of EO 13514 through among other things, recognition of LEED certification. Land use efficiencies are more appropriately addressed as part of the land use and economic development criteria than environmental criteria. However, the framework above includes measures to preserve habitat, and by extension promote more compact development, and to promote transit investment in established neighborhoods.

To what extent, if any, can technology improvements- lower carbon transportation technologies, the use of emerging light-weight materials, improved engine designs or bio-fuel applications, for example, be said to reflect environmental benefits of transit proposals? How would such improvements be measured and compared?

Yes, improvements in technology should be considered as they pertain to the project's operation. The proposed framework incorporates measures related to fleet age and composition, as well as reductions in Greenhouse Gas emissions, to reflect advances in technology. Use of new technology *per se* should not be a consideration.

Should environmental benefits be included in the cost-effectiveness measure? How can environmental benefits be compared across projects and incorporated into FTA funding decisions?

No. The environmental benefits should remain distinct from the cost effectiveness measure. Incorporating environmental benefits into the measure would add unnecessary complexity and make it more difficult to compare benefits across projects. The incorporation of an environmental rating approach as proposed in the above framework provides sufficient basis for consideration of environmental benefits as part of the New Starts rating process, which constitutes FTA's basis to support funding decisions.

Additional Issues

In addition to comments on the specific measures, we offer the following recommendations to ease the burden and costs of the New Starts/Small Starts process. We believe FTA should eliminate its stand-alone alternatives analysis requirement. Project sponsors have multiple tools and opportunities at their disposal to meet the intent of basing their decisions on the findings of an alternatives analysis (e.g. long-range transportation and land use planning, high capacity transit corridor analysis, etc.). Many regions conduct alternatives analyses by corridor at the system planning level – reviewing potential technologies, developing a range of alternative alignments and generating comparative data on project costs and benefits by alternative. Since NEPA requires the federal government to review the environmental impact of and alternatives to major federal actions, that process fulfills the requirement that FTA funding actions be based on decisions made through an alternatives analysis.

We believe FTA should collapse all activities into a single project development phase for New Starts. A complicating aspect of the New Starts process is the loss of local project development momentum at each early federal milestone. Collapsing the planning (i.e. pre-preliminary engineering) and preliminary engineering phases of New Starts project development into one continuous and comprehensive planning, environmental and preliminary engineering phase enables project sponsors to maintain continuity in stakeholder and public outreach in addition to saving valuable financial, staff and consultant resources through a more streamlined project development approach. FTA approval to enter into this consolidated and streamlined project development phase, that includes preliminary engineering, would be consistent with most local decision-making bodies and processes – processes that do not make significant project

commitments until after completion of the environmental review and preliminary engineering at which time they have detailed information on benefits, impacts and costs of the investment. The significant federal commitment to invest in the project follows this same sequence and should not require an interim project review step.

FTA should advance the concept of Project Development Agreements (PDA) as a management tool to eliminate uncertainties and reduce risks, with flexibility built in to make changes to the agreement as the project evolves. The PDA should define the criteria and conditions a project must meet to streamline and expedite overall project delivery and could be the basis for an Early System Work Agreement once the NEPA process is completed with a Record of Decision (ROD) or Finding of No Significant Impact (FONSI).

Finally, FTA should reestablish the Program of Interrelated Projects. More and more, regions are seeking, and gaining, voter approval to implement multiple corridor system expansion plans as metropolitan areas across the country are experiencing record levels of public and employer pressure build more high capacity transit to more places more quickly. The federal approach to funding one corridor expansion project at a time has not kept pace with current high capacity transit expansion demand and trends. Federal policy can improve on this situation by:

- Allowing the individual projects in a program of interrelated fixed guideway projects to move forward simultaneously, in order to capture the inflation and overhead savings that can result;
- Allowing some projects within the program of interrelated projects to be funded entirely with local funds, and other projects in such a program to be funded with a share of federal New Starts funds;
- Allowing a higher New Starts share for individual projects using some federal funds, without prejudice to a project's financial rating, where the federal New Starts share for the entire program of interrelated projects is 20% or less;
- Establishing an expedited FTA review process to evaluate, rate and approve individual projects within an interrelated program of projects.

We appreciate the opportunity to assist the Department in this important endeavor. For additional information, please contact James LaRusch, APTA's chief counsel and vice president corporate affairs, at (202) 496-4808 or jlarsch@apta.com.

Sincerely yours,



William Millar
President