

**DEPARTMENT OF TRANSPORTATION****Federal Transit Administration****49 CFR Part 611**

[Docket No. FTA-2010-0009]

RIN 2132-AB02

**Major Capital Investment Projects****AGENCY:** Federal Transit Administration (FTA), DOT.**ACTION:** Final rule.

**SUMMARY:** This final rule sets a new regulatory framework for FTA's evaluation and rating of major transit capital investments seeking funding under the discretionary "New Starts" and "Small Starts" programs. This final rule is being published concurrently with a Notice of Availability of revised proposed policy guidance that provides additional detail on the new measures and proposed methods for calculating the project justification and local financial commitment criteria specified in statute and this final rule. FTA seeks public comment on the revised proposed policy guidance referenced in the Notice of Availability published today. Because of the recent enactment of the Moving Ahead for Progress in the 21st Century Act (MAP-21), subsequent interim guidance and rulemaking will be forthcoming to address provisions not covered in this final rule.

**DATES:** This rule will become effective on April 9, 2013.

**FOR FURTHER INFORMATION CONTACT:** Elizabeth Day, Office of Planning and Environment, (202) 366-5159 or [Elizabeth.Day@dot.gov](mailto:Elizabeth.Day@dot.gov); for questions of a legal nature, Scott Biehl, Office of Chief Counsel, (202) 366-0826 or [Scott.Biehl@dot.gov](mailto:Scott.Biehl@dot.gov). FTA is located at 1200 New Jersey Avenue SE., Washington, DC 20590. Office hours are from 9:00 a.m. to 5:30 p.m., EST, Monday through Friday, except Federal holidays.

**SUPPLEMENTARY INFORMATION:****I. Introduction**

This final rule is being issued to amend the regulation (Part 611 of Title 49 of the Code of Federal Regulations) under which the Federal Transit Administration (FTA) evaluates and rates major transit capital investments seeking funding under the discretionary "New Starts" and "Small Starts" programs authorized by Section 5309 of Title 49, U.S. Code. The New Starts and Small Starts programs are FTA's primary capital funding programs for new or extended fixed guideway and corridor-based bus systems across the

country, including rapid rail, light rail, commuter rail, bus rapid transit, and ferries. This final rule was the subject of an Advance Notice of Proposed Rulemaking (ANPRM) published on June 3, 2010 (75 FR 31383), which posed a series of questions about the current regulation and three of the criteria used to assess project justification, in particular. Following the ANPRM, FTA published a Notice of Proposed Rulemaking (NPRM) on January 25, 2012 (77 FR 3848), that proposed changes to the regulatory text. FTA also published on January 25, 2012, a Proposed New Starts/Small Starts Policy Guidance that provided additional detail on the proposed new measures and methods for calculating the project justification and local financial commitment criteria specified in statute. On July 8, 2012, President Obama signed into law the Moving Ahead for Progress in the 21st Century Act (MAP-21), which made changes in FTA's New Starts and Small Starts programs under Section 5309 of Title 49, United States Code. However, because significant portions of the project evaluation and rating requirements for major capital investments were not changed by MAP-21, FTA is proceeding with this final rule that covers the features of the NPRM that are consistent with the new law.

Accordingly, this final rule puts into place the following features:

- The regulatory structure that was proposed in the NPRM
- The New and Small Starts evaluation criteria and rating process defined in MAP-21 (including the five of the six evaluation criteria which were not changed by MAP-21); and
- The before and after study requirements for New Starts projects.

Subsequent guidance and rulemaking will cover new items included in MAP-21 that have not yet been the subject of a rulemaking process. These include

- The "congestion relief" evaluation criterion;
- The core capacity evaluation and rating process;
- The program of interrelated projects evaluation and rating process;
- The pilot program for expedited project delivery;
- The process for an expedited technical capacity review for project sponsors that have recently and successfully completed at least one new fixed guideway or core capacity project; and
- The revised New Starts and Small Start processes including eliminating the requirement that a New Starts or Small Starts project be the result of an

alternatives analysis and instead relying on evaluations performed as part of the Metropolitan Transportation Planning process and the environmental review process conducted in accordance with the National Environmental Policy Act (NEPA); and

- The reduced number of defined steps in the process when FTA must evaluate and rate proposed projects.

MAP-21 created a step in the process called "project development" during which a local project sponsor will conclude the review required under NEPA, select a locally preferred alternative (LPA), adopt that LPA into the fiscally constrained regional long range transportation plan and develop sufficient information for FTA to evaluate and rate the project. Once "project development" is complete, if the project meets the criteria for advancement, the project will begin the "engineering" phase. Upon completion of "engineering" a project will be eligible for a construction funding commitment. While the final rule includes the names of the steps in the New and Small Starts process as defined in MAP-21, further detail on how those steps will be implemented will be the subject of future interim policy guidance and rulemaking. An important aspect of this subsequent guidance and rulemaking will be better defining the relationship of these changes in the New Starts process and the requirements for concluding the NEPA process during project development.

MAP-21 amends 49 U.S.C. § 5309(g)(5) to require the issuance of interim policy guidance describing how FTA will implement the requirements of MAP-21 on an interim basis. Additionally, Section 5309(g)(6), as amended by MAP-21, calls for a new regulation. Accordingly, as a next step in implementing MAP-21, FTA will issue draft interim policy guidance for public comment covering the MAP-21 changes which are not addressed in this final rule. FTA's new rulemaking on these subjects will follow.

In developing this final rule, FTA has been guided by two broad goals, outlined in the NPRM. First, FTA intends, as noted in the NPRM, to measure a wider range of benefits transit projects provide. Second, FTA desires to do so while establishing measures that support streamlining the New Starts and Small Starts process. In balancing these goals, FTA is seeking to continue a system in which well-justified projects are funded. At the same time, FTA seeks to ensure that it does not perpetuate a system in which the measures used to determine the project justification or local financial commitment are so

complex that they unnecessarily burden projects sponsors and FTA, or are difficult to understand.

First, to streamline the process, FTA has adopted measures of both mobility benefits and cost-effectiveness that are simplified yet reliably objective metrics. Second, FTA is expanding the ability of projects to pre-qualify based on the characteristics of the project or the corridor in which it is located. As with the current "Very Small Starts" category, FTA will determine, at some point in the future, what characteristics would be sufficient, without further analysis, to warrant a satisfactory rating of "medium" on one or more of the evaluation criteria. Third, FTA is adopting ways the data submitted by project sponsors and the evaluation methods employed by FTA could be simplified. Fourth, FTA is greatly simplifying the process for developing a point of comparison for incremental measures (i.e., measures that are based on a comparison between two different scenarios, such as a comparison of vehicle miles of travel (VMT) in the corridor without the project and VMT in the corridor with the project). Fifth, FTA is clarifying the local financial commitment criteria to address more clearly the strong interaction between capital and operating funding plans. To address more explicitly the broad range of benefits that transit projects provide, FTA has adopted several ways such benefits will be incorporated into the evaluation process. FTA is including more meaningful measures of the environmental benefits and additional measures on economic development effects of projects, as well as providing for equal weights for all of the project justification criteria. While FTA is streamlining the New Starts and Small Starts processes, nothing in this rule is intended to subvert or diminish the quality and rigor of the existing NEPA process.

## II. What This Final Rule Contains

FTA also is publishing a notice in the **Federal Register** today that announces the availability of revised proposed policy guidance related to the provisions in this final rule for public review and comment. The regulation acts as a framework for the project evaluation process, and the policy guidance provides non-binding interpretations for implementing the regulations. Under both prior law and MAP-21, FTA is required to issue such policy guidance for public comment at least every two years and whenever major changes in policy are proposed. FTA believes that this approach allows FTA to make improvements in the

measures used for the criteria as new techniques become available. FTA published proposed policy guidance along with the NPRM, and as promised in the NPRM, has revised that proposed policy guidance in response to comments received. In the revised proposed policy guidance made available today, FTA is providing more specificity on the measures and analytical techniques needed to calculate those measures. FTA encourages comment on the revised proposed policy guidance. Prior to the effective date of this final rule, FTA will publish final policy guidance on these issues. As noted above, at a later date, FTA will publish interim policy guidance on the items in MAP-21 under the major capital investment program that are not addressed in this rulemaking.

The Executive Summary that follows describes the purpose of this rule, discusses its major provisions, and summarizes its benefits and costs. The section that follows the Executive Summary includes a detailed summary of the comments received on the NPRM and FTA's responses to those comments. FTA received approximately 1,000 individual comments from over 103 respondents to the NPRM. FTA chose to categorize the comments by topical area, group them, and summarize them to assure all relevant comments received consideration in the development of this final rule and accompanying revised proposed policy guidance. The responses to comments help elucidate the provisions adopted by this final rule and provide additional context to the proposals in the accompanying revised proposed policy guidance. The provisions adopted by this final rule are more specifically detailed in the "Section-by-Section" analysis that directly follows the comment summaries and responses.

The Section-by-Section analysis is intended to do two things: (1) Explain the changes to the regulatory text found at the end of this final rule; and (2) explain what is in the related revised proposed policy guidance being published for comment today. FTA must strictly comply with the authorization statute, 49 U.S.C. 5309, in setting the regulatory process the agency will use to evaluate, rate, and approve funding for New Starts and Small Starts projects, and the criteria the agency will use to evaluate those projects. FTA is taking the occasion of this rulemaking, however, to introduce a number of administrative steps consistent with MAP-21, that will help to streamline the New Starts and Small Starts process.

Following the Section-by-Section analysis is the "Regulatory Evaluation" section of this final rule, which includes descriptions of the requirements that apply to the rulemaking process and information on how this rulemaking effort complies with those requirements.

The final rule concludes with the actual regulatory text FTA is adopting for its New Starts and Small Starts programs. This is the language that will govern the way New Starts and Small Starts projects are evaluated, rated, and funded. The language is binding, which means that FTA's future policy guidance documents must be consistent with the regulatory text. As noted earlier, while the regulatory text being adopted today includes the revised regulatory structure proposed in the NPRM and additional features consistent with the changes to the program made by MAP-21, further rulemaking will be needed to address the aspects of the major capital investment program in MAP-21 that were not included in the NPRM. Such changes require further public comment before being made final and thus will be the subject of a subsequent interim policy guidance and rulemaking.

## III. Executive Summary

### A. Purpose of Rule

The New Starts and Small Starts programs, established in Section 5309 of Title 49, U.S. Code, as amended by MAP-21, are FTA's primary capital funding programs for new or extended transit systems across the country, including rapid rail, light rail, commuter rail, bus rapid transit, and ferries. Under this discretionary program, proposed New and Small Starts projects are evaluated and rated as they seek FTA approval for a Federal funding commitment to finance project construction. Overall ratings for proposed New Starts and Small Starts projects are based on summary ratings for two categories of criteria: project justification and local financial commitment. Within these two categories, projects are evaluated and rated against several criteria specified in law. A summary of the current New Starts and Small Starts evaluation and rating process can be found at [http://www.fta.dot.gov/documents/FY13\\_Evaluation\\_Process.pdf](http://www.fta.dot.gov/documents/FY13_Evaluation_Process.pdf).

It is important to distinguish the purpose of this rule from other requirements which must be met as a prerequisite for funding of Major Capital Investments. This rule covers the process by which FTA rates and evaluates candidates for grants under the Major Capital Investments program.

Thus, it focuses on the criteria which FTA will use for this purpose. Candidate projects must still meet the other requirements, in particular, those laid out to address the National Environmental Policy Act (NEPA). Because of the changes made by MAP-21, these requirements will have to be met first, in particular for New Starts projects to advance into the newly defined “engineering” stage. Only once these requirements are met will projects be subject to evaluation and rating against the criteria laid out in this final rule. For example, through the NEPA process (including the use of linking planning and NEPA as provided for in 23 CFR 450.318), all environmental impacts will be evaluated, reasonable alternatives will be examined, and measures necessary to mitigate any adverse environmental impacts will be developed and included in the scope of the project. Only once these environmental effects are analyzed through the NEPA process, will the “environmental benefits” be evaluated using the measures established under this rule and the New Starts/Small Starts evaluation will focus on a more limited range of environmental criteria than the NEPA analysis.

This final rule is issued pursuant to the requirements first outlined in SAFETEA-LU and continued in MAP-21 that the Secretary promulgate regulations to implement the Small Starts program. The final rule and accompanying revised proposed policy guidance change FTA’s implementation of the major capital investment program, primarily by giving the project justification criteria specified in law “comparable, but not necessarily equal weights” as required by Sections 5309(g)(2)(B)(ii) and (h)(6), improving the measures FTA uses for each of the evaluation criteria specified in law, and streamlining and simplifying the means by which project sponsors develop the data needed by FTA.

In addition, this rule implements an initiative in the Department of Transportation’s (DOT) *Plan for Implementation of Executive Order 13563: Retrospective Review and Analysis of Existing Rules* (<http://regs.dot.gov/docs/RRR-Planfinal-8-20.pdf>). Executive Order 13563 calls on agencies to identify rules that may be “outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them...” This rule streamlines and simplifies the various means by which project sponsors may obtain the information needed by FTA for its evaluation and rating of projects. For example, FTA is allowing project sponsors to use a

simplified FTA-developed national model, once available, to estimate ridership rather than standard local travel forecasting models; to use a series of standard factors in a simple spreadsheet to calculate vehicle miles traveled (VMT) and environmental benefits; to no longer require the development of a baseline alternative for calculation of incremental measures; and to expand the use of warrants whereby a project may be able to automatically qualify for a rating if it meets parameters established by FTA. By doing so, this final rule achieves two broad goals—measuring a wider range of benefits that transit projects provide while at the same time establishing measures that support streamlining of the New Starts and Small Starts process. In balancing these goals, FTA is seeking to continue a system in which well-justified projects are funded. At the same time, FTA seeks to ensure that it does not perpetuate a system in which the measures used are so complex that they are difficult to understand or unnecessarily burdensome to project sponsors.

#### *B. Major Provisions in This Final Rule*

This section describes the most significant changes being adopted in this final rule. These adopted changes, some of which are altered in this final rule from the proposals made in the NPRM, are the result of FTA’s review of the comments received on the ANPRM and NPRM and further evaluation of its proposals based on those comments.

##### 1. Cost-effectiveness

Cost-effectiveness is currently evaluated and rated based on the incremental annualized capital and operating cost of the project divided by the incremental hour of travel time savings (i.e., the cost of the project divided by how much time it would save travelers). Changes in cost and travel time are estimated by comparing forecast data for the proposed project with forecast data for a baseline alternative (typically a lower-cost bus alternative referred to as the Transportation System Management alternative). FTA’s thresholds for assigning ratings from “low” to “high” are based on U.S. DOT guidance on the value of time. To establish these thresholds, benefits other than travel time savings are not estimated directly, but are assumed to be equal to the value of the travel time savings. MAP-21 defined cost-effectiveness as “cost per rider.”

With this final rule, FTA is adopting the significantly streamlined and simpler approach for measuring cost-

effectiveness as proposed in the NPRM and consistent with the change in law in MAP-21. The measure of cost-effectiveness for New Starts project will now be annualized capital cost and operating cost per trip taken on the project, with some allowances for project “enrichments” to be excluded from the cost side of the equation. For Small Starts projects, the measure of cost-effectiveness will be annualized Federal share per trip taken on the project in accordance with the MAP-21 requirement that FTA base Small Starts ratings on the “evaluation of the benefits of the project as compared to the Federal assistance to be provided.”

FTA will allow the cost of “enrichments” (referred to in the NPRM as “betterments”) to be excluded from the cost side of the cost-effectiveness calculation for New Starts projects. Enrichments are those items above and beyond the items needed to deliver the mobility benefits of the project. Enrichments may include, for example, features needed to obtain LEED certification for the transit facilities, additional features to provide extra pedestrian and bicycle access to surrounding development, aesthetically-oriented design features, or joint development expenses. This will remove a disincentive to include such features in the design of projects. FTA received numerous helpful comments on the kinds of enrichments that should be excluded from the calculation and as a result was able to adopt a simple approach to identify how to define and assign a value to these features.

FTA is adopting the proposal in the NPRM to develop pre-qualification approaches that would allow for a project to automatically receive a satisfactory rating on a given criterion based on its characteristics or the characteristics of the project corridor. In Section 5309(g)(3), the use of such warrants is required for projects where: (1) The Section 5309 share either does not exceed \$100,000,000 or is 50 percent or less of the project cost; and (2) the applicant seeks the use of warrants and certifies that the existing public transportation system is in a state of good repair. The text of the final rule will allow use of warrants for all projects, but the final warrants to be specified in subsequent policy guidance will be mindful of this statutory structure. The approach for pre-qualification would be developed by analyzing how certain projects or corridor characteristics would contribute to producing a satisfactory rating on the criterion in question. In this way, a project whose characteristics meet or exceed a certain threshold value

could be automatically rated without further project-specific analysis. Proposed pre-qualification values (“warrants”) would be proposed in future policy guidance with a period for public comment before being made final. The revised proposed policy guidance published along with this final rule does not propose any pre-qualification values at this time. However, FTA is interested in receiving suggestions about specific factors and values which could be adopted as pre-qualification thresholds.

## 2. Environmental Benefits

To evaluate and rate environmental benefits, FTA currently uses the EPA air quality designation for the metropolitan area in which a proposed project is located. Thus, FTA assigns projects located in nonattainment areas (areas that EPA has designated as having poor air quality) with a “high” rating; all other projects receive a “medium” rating.

FTA is adopting the proposal in the NPRM to expand the measure for environmental benefits to include direct and indirect benefits to the natural and human environment. These benefits will be based on estimated changes in highway and transit VMT resulting from an estimated change in mode from highway to transit due to the implementation of the project. FTA will evaluate changes in air quality based on changes in total emissions of EPA criteria pollutants, changes in energy use, changes in total greenhouse gas emissions, and safety improvements based on reductions in the amount of accidents, fatalities, and property damage. Changes in public health, such as benefits associated with long-term activity levels that would result from changes in development patterns, would be included once better methods for calculating this information are developed.

## 3. Economic Development

Currently, FTA evaluates and rates the economic development effects of major transit investments on the basis of the transit-supportive plans and policies in place and the demonstrated performance and impact of those policies. FTA adopts the proposal in the NPRM to continue to use this measure and to add a consideration of whether policies maintaining or increasing affordable housing are in place. The number of domestic jobs related to design, construction, and operation of the project will also be reported but not considered in the rating, as proposed in the NPRM.

FTA is also adopting the proposal in the NPRM to allow project sponsors, at their option, to also estimate indirect changes in VMT resulting from changes in development patterns that are anticipated to occur with implementation of the proposed project. The resulting environmental benefits from these changes in VMT would be calculated, monetized, and for New Starts projects compared to the annualized capital and operating cost of the project and for Small Starts projects compared to the Federal share. The resulting estimate would be evaluated under the economic development criterion. For New Starts projects, the final rule includes a provision that would subtract the costs of “enrichments” from the costs used in this calculation, just as in the measures of cost-effectiveness and environmental benefits. It is anticipated that the project sponsor at its option would undertake an analysis of the economic conditions in the project corridor, the mechanisms by which the project would improve those conditions, the availability of land in station areas for development and redevelopment, and a pro forma assessment of the feasibility of specific development scenarios to calculate the VMT changes.

## 4. Streamlining

Aside from changes that will improve FTA’s measures for evaluating projects, FTA is adopting the changes proposed in the NPRM that are intended to streamline the process.

First, FTA will allow project sponsors to forgo a detailed analysis of benefits that are unnecessary to justify a project. For example, if a project rates “medium” overall based on benefit calculations developed using existing conditions in the project corridor today, the project sponsor would not be required to do the analysis necessary to forecast benefits out to some future year (i.e., a “horizon” year). In response to comments received on the NPRM, if a sponsor chooses to prepare future year forecasts, FTA will allow the project sponsor to use either a 10-year horizon, as proposed in the NPRM, or a 20-year horizon (which is consistent with metropolitan transportation planning requirements). Similarly, FTA is developing methods that can be used to estimate benefits using simple approaches. Only when a project sponsor feels it is necessary to further identify benefits beyond a simplified method would more elaborate analysis be undertaken, and only at the project sponsor’s option.

## C. Benefits and Costs

FTA believes that the benefits of this rule will far exceed its costs. FTA estimates that implementation of this final rule will have a one-time cost of \$306,200 due to the need for projects sponsors and contractors to become familiar with the changes made by this final rule and another one-time cost of \$306,200 for the development of the additional information required by this rule.

FTA estimates an annual savings of \$423,750 in reduced paperwork burden arising from project sponsors being given the option of replacing the costly and time consuming application of local travel demand models with a simplified national model, the elimination of the requirement that project sponsors develop and analyze a baseline alternative, and the expanded use of automatic, pre-qualification (“warrants”) for certain projects. FTA believes that this is a conservative estimate. FTA believes some of the streamlining changes made in this final rule could result in much larger savings, including savings that may result from projects being able to be constructed sooner because of the reduced time it may take them to comply with Federal requirements.

FTA also estimates that because of the changes in evaluation criteria incorporated in this final rule, implementation of the final rule may result in the selection for a recommended commitment of Major Capital Investment program funding of one different New Starts or Small Starts project than under the current final rule each fiscal year, with an average Major Capital Investments program contribution of \$250,000,000. However, because of the large number of factors which go into the selection of recommended projects beyond those being revised by this final rule (such as project readiness), there is a considerable degree of uncertainty to FTA’s estimate of the number of different projects which may be recommended as a result of the changes made by this final rule. To put this figure in context, the Major Capital Investments program provides a total of just under \$2,000,000,000 per year for New Starts and Small Starts projects.

The following table summarizes the costs, benefits, and changes in Federal transfers (Major Capital Investments grants) of this final rule over a ten year period, discounted at three and seven percent:

TOTAL BENEFITS AND COSTS SUMMARY FOR MAJOR CAPITAL INVESTMENTS FINAL RULE OVER TEN YEARS, 2012\$

	3% Discount rate	7% Discount rate
Total Monetized Benefits .....	\$3.7 M	\$3.2 M
Total Cost .....	0.6 M	0.6 M
Total Net Impact (Benefit—Costs) .....	3.1 M	2.6 M
Changes in Transfer Payments .....	2.2 B	1.8 B

**IV. Response to Comments**

The following is a summary of the comments received in response to the proposals in the NPRM, FTA’s response to the comments received, and how FTA has responded in this final rule to the issues raised. FTA received approximately 103 comment submissions from a wide-range of organizations and individuals that provided approximately 1,000 individual comments. Comments were received from: operators of public transportation; State departments of transportation; other departments of State government; metropolitan planning organizations (MPO) and regional councils of governments; local governments or entities; trade organizations; national non-profit organizations; lobbyists; research institutions; universities; local or regional community organizations; private citizens; and businesses.

Please note that FTA attempted to respond to all relevant comments received on the NPRM. In the section below, FTA summarizes and responds to a variety of general comments, comments on the project justification criteria, comments on the local financial commitment criteria, comments on the process for developing New Starts and Small Starts projects, and comments on eligibility for funding under these programs.

*A. General Comments*

**1. General Support or Opposition**

*Comment:* FTA received a total of 53 comments providing either general support or opposition to the NPRM. Of these comments, 51 expressed strong support for the proposed rule, citing the streamlined analytical approaches, use of a multiple measure approach, elimination of the baseline alternative as the point of comparison, use of a simplified measure for cost-effectiveness, improvements in the measures of environmental benefits, enhanced consideration of affordable housing, consideration of the mobility of transportation disadvantaged persons, the proposed approach for economic development, and the ability for projects to pre-qualify under certain conditions.

Two comments were generally opposed to the proposals in the NPRM. One of these comments objected to assessing projects on other than mobility impacts, and the other comment suggested use of a qualitative “make the case” approach focused primarily on how a project supports local goals and objectives.

*Response:* FTA appreciates the strong support for the ideas in the NPRM and thus is adopting much of what was proposed. FTA believes there are multiple reasons to make public transportation investments, and that they should be taken into account when evaluating and rating projects, not just the mobility benefits provided by the project. The statute requires FTA to evaluate six project justification criteria and to weight them comparably, but not necessarily equally. As this is a discretionary program in which projects across the United States compete with one another for a limited amount of federal financial assistance, FTA must explicitly consider more than just local goals and must be able to address project merit based on how well projects do against quantitative criteria.

**2. Horizon Year**

*Comment:* FTA received 41 comments on the horizon year to be used when a project sponsor chooses to prepare an optional future year forecast. In the NPRM, FTA proposed that a project sponsor would be required to provide forecasts of ridership on the proposed project using current year inputs. If the project sponsor was comfortable with how the project rated under the evaluation criteria based on the current year data, no further analysis would be required. FTA proposed that, at a project sponsor’s option, it could choose to make a future year forecast, but that it would be based on a 10 year time horizon. Although many comments supported the concept of having a future year forecast be optional, only one agreed entirely with FTA’s proposal to use a horizon year 10 years in the future. Another agreed with the 10-year time horizon, but suggested that funding be provided to project sponsors to do the analysis because it is not consistent with the normal time frame used in long

range planning. Two comments asked for further clarification on the issue, and the remaining comments suggested that FTA retain its current practice of using a 20-year time horizon. These comments suggested that continuing to use a 20-year time horizon would be consistent with the requirements of the metropolitan planning process, which requires a 20-year fiscally constrained long-range transportation plan, and with the NEPA process. Comments suggested that it would be burdensome to have to do a 10-year forecast given that most MPO’s forecast demographic data and develop transportation networks for a 20-year time horizon.

*Response:* FTA is not requiring project sponsors to prepare future year forecasts but is rather making them optional. FTA agrees that there is merit to using a 20-year time horizon for consistency with long-range planning requirements in the metropolitan transportation planning process. Nonetheless, FTA believes there is also merit in using a 10-year time horizon given that it allows for use of a simplified model to estimate trips on the project and a simpler point of comparison for estimating incremental measures. Additionally, FTA notes there is less uncertainty in 10-year forecasts than in 20-year forecasts and that 10-year forecasts are used for conformity purposes in non-attainment areas. Accordingly, FTA is adopting an approach that will require all project sponsors to prepare a current year forecast, and will make preparation of future year forecasts optional. FTA believes that current year data is a good basis for the evaluation of project merits in the opening year. Project sponsors may choose to prepare future year forecasts using either a 10-year or a 20-year time horizon. FTA cannot provide additional funding for sponsors that choose the 10-year time horizon to do additional analysis that would be needed. Also, FTA notes that project reviews pursuant to NEPA do not necessarily require any particular time horizon, but rather must be structured to evaluate impacts that are reasonably foreseeable.

### 3. Basis for Comparison

*Comment:* FTA received a total of 32 comments on the point of comparison to be used in calculating incremental measures. Of these comments, 29 supported FTA's proposal to use a no-build alternative while three supported continued use of the "baseline alternative" required under the current regulation (defined as the best that can be done in the absence of a major investment, typically the "Transportation System Management (TSM) alternative"). Those supporting use of the no-build alternative cited the burden involved in developing a baseline alternative and the fact that it is often an artificial alternative not under active consideration locally for implementation. Those in support of continued use of the baseline or TSM alternative as the point of comparison noted the importance of isolating the effects of the proposed investment and the need for a level playing field between differing systems.

*Response:* FTA agrees that although there is some technical merit in the use of the baseline or TSM alternative for isolating the effect of the major investment versus less costly investments, the burden of developing the baseline alternative is significant as it requires an iterative process. FTA has found that it can take as much as a year to develop an adequate baseline alternative due to the difficulty in FTA and the project sponsor reaching agreement on what constitutes "the best that can be done without a major investment" since that is often a matter of judgment. FTA believes that consideration of lower cost alternatives should remain an integral part of the ongoing metropolitan planning and NEPA processes that occur prior to and during the project development phase. Once a locally preferred alternative has been chosen through completion of the metropolitan planning and NEPA processes, FTA does not believe it is necessary to continue examining other alternatives, including a baseline or TSM, after entering the engineering phase of the New Starts and Small Starts program. In addition, MAP-21 explicitly calls for use of the "no-action" alternative as the point of comparison for Small Starts projects. Accordingly, FTA is adopting use of a no-build alternative as the point of comparison for incremental measures.

*Comment:* Of the 29 comments supporting use of a no-build alternative, 12 commented further that it should be defined based on various products of the metropolitan planning process appropriate to the horizon year selected.

Most supported a no-build alternative that includes projects in the Transportation Improvement Program (TIP), while others supported a no-build alternative that includes projects in the fiscally constrained long-range transportation plan.

*Response:* As noted above, FTA will require all project sponsors to prepare a current year forecast in which case the no-build alternative is simply the existing transportation system. FTA will allow project sponsors to choose either a 10-year or a 20-year time horizon if they wish to prepare a future year forecast that describes the environment to be affected by the proposed project. When a sponsor chooses to prepare a future year forecast based on a 10-year horizon, FTA is adopting its proposal to define the no-build alternative as the current transportation system plus projects included in the TIP in place at the time the sponsor seeks entry into the "engineering" phase. If forecasts are updated later, as required when there is a significant change in the project, the point of comparison would include projects in the TIP at that time. When a sponsor chooses to prepare a future year forecast based on a 20-year horizon, FTA is adopting a definition of the no-build alternative that includes all projects included in the fiscally constrained long-range transportation plan. Thus, sponsors choosing to prepare a forecast using a 20-year horizon should do so recognizing that development of the point of comparison (the no-build alternative) will require additional work beyond that required if they choose to prepare only a current year forecast or a 10-year forecast.

Regardless of which horizon years are used for purposes of the evaluation process under New Starts and Small Starts, FTA still expects that during the NEPA process, project sponsors will evaluate all reasonably foreseeable impacts of the proposed project and reasonable alternatives to the project as appropriate. As has always been the case, the horizon involved in evaluating those impacts could potentially vary depending on the type of impact and how reasonably foreseeable a particular impact type is determined to be.

*Comment:* FTA received two comments on how to weight the current and horizon year forecasts if a project sponsor chooses to do a horizon year forecast. FTA proposed that the current and future forecasts be weighted equally. One comment suggested that the current year forecast receive a higher weight (75 percent), citing the greater reliability of estimates based on known current year inputs of population and employment. The other comment

suggested that the horizon year receive a higher weight (80 percent), noting that these are long term investments that should address future growth in population and employment.

*Response:* FTA believes that weighting estimates based on current year data and future year data equally is a reasonable trade-off between the increased reliability of current year estimates and the fact that major capital investment projects covered by this rule are long-lived investments with benefits that extend well out into the future. Under the current regulation, FTA evaluates only a 20-year time horizon, favoring investments whose benefits accrue in the longer term and giving no additional credit to projects that will accrue substantial benefits immediately after implementation. While many projects may need to use future year forecasts in order to be fully justified, FTA believes that because of the large demand for funds from this program, giving additional credit to projects whose benefits occur sooner is reasonable. FTA believes equally weighting estimates based on current year data with those based on horizon year data to develop a rating should appropriately balance the increased reliability that comes with using current year data and at the same time give adequate consideration to projects in fast growing areas and the long term benefits of the project.

### 4. Weighting of Project Justification Criteria

*Comment:* FTA received a total of 22 comments on the use of a multiple measure approach. All of these comments supported use of a multiple measure approach. A total of eight comments supported FTA's proposal to weight each project justification criterion equally. Three comments suggested weighting cost-effectiveness more heavily, assigning it as much as forty percent of the total weight. Two comments suggested allowing project sponsors to set their own weights.

*Response:* FTA is adopting its proposal to weight each of the project justification criteria equally. The statute requires "comparable, but not necessarily equal" weights. FTA believes each of the project justification criteria provides important information about project merit and, thus, feels that equal weights are appropriate. Although cost-effectiveness is important, it remains only one legislatively mandated criterion among several. Thus to give it a higher weight would undervalue some of the other significant benefits. FTA does not believe a weight of 40 percent would be consistent with the

requirement in the law that the weights of the project justification criteria be “comparable.” Given that this is a competitive, national discretionary grant program, FTA believes that consistent weights must be applied to all projects to assure fair evaluations.

#### 5. Pre-Qualification and Establishing Breakpoints

*Comment:* FTA received a total of 25 comments about its proposal to allow projects to pre-qualify based on characteristics of the project or the corridor in which it is located (also called “warrants”). Of these comments, 17 expressed general support for the concept. Many of these comments indicated that warrants could be applied to several of the criteria, not just to cost-effectiveness. The remaining eight comments provided general support, but expressed some concerns. Several of these expressed the concern that warrants not be developed in such a way as to be biased in favor of a specific mode. These comments noted that FTA’s existing Very Small Starts warrants appear to strongly favor bus rapid transit. Others indicated that FTA needs to justify the warrants that it promulgates by describing exactly how a project with the FTA-specified characteristics would rate against the various criteria. Several suggestions were provided on specific warrants.

*Response:* FTA appreciates the support for the pre-qualification or “warrants” concept and is adopting it in the final rule. FTA notes that MAP-21 explicitly calls for the use of warrants for projects requesting \$100 million or less in New Starts funds or requesting a Federal share of 50 percent or less. FTA agrees that warrants should be mode-neutral and will work to assure that when FTA proposes them in future policy guidance, FTA will provide the justification as each warrant is proposed. FTA will not be publishing warrants in the revised proposed policy guidance being published along with this final rule, but plans to do so in the near future once the criteria are established and additional data are gathered. Even though the changes made by MAP-21 focus warrants only on a certain set of projects, FTA believes it is appropriate to consider using warrants for as many kinds of projects as possible, in order to allow for additional streamlining of the process. Nonetheless, FTA will be mindful of the strictures placed on warrants by MAP-21 when it proposes warrants in the future.

*Comment:* FTA received 15 comments on how breakpoints should be established for the various quantitative

criteria. Two of these comments suggested using different breakpoints for different modes. One comment provided a suggestion that several Transit Cooperative Research Program (TCRP) projects could provide input on how breakpoints should be established. A total of 12 comments were received on FTA’s proposal that breakpoints should be established to recognize that a small amount of positive benefits is not bad, just small. Of these comments, eight opposed FTA’s proposal to give a medium rating to projects that had small but positive benefits, citing the need to be able to more fully distinguish between projects. Four comments supported FTA’s proposal.

*Response:* FTA appreciates the suggestions on how to establish breakpoints. FTA believes the breakpoints should be mode-neutral, as projects of various modes are competing for a single source of funds. Further, the intrinsic value of a particular benefit is not based on the mode of the project being considered. FTA agrees that assigning projects with small but positive benefits a medium rating will create a problem of not being able to adequately differentiate between projects. Thus, FTA is not adopting its proposal in this area. Instead, FTA will develop breakpoints that use all five rating levels. FTA is publishing proposed breakpoints for the criteria in the revised proposed policy guidance accompanying this final rule and requests comments on those breakpoints.

#### 6. Use of Standard Factors To Calculate Benefits

*Comment:* FTA received a total of nine comments regarding the use of standard factors to calculate the value of the various evaluation criteria. Although four of the comments provided general support for the concept, citing the reduced burden on project sponsors, concern was expressed about the need to allow for some variation based on local conditions. Two comments suggested that establishment of the factors should await completion of ongoing TCRP projects. Three comments opposed the proposal, citing the wide variety in local conditions.

*Response:* FTA believes that use of standard factors can significantly streamline the process, but understands the need for flexibility. FTA is publishing the proposed standard factors in the revised proposed policy guidance accompanying this final rule and is seeking comments. FTA notes that certain factors, such as the value of time or of a statistical life, are established in policy that applies

throughout the programs administered by the U.S. Department of Transportation (DOT). In these cases, FTA will use those set values.

#### 7. Program Administration

*Comment:* FTA received eight comments suggesting the importance of cooperation with other Federal agencies in administering the New Starts and Small Start program. Specifically identified were the U.S. Department of Housing and Urban Development (HUD) on issues related to affordable housing and sustainable communities, other DOT modal administrations on alternative project delivery, and the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services on issues related to public health.

*Response:* FTA agrees with the need to work with other agencies on a variety of issues. In particular, FTA has sought support and technical guidance from HUD on issues related to affordable housing. FTA will continue to work with other DOT agencies and agencies such as CDC to improve the process.

*Comment:* FTA received three comments supporting the proposal to have the measures and weights included in policy guidance, with the regulation itself providing a broader outline of the process and other required features. These comments supported the idea due to the increased flexibility allowing changes to be made through policy guidance subject to a public comment period as more information about various measures becomes available.

*Response:* FTA is adopting the approach of having measures and weights specified in policy guidance.

*Comment:* FTA received four comments noting the importance of developing clearly defined deliverables and schedules for the various steps in the process for developing New Starts and Small Starts projects. Similarly, FTA received one comment calling for as much streamlining as possible for Small Starts projects.

*Response:* FTA agrees that clearly defined deliverables and schedules are particularly important and notes that FTA already has clearly defined checklists of deliverables required of the project sponsor for each phase of the process and develops “roadmaps” for every project outlining a planned schedule. FTA plans to continue to make efforts along these lines as well as to assure that the process is as streamlined as possible. FTA continues to refine its reporting instructions and other information about the program to provide as much clarity as possible.

Further, FTA has found that the establishment of project roadmaps has been extremely effective in clearly identifying what must be done, who is responsible for it, and when deliverables are expected. FTA continues to look for ways to streamline the process.

*Comment:* FTA received three comments about the relationship of the New Starts and Small Starts project development process and the NEPA process.

*Response:* FTA continues to work to ensure that the New Starts and Small Starts process is coordinated with requirements under NEPA. FTA notes that MAP-21 calls for completion of the NEPA process during a newly-defined phase called "project development." FTA notes that the evaluation criteria defined in this final rule are applied subsequent to the completion of the NEPA process for approval of entry in the "engineering" phase. In subsequent guidance and rulemaking, FTA will provide additional information on how a project sponsor will gain entry into the newly defined phase of "project development" and what must be completed during the phase before entry into the subsequent "engineering" phase will be granted.

*Comment:* FTA received seven comments about how the New Starts and Small Starts process should be structured to assure compliance with fair housing requirements, the Americans with Disabilities Act (ADA), FTA's requirements for Environmental Justice, Title VI of the Civil Rights Act, and private sector participation in New Starts and Small Starts projects, consistent with FTA's requirements for third-party contracting.

*Response:* FTA believes that fair housing issues are addressed by the inclusion under the economic development criterion of an assessment of local plans and policies to maintain or increase affordable housing, but that enforcement of fair housing practices is under the authority of HUD. The DOT and FTA regulations under the ADA prescribe the rules for grantee compliance with the ADA. In addition, FTA has published guidance for compliance with Title VI of the Civil Rights Act and the Executive Order on Environmental Justice. FTA is fully supportive of private sector involvement in New Starts and Small Starts projects, and will continue to explore opportunities to promote innovative project delivery methods. MAP-21 provides for a pilot program to test how to utilize such methods. FTA will more fully define this pilot program in

subsequent interim policy guidance and rulemaking.

#### 8. Definitions of Eligible Projects

*Comment:* FTA received two comments expressing general support for the definition of eligible projects proposed in the NPRM. Three comments suggested limiting bus rapid transit (BRT) to projects that operate on an exclusive guideway along at least half of the project length, while two other comments suggested broadening the definition of BRT to clearly include service operating on high occupancy or managed lanes. Another commenter suggested using a standard recently proposed by the Institute for Transportation Development Policy in order to define BRT. Another commenter suggested that the service standards for BRT clearly be limited to the "trunk" segment of a proposed route. One commenter suggested that eligibility be expanded to cover a variety of "alternative modes," while another commenter suggested expanding eligibility to cover "core capacity" projects.

*Response:* In MAP-21, Small Starts BRT projects may include "corridor-based bus projects" not operating on exclusive rights of way. Accordingly, FTA must continue to define Small Starts BRT projects without specifying a requirement for an exclusive right-of-way. BRT projects proposed to operate on managed lanes may be eligible for funding through the Small Starts program, but only if the project otherwise meets the parameters for "corridor-based bus projects" defined by FTA. Under current law, managed lanes cannot be counted as exclusive lanes since they are not for the exclusive use of high occupancy vehicles. FTA's current approach, which it is continuing, allows a project to qualify as a corridor-based bus project if the frequency of service requirements defined by FTA are met on at least the core segment of the bus route, sometimes called the trunk. Services operated off the trunk may be part of the overall project. FTA is limited by law to fund only public transportation projects, not any "alternative mode." Further, MAP-21 limits New Starts funding to new fixed guideways and extensions to existing fixed guideways. MAP-21 allows core capacity projects as eligible projects for funding through the Section 5309 major capital investments program. FTA will define the requirements for core capacity projects in subsequent interim policy guidance and rulemaking.

#### 9. Incremental Funding and Programs of Projects

*Comment:* Thirteen comments recommended defining a project in such a way as to allow it to be evaluated and rated, but then have funding and construction of that project provided on a segment-by-segment basis incrementally. Another commenter suggested more clearly defining allowable programs of projects.

*Response:* FTA can undertake programs of projects, and can fund projects incrementally. In general, FTA believes it is appropriate to evaluate each segment of a project being proposed for funding independently, consistent with the requirement in law to fund "operable segments." Thus, FTA is not adopting the suggestions to evaluate and rate a project as a whole and then fund it on a segment-by-segment basis. However, FTA will define the requirements for "programs of interrelated projects" in subsequent interim policy guidance and rulemaking.

#### 10. Other General Issues

*Comment:* FTA received a total of 21 comments on other general issues. Three comments provided information related to the merits of specific local projects. Four comments expressed general support for comments received from other commenters. One comment opposed continuation of the New Starts and Small Starts program, while several comments provided general support for investment in public transportation. Several additional comments pointed out clerical or typographical errors or suggested editorial changes. One comment suggested that project sponsors be required to report the uncertainty involved in their forecasts.

*Response:* FTA appreciates the general comments and suggestions. FTA notes that this rulemaking concerns the process by which a specific grant funding program specified in law is implemented. The merits of investing in public transportation in general are a subject for other forums. FTA agrees it is important to have reliable forecasts and notes MAP-21 requires FTA to consider "the reliability of the forecasting methods used to estimate costs and utilization" on the project when developing the project justification rating.

##### B. Project Justification Criteria

#### 1. Mobility Improvements

##### a. General Comments

*Comment:* Twelve comments supported FTA's proposed approach of measuring mobility improvements

solely in terms of trips. Eight comments disagreed with the proposed approach. Of these eight, three comments suggested that FTA retain passenger miles as part of the measure, three others recommended that the current measure be retained as is, and one requested that an alternative approach submitted in response to the Advance Notice of Proposed Rulemaking be adopted. The alternative approach suggested that FTA create a five-step process that would require project sponsors to: (1) Identify the full range of alternative projects; (2) identify key non-monetizable benefits of those alternative projects including benefits to mobility, the environment, and economic development; (3) estimate the costs and monetizable benefits of each alternative project, (4) estimate the non-monetary benefits of each alternative project, and (4) rank the alternative projects in terms of dollars of net cost per unit of each key non-monetary benefit. The suggested alternative indicated that FTA should fund only those projects that are the highest or near-highest ranked alternative by each of the non-monetary measure but did not provide specifics on how mobility benefits should be determined. This same commenter suggested that it is important to assess how a transit project may affect other modes, such as in the case where a general purpose lane is converted to exclusive transit use, thus increasing highway congestion.

*Response:* FTA is adopting its proposed trip-based mobility improvements measure. Use of a trip-based measure will permit use of a simplified national model. Furthermore, a trips measure is more easily understood by the public and decision-makers than is transportation system user benefits. Additionally, using fewer and simpler measures for the mobility criterion supports FTA's streamlining goal.

FTA believes that travel time savings can be an important benefit of a major transit investment, but notes they have been challenging to estimate. The proposed trips measure is easier to forecast and still provides a good indication of the mobility benefits provided by the project. FTA is not adopting the suggestion that the mobility measure include passenger miles travelled since that measure gives an advantage to projects serving longer trips. FTA believes that credit should be given to projects that serve the most riders, regardless of trip distance. FTA is also not adopting the suggested alternative approach to consider under the mobility measure the impact implementation of a transit project may

have on other modes since it would be cumbersome to do so and be inconsistent with the goal of streamlining the process. FTA believes the impact of a transit project on other modes is adequately considered in the environmental process, where the mitigation of such negative effects is addressed. FTA does not believe it is necessary to assess such effects as part of the evaluation of mobility benefits.

*Comment:* Two comments suggested that FTA develop the mobility improvements criterion's breakpoints according to project mode or type. Three comments requested that FTA clarify whether a trip is equivalent to a boarding.

*Response:* FTA has developed a single set of mobility improvements breakpoints that will apply to all New and Small Starts projects regardless of mode. Mode-specific breakpoints would imply that a trip made on one mode is worth more or less than a trip made on another mode or that one mode is preferred over another. FTA has clarified in the revised proposed policy guidance being published concurrently with this final rule that a trip is equivalent to a "linked trip using the project."

#### b. Weighting of Trips by Transit Dependent Passengers

*Comment:* Fourteen comments supported FTA's proposal to assign a weight of two to project trips made by transit dependent passengers in the mobility improvements measure. Fourteen additional comments supported additional weight for transit dependent trips but requested that FTA provide a clear definition of "transit dependent persons" in final policy guidance. Of the comments that requested clarity on the definition of "transit dependent persons," one commenter suggested that the elderly be included in the definition, one recommended that persons with disabilities be included, two commented that all zero-car households be included regardless of income level, and two proposed that FTA define transit dependent persons in terms of automobile ownership as a function of household size.

Eighteen comments disagreed with the proposal to assign extra weight to trips made by transit dependent persons. Of these, nine suggested that trips by transit dependent persons be reported as an "other factor" in project evaluation rather than included in the mobility improvements criterion. Three comments suggested that the measure count transit dependent households within one-half mile of stations rather

than trips by transit dependent persons. Two comments proposed assigning additional weight to other types of trips instead, with one suggesting that FTA assign more weight to work trips than non-work trips and the other suggesting that FTA give credit to projects that offer travel options to "highway dependent" users.

*Response:* FTA is adopting its proposal to weight trips made by transit dependent persons twice that of trips made by non-transit dependent persons in the calculation of mobility improvements. FTA believes the mobility improvements criterion is the appropriate place to incorporate equity considerations into the New and Small Starts project evaluation and rating process given that populations that lack other travel options have a particularly strong need for mobility improvements. To keep data collection requirements manageable, in the simplified national model FTA is developing, trips made by "transit dependent persons" will be defined as trips made by individuals residing in households that do not own a car. Project sponsors that choose to continue to use their local travel model rather than the simplified national model to estimate trips will use trips made by individuals in the lowest socioeconomic stratum in the local model as the measure of trips made by transit dependent persons. Local models classify trips either by household auto ownership or by income level. Thus, trips made by transit dependent persons would be either trips made by individuals residing in households that do not own a car or trips made by individuals in the lowest income category. FTA feels that this proposed approach offers a relatively simple way to incorporate equity considerations into the mobility improvements measure and is consistent with other streamlining proposals included in this final rule. FTA believes that a weight of two on transit dependent trips is appropriate based on data from the National Household Travel Survey, which show that persons in zero-car households make up approximately 8.7 percent of households but make only 4.3 percent of all trips. FTA believes increasing mobility for these transit dependent persons should be considered in the evaluation. FTA notes that MAP-21 eliminated "other factors" as a consideration in the evaluation and rating process.

#### c. Simplified National Model

*Comment:* Ten comments supported the option of using an FTA-developed simplified national model to estimate trips for the purposes of the cost-

effectiveness and mobility improvements criteria. Three comments opposed the use of a simplified national model due to concerns that the model would not be adequately calibrated to the particularities of each region. One of the three felt that the model may be reasonable for Small Starts or Very Small Starts projects, but not robust enough for New Starts projects.

Several comments expressed concerns about the simplified national model without indicating support or opposition. Eleven comments indicated a preference for using travel forecasting approaches already in place in their localities. Seven comments stressed that the national model's approach should be transparent, tested by project sponsors, and neutral in its assumptions. Six comments (beyond the three that opposed the use of the simplified national model) indicated that the model may not replicate local conditions. Finally, four comments anticipated that FTA's proposal would require more effort because many project sponsors would likely feel compelled to prepare forecasts using both the simplified national model and their local travel model.

*Response:* FTA is making use of the simplified national model optional. The simplified national model is currently being developed by FTA and will only be made available to project sponsors after it is calibrated against completed transit projects in a range of environments. The model is intended to reduce the effort required by project sponsors to develop the data needed for the cost-effectiveness and mobility improvements criteria. Thus, it fits with FTA's streamlining goals. Moreover, FTA believes that it will allow project sponsors and/or metropolitan planning organizations the option of not expending significant time and resources on modeling refinements when ample data on the performance of transit projects in a wide range of environments would be available through the simplified national model. Regardless of the approach that project sponsors opt to pursue, FTA will continue to work with sponsors to assure that the models used are appropriate and the results as accurate as possible.

## 2. Environmental Benefits

### a. General

*Comment:* One comment supported FTA's proposal in the NPRM to measure the direct and indirect benefits to human health, safety, energy, and air quality in the environmental benefits criterion. Two comments were

concerned about FTA making the environmental benefits criterion a "catch-all" measure. Seventeen comments supported FTA's proposal to broaden the measures used in the environmental benefits criterion and suggested that FTA look at both direct and indirect benefits to the natural and human environment. Fourteen comments expressed support for including the change in air quality in the environmental benefits criterion. Four comments expressed support for including estimates of the change in greenhouse gas emissions as a measure under the environmental benefits criterion. Nine comments expressed support for including the change in energy use as a measure under the environmental benefits criterion. One comment agreed with the quantitative approach proposed by FTA instead of a simple checklist approach. This comment also agreed with FTA's proposal to specify the details of the approach in policy guidance as opposed to the final rule.

*Response:* FTA agrees that a new approach to evaluating and rating environmental benefits is required and is adopting the approach to quantify benefits to human health, safety, energy, and air quality. FTA believes this approach is appropriately focused on the benefits related to human health and the natural environment. As new information or methods for calculating environmental benefits data become available, FTA can propose alternate methodologies in future policy guidance.

*Comment:* One comment stated that the proposed environmental benefits measures appeared to favor transit agencies with a variety of fleet vehicles, corridors with high population density, corridors with strong existing transit service, and longer projects due to its use of change in vehicle miles of travel (VMT) as the basis for the various benefit calculations. One comment made a statement about data collection for environmental benefits and stated that a one-size-fits-all approach does not work in an urban setting. This comment also suggested that FTA should consider quality of life issues under the environmental benefits criterion.

*Response:* FTA agrees that by using VMT as a basis for the calculation of environmental benefits, longer projects or those projects with a high potential for acquiring new transit riders will generate a greater change in VMT and thus get a higher amount of environmental benefits. This advantage will be somewhat moderated because for New Starts projects environmental benefits will be compared to the

annualized capital and operating cost of the project and for Small Starts projects environmental benefits will be compared to the Federal share. FTA does not expect transit agencies with a variety of fleet vehicles, strong existing service, and in areas with higher population density to have an advantage over other transit agencies.

### b. Complexity and Suggestions for Simpler Approaches

*Comment:* One comment stated that the proposed measures for environmental benefits appeared to be somewhat complex, but went on to say that these types of analyses seem consistent with goals for environmental improvement. Another comment encouraged FTA to keep in mind the desire to simplify the project justification criteria and reduce the subjective measures that require FTA review. A third comment stated there were too many environmental measures proposed and that FTA should simplify the measures and consider warrants.

One comment suggested a more qualitative analysis be used to evaluate environmental benefits given that it is difficult to combine and quantify environmental benefits. Another comment stated that because of the breadth and complexity of the measures proposed, they may not be in place at the time the final rule is published. This comment encouraged FTA to continue with the multi-measure approach.

*Response:* In choosing measures to use under the environmental benefits criterion, FTA's goal was to ensure that calculation of the measures would not impose an undue burden on project sponsors. FTA is adopting measures that are based on data coming directly from the project analysis methods normally used by project sponsors during project planning, as well as adopting simplified approaches for calculating environmental benefits. Through revised proposed policy guidance being published concurrently with the final rule, FTA is requesting public comment on a simple spreadsheet tool that will allow project sponsors to input only a few key data. The spreadsheet will use standard factors to calculate the various environmental benefits and monetize them, including air quality, greenhouse gas emissions, energy, and safety. The factors are shown in the revised proposed policy guidance.

FTA agrees it can be difficult to quantify environmental benefits and combine the measures into a meaningful value. To overcome this difficulty, FTA is using DOT-standard economic values or other published environmental and health economic research to monetize

the various measures of environmental benefits. By converting the environmental benefits into dollar values, they can easily be combined. FTA anticipates it may be necessary at some point in future proposed policy guidance to update the measures or modify the spreadsheet tool as new information and research becomes available.

#### c. Additional Information Sources

*Comment:* One comment recommended that FTA wait for the publication of the TCRP Report on Environmental Benefits before advancing measures and data sources. Another comment suggested that, in addition to using U.S. Environmental Protection Agency (EPA) and TCRP guidance to develop its measures, FTA should examine American Public Transportation Association (APTA) Sustainability Commitment metrics. This comment also suggested FTA create a system of data collection to enable project sponsors to use more specific environmental data when available (e.g., utility electricity emission factors vs. EPA regional grid factors).

*Response:* FTA agrees that information from TCRP's Report on Environmental Benefits was a helpful resource in defining the environmental benefits measures. FTA wrote the problem statement for that TCRP study and served as part of the review panel for the study. FTA has considered the research and findings in the development of the final rule and revised proposed policy guidance. If new or revised information on calculation methodologies becomes available they could be incorporated into the environmental benefits criterion in the future by FTA through policy guidance.

#### d. Monetization of Environmental Benefits

*Comment:* Two comments stated support for the monetization of environmental benefits, and one comment added that monetization of benefits "can be good public policy."

Thirteen comments expressed concern that monetizing environmental benefits would cause people to view it as a cost-benefit analysis when it is not attempting to capture all benefits. One comment added that environmental benefits do not need to be monetized because several other project justification criteria include cost considerations. Another comment stated it is appropriate to evaluate the environmental benefits of a project against the project's size or cost, but the

environmental benefits themselves should not be monetized. One comment recommended, instead of monetizing environmental benefits, creating a second part to the cost-effectiveness criterion that would compare environmental benefits to the cost of the project.

*Response:* One of FTA's goals is to streamline the evaluation and rating process to the extent possible while maintaining sufficient rigor in the process to inform decision-making on whether taxpayer dollars should be invested in a project or not. FTA believes a detailed analysis of the net impacts of certain environmental factors, as may be required to support a cost-benefit analysis, is unnecessarily complicated. Instead, FTA is focusing on relevant environmental benefits that are most easily addressed, such as changes in air quality pollutant and greenhouse gas emissions, energy use, and safety. FTA notes that a complete review of all environmental effects, is still required as a part of the NEPA process (including through the use of linking planning and NEPA as provided for in 23 CFR 450.318), performed prior to entering into the engineering phase and independent of the particular variables chosen as part of the environmental benefits measures. FTA believes that at a later date it may be possible to develop an approach for assessing public health benefits. Monetizing these environmental benefits using existing economic methods and research is the simplest and most transparent way to combine the results into a single measure of environmental benefits. FTA is adopting the proposal to compare the combined monetized value of environmental benefits to the annualized capital and operating cost of a proposed New Starts project or to the Federal share of a proposed Small Starts project in order to ensure fair comparison of environmental benefits across widely variant projects. FTA believes it is best to compare the benefits to cost in the environmental benefits criterion, rather than combining environmental benefits into the cost-effectiveness criterion, because combining the two would not comport with the requirement in law that there be a separate environmental benefits criterion and that it be given "comparable, but not necessarily equal weight" in the evaluation process.

*Comment:* Three comments stated that a reliable tool does not exist that can accurately capture the full monetary value of environmental benefits. One comment felt monetizing environmental benefits would work against streamlining the process. Two

comments suggested environmental benefits are subjective and that regions of the country do not have uniform environmental needs. These comments went on to say that attempting to monetize or uniformly quantify all environmental benefits for a national ranking may prove contrary to the overall goal of encouraging projects that provide environmental benefits as one of their key elements. These comments added that FTA should take a measured approach to monetization. One commenter recommended that FTA conduct an analysis of the "impact" of the monetization approach on projects that have successfully received New Starts and Small Starts funds in the past before finalizing the environmental benefits measures.

*Response:* FTA is not proposing and does not believe that it is necessary to capture the full monetary value of all environmental benefits generated by implementation of a major transit investment as would be necessary for a cost-benefit analysis. Instead, FTA is focusing on the potential environmental benefits most relevant and easily calculated on a national scale, such as changes in air quality pollutant and greenhouse gas emissions, energy use, and safety. FTA believes that at a later date it may also be possible to develop an approach for assessing public health benefits. FTA is using established methods and research to quantify and appropriately monetize these environmental benefits.

FTA recognizes the diversity of environmental settings throughout the country and that transit projects may have different, specialized effects on the human and natural environment depending on the environmental setting. FTA believes it is best to evaluate and mitigate, as appropriate, these specialized effects through the NEPA process. But FTA believes that the evaluation of changes in air quality pollutants and greenhouse gas emissions, energy use, safety, and, potentially some point in the future, public health benefits, is appropriate. These can be evaluated fairly and uniformly across the country to identify the merits of individual transit projects.

FTA believes transit projects are developed to meet numerous goals, one of which is to improve the environment. Similarly, the environmental benefits criterion is just one of six project justification criteria in the New and Small Starts evaluation process. FTA disagrees that the proposed environmental benefits measures would change or discourage environmental goals.

FTA is currently testing the environmental benefits measures with data from existing transit projects and will continue to do so prior to issuing final policy guidance. As expected, transit projects that reduce the greatest amount of VMT and New Starts projects with relatively lower costs or Small Starts projects with relatively lower Federal shares perform better than projects that do not result in substantial changes in VMT or have a very high cost or Federal share. FTA recognizes the primary goals and objectives of some projects seeking New or Small Starts funds are to make the transit system network run more efficiently and to improve mobility of existing transit riders. Although these types of projects would not result in substantial reductions in VMT and might, therefore, receive a lower environmental benefits rating, they would likely perform well under some of the other project justification criteria.

*Comment:* One comment suggested that instead of monetizing environmental benefits FTA develop warrants for evaluating environmental benefits related to development densities and land use patterns. Another comment suggested that, in lieu of monetization of environmental benefits, FTA use a checklist approach to allow projects to more easily demonstrate environmental improvements across an array of areas. This comment went on to suggest that the checklist include improvements to the natural environment through restoration of degraded wetlands, the clean-up of contaminated sites, and reductions in accidents at pedestrian crosswalks or railroad crossings. Another comment stated that, in lieu of monetization of environmental benefits, FTA use a checklist that would ask project sponsors if certain environmental benefits are expected from the proposed project and/or whether the project sponsor participates in a third-party verified environmental program.

*Response:* FTA does not agree that a checklist evaluating environmental improvements would be simpler or more advantageous over relatively simple quantitative measures of environmental benefits. In addition, the restoration of wetlands and the clean-up of contaminated sites are actions that are typically governed by or required by federal or state laws and, therefore, would not be an appropriate measure to evaluate the merits of an individual transit project. Also, all transit projects should be designed to avoid accidents at pedestrian crosswalks or railroad crossings to the maximum extent possible. FTA notes that the various

environmental issues described in the comments are the kinds of issues that should be addressed through the metropolitan planning and NEPA processes, which would develop mitigation measures to be included in the proposed action in the event there are negative or adverse environmental impacts as a result of the proposed project.

FTA agrees that warrants can be useful in streamlining project evaluation. Such approaches, however, should be based primarily on the evaluation measures being used. In future proposed policy guidance, FTA may propose warrants for the environmental benefits criterion, but is not doing so at this time.

#### e. Use of VMT Change as Basis for Environmental Benefits

*Comment:* One comment stated the current approach of basing the rating simply on the air quality attainment status of the metropolitan area in which the project is located is not related to a project's effects on the environment and supported FTA's proposal for evaluating environmental benefits based on a reduction in VMT instead. The comment also stated that future changes to air quality standards for ozone may cause much of the country to be in nonattainment status, thereby making the current measure even less effective in differentiating between projects.

*Response:* FTA agrees that the existing measure, which examines only the EPA air quality conformity designation for the area in which the proposed project is located and does not look at any specific environmental benefits, does not provide a useful basis for decision-making.

*Comment:* Two comments did not support evaluating and rating environmental benefits from estimates of changes in VMT based on the idea that VMT-based calculations may not capture all environmental benefits or result in scores that fairly recognize the full environmental benefit of a given project. One comment noted that VMT assessed at a regional level would not capture localized health impacts or benefits of projects on "hot spots" of changes in air quality. The comment noted that, with respect to air quality, technology to assess intra-regional exposure variation and project level pollutant concentrations now exists with computational modeling approaches such as dispersion modeling and land use regression. It went on to say these tools can be used to create maps of cumulative air pollution concentrations within regions. The commenter noted the example of the

San Francisco Department of Public Health (SFDPH), which has developed and routinely applies tools to assess local impacts that are being employed in the San Francisco Community Risk Reduction Plan to evaluate whether infill residential development needs additional ventilation system protections. Another comment stated that measuring the change in air quality criteria pollutants would be better for the proposed transit corridor than for the region. Two comments stated that environmental benefits should include changes in VMT for all roadways, not just "highways." One comment suggested that FTA include environmental benefits due to the future predicted VMT changes resulting from projected development around stations instead of the economic development measure.

*Response:* FTA does not believe it is necessary in the New and Small Starts evaluation process to attempt to do a full cost-benefit analysis and capture all of the environmental benefits a transit project may produce as this would conflict with FTA's streamlining objectives. FTA also believes it is unnecessarily complicated to use computational modeling approaches to assess localized "hot spots" changes in air quality for the purposes of the New and Small Starts evaluation and rating process. FTA believes focusing on the most relevant environmental benefits that are more easily estimated and evaluated on a national scale is appropriate, such as changes in air quality pollutant and greenhouse gas emissions, energy use, safety, and at some point in the future human health. These can be derived from estimated changes in VMT and they allow FTA to fairly compare the merits of proposed projects. FTA conducts "hot spot" analyses as part of the NEPA process, as needed, in order to support transportation air quality conformity determinations required by the Clean Air Act.

FTA intends to look at the change in VMT for all roadways and not just changes in highway VMT. Estimates of VMT change will be based on the results of the simplified national model FTA is currently developing, or at the option of the project sponsor, from the results of their local travel forecasting models. FTA intends to continue the current practice of evaluating only the first order effects that come when transportation system users choose to change modes, rather than attempting to quantify higher order effects that might come from changes in land use patterns and increased densities that may lead to changes in destinations. Further, FTA

does not intend to quantify any induced or latent demand on the highway system that could result. FTA believes that while more accurate forecasts of overall transportation system usage might be possible by applying more complex analytical techniques, the increased precision is not worth the additional burden on project sponsors and that a metric relying on first order changes in VMT is sufficient to accurately determine the relative environmental benefits of candidate projects.

FTA believes that the best location to capture the benefits associated with dense, more compact development is in the economic development criterion rather than the environmental benefits criterion. FTA believes it is appropriate to focus the environmental benefits measure on the direct environmental effects that result from changes in mode use as a result of the project. The environmental benefits that might come as a result of changes in development patterns are a secondary impact of the economic development effects of the project.

*Comment:* Five comments suggested FTA consider total auto trips reduced given that “cold starts” of vehicles have a disproportionate impact on emissions and fuel consumption.

*Response:* FTA agrees cold starts can have a disproportionate effect on emissions and fuel consumption, but they are already included in the average emissions factors.

*Comment:* Five comments suggested FTA develop warrants for evaluating environmental benefits. Specifically, two comments stated many transit projects in dense urban areas do not result in VMT reduction, but do support existing dense development and energy-efficient land use patterns leading to walkable and bike-able communities and are still important for air quality emission reductions. These comments suggested that the environmental benefits of these projects should be counted. One of the comments went on to mention this linkage is currently being studied in a TCRP project entitled Quantifying Transit’s Impact on GHG Emissions and Energy Use: The Land Use Component. Another comment stated transit projects located in corridors within or near the freeway system would experience more safety benefits based on VMT reduction than would transit projects located away from freeway systems.

*Response:* FTA recognizes the primary goals and objectives of some projects seeking New and Small Starts funds are to make the transit system network run more efficiently and to improve mobility for existing transit

riders. FTA also recognizes these projects are environmentally beneficial because they sustain or improve transit service and are important components to maintaining regional air quality standards. While these types of projects would not result in substantial reductions of VMT and thereby would receive a lower environmental benefits rating, FTA anticipates they would perform well under the other New and Small Starts project justification criteria.

FTA agrees warrants can be useful in streamlining the New and Small Starts project evaluation process. Such approaches, however, should be based primarily on the evaluation measures being used. In future proposed policy guidance, FTA may propose warrants for the environmental benefits criterion, but is not doing so at this time.

#### f. Use of a National Model To Assess Environmental Benefits

*Comment:* Five comments stated concerns or did not support use of a simplified national model for deriving changes in highway VMT to be used when calculating environmental benefits. Three comments did support the flexibility to use a standard local travel forecasting method at the sponsor’s option.

*Response:* Because streamlining is one of the main objectives associated with this rulemaking, FTA is proposing that project sponsors, at their option, may choose to use a simplified national model for estimating the number of trips on the project. The information from the simplified national model would be used to estimate the change in VMT, which would then be used to calculate environmental benefits. FTA recognizes estimating VMT in this manner may result in a higher margin of error than estimating VMT through standard travel forecasting tools, but believes the results will be fair estimates of environmental benefits attributable to the transit project. Given the streamlining benefits this approach will allow, FTA believes it will be an attractive option for many project sponsors. FTA will continue to allow project sponsors the flexibility of calculating VMT from their standard local travel forecasting models if they so choose. Project sponsors choosing this approach should recognize that FTA will need to verify the calculations.

#### g. Valuing Energy and Greenhouse Gas (GHG) Reductions and Recognizing GHG Performance Targets

*Comment:* One comment did not support evaluating and rating environmental benefits based on both the change in energy use and the change in greenhouse gas emissions. Another

comment suggested that states or regions with GHG performance targets for their regional transportation plans should be acknowledged in the scoring for environmental benefits.

*Response:* FTA recognizes a significant part of the benefits that come from reducing energy use are accounted for by the resulting reduction in pollutant and greenhouse gas emissions. To avoid the double counting, the monetary value of energy conservation will be factored down to account for this, and will count only the public benefits related to energy security and will also not include the private benefits which accrue to transportation system users who do not have to purchase fuel. Because there is wide variation in the use of GHG performance targets in regional transportation plans and in the requirements and methods for achieving these targets, FTA could not acknowledge the use of these plans in the scoring for environmental benefits.

#### h. Inclusion of Health and Safety Benefits in Environmental Benefits

*Comment:* Twelve comments expressed support for the inclusion of changes in health in the environmental benefits criterion and nine comments expressed support for the inclusion of safety in the environmental benefits criterion.

One comment acknowledged FTA’s efforts to keep the environmental benefits calculations as simple as possible. But this comment recommended FTA limit the evaluation of environmental benefits to only the impacts on air quality and greenhouse gas emissions, which are direct environmental impacts. This comment stated that calculation of change in energy use and health benefits would add time and uncertainty to project evaluations, would not help to distinguish between projects, and would dilute the importance of the direct environmental benefits, which are required to be evaluated under the current statute.

Two comments stated that although reduction in traffic accidents is important, it is not an environmental benefit and is captured in other project justification criteria. One comment went on to say FTA should avoid the complication of trying to measure health and safety separately under the environmental benefits criterion. Another comment suggested the best location to evaluate safety is within “other factors” or within the economic development criterion. Another comment added that safety is captured through the local financial commitment evaluation, which considers funding for

core state of good repair of the transit system. One comment suggested FTA distinguish between transit systems that operate in mixed traffic verses those operating on exclusive guideways.

*Response:* FTA disagrees that health and safety are not environmental benefits and believes that some safety and health benefits, in addition to the health benefits that come from improved air quality, should be included in the evaluation. FTA believes it is appropriate to highlight explicitly the safety and public health benefits of transit. Once a methodology becomes available for doing so, FTA believes it will measure public health benefits coming from implementation of a project based on the additional walking and other physical activity that would be expected. FTA notes that MAP-21 eliminates the consideration of "other factors" in the development of a project justification rating.

#### i. Valuation of Environmental Benefits in Areas of Nonattainment and Maintenance Areas

*Comment:* Five comments suggested while reductions in VMT and emissions are a benefit of many transit projects, emission reductions have greater value in metropolitan areas that are in nonattainment of the National Ambient Air Quality Standards. Three of these comments stated FTA's environmental benefit rating should continue to take into account a metropolitan area's nonattainment status. These comments further recommended FTA either increase the environmental benefit rating by one or two levels for projects located in metropolitan areas with the most severe air quality conditions or give a higher monetary value to emission reductions in these areas. One comment felt the New and Small Starts process should favor projects that support regional air quality objectives. Three comments said it is unclear how air quality maintenance areas would be treated and recommended they be treated like nonattainment areas when evaluating environmental benefits.

*Response:* FTA believes any reduction in the emission of criteria pollutants would be beneficial to public health. FTA agrees that reductions in pollutant emissions in metropolitan areas in nonattainment or maintenance of the National Ambient Air Quality Standards have greater value than reductions of emissions in areas that are in attainment of those air quality standards. FTA is reflecting these differences in how environmental benefits will be monetized rather than raising a rating by one or two levels.

#### j. Electric Vehicles and Fleet Energy Use

*Comment:* One comment stated electrically powered transit has a significant advantage because the vehicles do not produce any air pollution at the source, adding that the air pollution is generated at power plants, which are usually located away from population centers and employ advanced emission control technologies. The comment also stated that electric vehicles run more efficiently because of faster acceleration. In addition, the comment observed that bus fleets usually use a combination of new and older technologies and the effectiveness of new technologies such as hybrid vehicles in reducing air emissions is uncertain. The comment said it was unclear whether FTA would consider the increase in transit VMT from the new project or whether FTA would also look at system-wide changes. Another comment observed that in some parts of the country the electric generation mix is significantly different from the national average. This comment suggested the factors used by FTA to calculate emissions should be adjusted in these cases and should consider changes to the energy mix in the future.

*Response:* FTA does not believe electric vehicles will necessarily have a significant advantage in the environmental benefits measure because some emissions generated from power plants will still be calculated. FTA intends that the environmental benefits measure will consider both changes in automobile and truck VMT and changes in transit VMT to calculate changes in air quality, safety, greenhouse gas emissions, and energy. For transit VMT, FTA will consider changes in VMT associated with the proposed project and changes in ancillary service that may feed into the project. At this time, FTA plans to use national factors based on the national electric generation mix rather than adjusting the energy mix region by region. FTA may consider using regional electric generation mixes in future policy guidance.

#### k. Health Benefits

*Comment:* One comment suggested NEPA may be the more appropriate venue for assessing environmental impacts of a proposed project, and said ideally the New and Small Starts evaluation and rating process would be consistent with NEPA with respect to health findings and analysis.

Another comment recommended the environmental benefits measure for changes in health focus on the air quality of the Community Planning Association (CPA) district where the

transit project is located based on the idea that minority and lower-income communities experience the poorest air quality and the highest rates of asthma.

Another comment commended FTA for recognizing the impacts poor transportation decisions have on public health (based on impacts they have on air quality, etc.) This comment suggested FTA find ways to evaluate how transit investments can foster better health through improved environments for accessing transit on foot and related physical activity. It went on to say this is an important step for FTA toward encouraging local and regional decision-makers to prioritize projects seeking to maximize public health benefits and reduce health disparities in the community where a transit project is to be built.

One comment recommended an evaluation tool—such as the Healthy Development Measurement Tool or a health impact assessment—should be used in order to determine the health impact of the transit project. This comment also stated FTA should recommend that project sponsors use health impact assessments as a means of prioritizing transit projects that could reduce health disparities across race and income and achieve more equitable outcomes.

*Response:* FTA agrees the results of the NEPA process and the New and Small Starts evaluation and rating process should be consistent with respect to health findings and analysis. During the NEPA process and during evaluations of New and Small Starts projects, FTA works closely with project sponsors to ensure that project descriptions and assumptions that go into each process are consistent with each other and with fiscally constrained long-range transportation plans. FTA is continuing this approach with the implementation of this final rule.

FTA is implementing environmental benefit measures that examine changes in air quality, changes in safety, and, as soon as a methodology becomes available to assess public health benefits, including changes in public health potentially related to walking and other physical activity. FTA recognizes that changes in air quality and changes in safety help with public health, but the measure of health would be focused on items not already captured under the other environmental benefit measures so as to avoid double counting. In monetizing the benefits from changes in air quality, the published literature being used by FTA to develop the factors considers the relationship of pollutants emissions and incidences of disease such as asthma

and other chronic illnesses linked to air quality. FTA does not agree with the suggestion to evaluate health benefits of transit projects at the Community Planning Association district scale as it would add complexity and conflict with FTA's streamlining goals. FTA is including in the final rule an environmental benefits measure of public health benefits associated with walking or physical activity, but is not implementing it until a relatively simple methodology for calculating it can be developed. FTA will consider evaluation tools such as the Healthy Development Measurement Tool as it continues its research.

### 3. Cost-Effectiveness

#### a. General Comments

*Comment:* Six comments supported FTA's proposed simplification of the cost-effectiveness measure in general. Two comments objected to the proposed simplification, stating the proposed changes would prioritize non-transportation objectives. Of these two comments, one recommended an alternative approach that had been submitted in response to the ANPRM, which is discussed above in the section on mobility benefits. Two comments suggested the cost-effectiveness criterion be renamed "Mobility Cost-effectiveness," because other types of benefits are not explicitly included.

*Response:* FTA is adopting its proposed changes to cost-effectiveness with the exception that FTA will no longer assign additional weight under the cost-effectiveness criterion to trips made by transit dependent persons. Further, as required by MAP-21, for Small Starts projects, the cost-effectiveness calculation will be based only on the Federal share rather than the total project cost. As noted earlier, MAP-21 specifies cost-effectiveness should be measured as "cost per trip". FTA believes it is important in the mobility criterion to consider trips made by transit dependent persons, but that the cost-effectiveness evaluation should focus instead on total trips on the project without giving extra credit to a particular type of passenger. As noted above, FTA is not adopting the alternative approach received in a comment that was described in the earlier section of this document under the mobility measure since it was not fully described, it would appear to involve a cumbersome process, and it would not meet some of the streamlining goals intended by this final rule.

FTA notes major transit capital projects may serve worthwhile purposes

beyond maximizing travel time savings, including improving accessibility to transit dependent persons, providing additional travel alternatives to the automobile, supporting changes in land development patterns around stations that may help to reduce sprawl and slow further congestion in the future, and improving environmental outcomes. The measure for the cost-effectiveness criterion is established in statute, and FTA is not proposing to change it as part of the rulemaking process, but rather is describing how the measure will be calculated, evaluated, and rated in Appendix A of the regulation. In addition, FTA is requesting comments in the revised proposed policy guidance published today on the method for calculating cost per trip. FTA notes that projects that produce significant travel time savings are likely to attract many riders since travel time is a major determinant of a traveler's choice of mode. Hence, the selected measure of cost-effectiveness does in fact account for reductions in travel time even if travel time savings, per se, is no longer the measure being utilized. FTA also notes that the calculation of net travel time savings is significantly more complex and subject to error compared to the calculation of estimated trips.

*Comment:* Three comments raised points related to the travel demand models used to forecast trips on the project that is used in the cost-effectiveness calculation. One comment stated no empirical evidence exists for the mode-specific constants used in travel forecasts. Another requested clarification on how special-event ridership would be treated under the proposed cost-effectiveness measure. The third comment encouraged FTA to continue to allow the use of spreadsheets and other travel model alternatives in developing ridership estimates for short streetcar segments.

*Response:* As described in the NPRM, FTA notes that it is all the attributes of a mode that cause riders to change modes, but that some cannot be modeled. Thus, FTA believes that mode-specific constants remain a good proxy for such un-modeled factors in travel demand models. FTA currently allows inclusion of special-event trips in ridership totals and will continue to do so. Sponsors of projects may propose use of simplified ridership estimating approaches to FTA. As outlined in FTA's Reporting Instructions, project sponsors should contact FTA to discuss potential alternate analytical techniques when beginning an alternatives analysis. If a sponsor uses a simplified ridership estimating approach, FTA will review

the reasonability of the approach and the resulting ridership projections as it does today.

*Comment:* One comment requested FTA reconsider its decision not to allow regional differences in calculating project costs. Another comment recommended FTA require project sponsors to analyze baseline causes of delay and to compare current transit travel speeds with estimated free-flow travel speeds.

*Response:* As stated in the NPRM, FTA believes it is necessary to evaluate projects consistently rather than based on regional differences since this is a national program with greater demand for funds than there is supply of funds. Regarding travel speeds, FTA believes it is more appropriate to focus on total usage of the project in the cost-effectiveness calculation rather than travel time saved. The state of the art for reliably estimating travel time saved is not sufficiently advanced to make that method more appropriate than estimating total usage. Moreover, comfort, convenience, frequency of service, and travel time reliability will produce increased ridership, and thus will be captured in the number of trips on the project.

#### b. Discount Rate

*Comment:* Nine comments supported FTA's proposal to use a two percent discount rate for calculation of annualized capital costs for use in the measures of cost-effectiveness and environmental benefits. One comment stated two percent is too low and recommended a three percent discount rate.

*Response:* FTA is adopting the proposed two percent discount rate based on the fact that these are long term investments.

#### c. Cost per Trip Measure

*Comment:* Twenty-five comments supported FTA's proposed change to a cost-per-trip measure of cost-effectiveness. Nine of these comments requested FTA clarify that a trip is defined as an "unlinked passenger trip" or "boarding" for the purposes of the measure. Two comments proposed defining a trip as a "passenger riding on the proposed project," but one of these comments made reference to Small Starts projects only. One comment made a series of suggestions, summarized earlier in this document for the horizon year, discount rate, and other values that should be used in the cost-per-trip calculation.

Seven comments opposed the replacement of the current cost-effectiveness measure with the proposed

cost-per-trip measure. Of these, five requested travel time savings be retained as part of the measure, one requested benefits gained by reducing congestion for existing users of the transit system be considered, and one requested the current measure be retained as is.

*Response:* FTA is adopting the proposed cost-per-trip measure of cost-effectiveness, except that no additional weight will be assigned to trips made by transit dependent persons. MAP-21 requires the use of cost per trip as the measure of cost-effectiveness. The definition of a trip in this measure is “linked trip using the project,” which FTA defines in the revised proposed policy guidance being published concurrently with this final rule. To support the streamlining of New and Small Starts procedures, FTA will not use multiple measures of cost-effectiveness.

FTA believes travel time savings can be an important benefit of a major transit investment, but observes they have been challenging to estimate reliably. The proposed trip-based measure is intended to be easier to forecast while still providing a good indication of project merit.

FTA has addressed comments on the horizon year, discount rate, and other parameters of the cost-per-trip measure elsewhere in this final rule.

#### d. Factor-Specific Breakpoints

*Comment:* Three comments recommended FTA develop cost-effectiveness breakpoints according to the objectives and characteristics of projects, such as mode-specific breakpoints.

*Response:* FTA is using a set of cost-effectiveness breakpoints that will apply to all New Starts projects and different set of breakpoints that will apply to all Small Starts projects. Because MAP-21 specifies the benefits of Small Starts project must be compared to the Federal share, the breakpoints will be different than for New Starts where the benefits are compared to the annualized capital and operating cost of the project. Having mode- or characteristic-specific breakpoints would imply that FTA weights trips and allocates funds according to these factors, which it does not.

#### e. Elimination of Baseline Alternative Requirement

*Comment:* Thirty-eight comments supported FTA’s proposal to eliminate the requirement for a baseline alternative for the purposes of calculating cost-effectiveness. Two comments opposed the proposal.

*Response:* FTA is adopting its proposal to eliminate the baseline alternative requirement because of the streamlining benefits it will achieve for the New Starts and Small Starts process. Further, MAP-21 explicitly calls for use of the “no-action” alternative for Small Starts projects. Project sponsors have had to spend a significant amount of time, money, and effort to develop a baseline alternative. Often the baseline alternative is one that is never under serious consideration locally for actual construction because it is not desired by local leaders. Thus, developing the baseline alternative becomes simply a cumbersome exercise necessary to meet Federal requirements. The NEPA process requires project sponsors to consider a reasonable range of alternatives, so eliminating the development of a baseline alternative in no way eliminates the need for sponsors to look at various alternatives when making investment decisions. FTA required the development of a baseline alternative because of the use of incremental measures, particularly cost-effectiveness, and the need to help level the playing field for evaluation of a wide variety of projects nationwide. However, developing a baseline alternative was found to be a burdensome process and confusing to many, with the resulting calculation of cost-effectiveness not readily understood by the general public. By moving to a cost-effectiveness measure based on cost per trip as required in law, which is not an incremental measure, developing the baseline alternative as the point of comparison is no longer necessary. Furthermore, FTA believes it is the responsibility of local decision makers to balance the costs, benefits, and risks of various alternatives. Local officials are closest to the unique circumstances of their area and are in the best position to consider all relevant factors when developing alternatives for consideration. These analyses can be conducted as part of the metropolitan transportation planning and NEPA processes. Under MAP-21, only once a project has cleared both processes and a Locally Preferred Alternative is adopted into the Long Range Transportation Plan is a project ready to be evaluated for entry into the newly defined “engineering” stage for a New Starts project.

#### f. Pre-Qualification—Cost-Effectiveness-Specific

*Comment:* Three comments supported FTA’s proposal to develop warrants that would allow projects to pre-qualify as cost-effective. One comment suggested a project be able to qualify for the same

cost-effectiveness rating as an earlier project in the same corridor if its annualized cost per trip is equal to or less than that of the earlier project. Another comment requested that warrants not favor a particular mode.

*Response:* FTA is adopting in this final rule the ability to develop warrants. More information on warrants will be proposed in future policy guidance.

#### g. Betterments/Enrichments

*Comment:* Forty-five comments supported the proposal to exclude certain items, originally defined as “betterments,” from the calculation of cost-effectiveness. Of the comments that supported this proposal, nine supported excluding the costs of pedestrian and bicycle facilities and six supported excluding the costs of LEED design elements. Twelve of the comments stated that allowable “betterments” should be defined by FTA in policy guidance, and four suggested FTA use the same definition of “betterments” used in Circular 5010.D. Ten comments requested FTA be flexible in the definition of betterments to reflect local conditions. Most of the comments that supported excluding “betterments” provided lists of various elements to be considered as “betterments,” including items needed for climate adaptation, energy efficiency measures, safety improvements, noise mitigation, acquiring land for affordable housing, energy reduction elements comparable to LEED certification, structured parking instead of surface parking, off-site pedestrian and bicycle improvements, storm-water management, and a variety of other activities. Three comments opposed the inclusion of parking. Two comments were opposed to excluding the cost of “betterments” from cost-effectiveness altogether. One of these two comments suggested that categorizing elements as “betterments” may result in them becoming ineligible for funding in the future. The other suggested that “betterments” such as LEED certification would be more appropriately captured under the environmental benefits measure rather than the cost-effectiveness measure. Several comments suggested using a different term than “betterments” to reduce confusion with the definition of “betterments” listed in Circular 5010.D. Two comments proposed capping the cost-reduction of “betterments” at 10 percent of project cost.

*Response:* As suggested by several comments, FTA is adopting the term “enrichments” rather than the term “betterments” to avoid confusion with “betterments” defined in Circular

5010.1D. FTA believes allowing clearly defined “enrichments” (those elements that go beyond what is needed for the basic functioning of the project) to be excluded from the cost part of the cost-effectiveness calculation for New Starts projects is reasonable and can help to remove disincentives from including higher cost elements whose benefits would not be captured by the final rule’s limited number of measures. For example, since the environmental benefits measure is focused on those impacts that come from a reduction in VMT, the environmental benefits of LEED certification of the transit facilities would not be captured in that measure. Likewise, most local travel models around the country are not sensitive enough to account for the number of trips that would be induced by bicycle improvements included in a project such as bike racks or lockers. FTA agrees with the comment received stating that New Starts cost-effectiveness should include only the costs necessary to produce the benefits examined in the cost-effectiveness calculation rather than include all costs. FTA is proposing to define the concept of “enrichments” in the Appendix to this final rule and to provide a list of the “enrichments” it will allow to be excluded from the New Starts cost-effectiveness calculation in the revised proposed policy guidance being published today concurrently with this final rule. Items being proposed as “enrichments” include artwork, landscaping, pedestrian and bicycle improvements, sustainable building design elements, alternative fueled vehicles, and joint development costs. FTA agrees the benefits of such features are not often captured in the primary benefits being evaluated in the cost-effectiveness criterion, but that these features nonetheless produce desirable outcomes such as reduced facility energy use, increased ridership, and/or improved aesthetics and quality of life factors. Although there is merit to the list of concurrent non-project activities or “betterments” described in Circular 5010.D, FTA proposes to limit the number of scope elements that may be considered “enrichments” to only those items non-integral for the planned functioning of the proposed project. Many comments expressed support for maintaining flexibility in what can be considered an “enrichment,” but a similar number of comments expressed concerns about prolonged negotiations with FTA over what may be considered as an “enrichment.” Thus, FTA is proposing a definition of “enrichments” in the Appendix to this final rule, and

providing a list of allowable “enrichments” in the revised proposed policy guidance made available for comment today. FTA believes the list of “enrichments” that has been developed is generally consistent with the proposals suggested in the comments on the NPRM. The list of enrichments can be revisited in future proposed policy guidance, however, as more information becomes available. Further, FTA believes its approach for considering “enrichments” is consistent with its streamlining goals in that it will not require significant discussion or “back and forth” verification between project sponsors and FTA. FTA is not including parking in the list of proposed “enrichments” because some parking is clearly integral to some projects. FTA does not believe the “enrichments” it is proposing in the policy guidance would exceed 10 percent of a proposed New Starts project’s total cost.

For Small Starts projects, MAP-21 explicitly calls for FTA to establish ratings based on “an evaluation of the benefits of the project as compared to the Federal assistance to be provided.” Accordingly, FTA will adopt in this final rule a cost-effectiveness measure for Small Starts that compares the Federal share requested to trips taken on the project. FTA will not subtract the cost of “enrichments” from the Federal share considered in the cost-effectiveness measure for Small Starts.

#### 4. Operating Efficiencies

*Comment:* Five of the nineteen comments received agreed with the proposed “operating cost per place-mile” measure for evaluating operating efficiencies. Three agreed without any comment and one commented that the project sponsor could lower operating cost per place mile artificially by adding more capacity than warranted. The same comment suggested consideration of efficiency factor adjustments to the measure to allow closer analysis of large and small systems. Another comment suggested FTA implement a spreadsheet or simple tracking tool to calculate the measure and requested that the vehicles and transit services currently in a corridor not have a bearing on how vehicles and transit services for a proposed project are defined for the purposes of calculating place-miles.

Of the fourteen comments that disagreed with the new measure, most preferred using the current measure, which is operating cost per passenger mile. The reason most often cited for not liking the proposed measure was that it considers only service provided and not the level of service utilization. Thus, the comments stated the new measure

seems to reward transit projects that simply provide more capacity by increasing frequencies even if those frequencies are not warranted based on estimated ridership levels. Several comments also stated the proposed measure could favor larger systems over smaller systems. One of the comments stated concerns with how FTA would consider standing capacity when calculating place-miles and suggested that FTA would allow certain modes such as bus and heavy rail to assume standing capacity but not commuter rail. Another comment stated that in the determination of place-miles, peak loads should not exceed identified levels of service from TCRP Report 100 (“Transit Capacity and Quality of Service”). A third comment suggested FTA use “operating cost per place-hour” instead given that it measures service provided as “operating cost per place-mile” but does not reward projects in areas where commute distances have ballooned due to sprawl and insufficient planning for growth.

*Response:* MAP-21 eliminates “operating efficiencies” as a project justification criterion and instead calls for including a “congestion relief” criterion. Accordingly, FTA will no longer include a measure for operating efficiencies. Because a measure for “congestion relief” was not proposed in the NPRM, FTA is proposing in the revised policy guidance published concurrently with this final rule to assign a medium rating for congestion relief for all projects seeking New and Small Starts funds until such time as subsequent interim policy guidance and rulemaking can be completed to allow for public comment on a proposed measure for the criterion.

#### 5. Economic Development Effects

##### a. General Comments

*Comment:* Forty-two general comments were offered on the proposed economic development criterion, which was that FTA would evaluate and rate the extent to which a proposed project is likely to enhance additional, transit-supportive development based on the existing plans and policies to support economic development proximate to the project. Twenty-six of these agreed with the proposed economic development criterion. Of these, 10 offered general support for including economic development in project evaluations; three suggested broader measures for economic development and consideration of scenario-based analysis of direct changes to VMT; two supported the use of more qualitative measures; one suggested the inclusion

of the track record of jobs created; one recommended additional research; one suggested assessing how local and regional plans and policies would allow for future transit-oriented development; and eight did not make specific recommendations.

Six comments disagreed with the proposed economic development criterion. Two of these comments suggested additional research. One comment stated there is a contradiction between corridor-level versus regional-level analysis. One comment asserted that FTA's proposal does not adequately distinguish between economic development and land use. One comment stated that transit's ability to reduce transaction costs and increase productivity is not sufficient to cluster or intensify development. One comment stated that transit agencies have little land use authority.

Ten of the comments received were neutral about the proposed economic development criterion or did not offer a clear position. Five of these comments pertained to jobs. They mentioned evaluating the percent of jobs accessible via transit before and after project implementation, consideration of job growth policies and job creation and potential, and the use of a warrant-based approach based on current levels of employment density. Two comments stated higher land values could be a negative effect of transit. One of the two comments recommended more attention to value capture. Three comments suggested consideration of plans and policies or proactive measures such as funding committed through public-private partnerships.

*Response:* FTA appreciates the general support of the improved economic development criterion. FTA believes the clustering of development around a transit investment is a key measure of the value of the project. Transit projects can help local areas improve the livability and sustainability of their communities by increasing transportation choices and access to transportation services; improving energy efficiency, reducing greenhouse gas emissions and improving the environment; and improving the environmental sustainability of the communities they serve. Improved access to jobs and activity centers can contribute to local economic growth. FTA agrees with the comments that suggest additional research for this measure.

#### b. Affordable Housing

*Comment:* Thirty-nine comments were received in response to FTA's proposal to examine the plans and

policies in place to maintain or increase affordable housing in the project corridor under the economic development criterion.

Twenty-six of the comments agreed with including affordable housing plans and policies in the evaluation of economic development. Of these comments, the majority gave general support for evaluating affordable housing and transit-oriented development. Several recommended FTA define affordable housing and provide further guidance about how it would be evaluated. Suggestions provided by several comments included examining plans and policies related to employer-assisted housing, community land trusts, inclusionary zoning, programs to preserve subsidized housing, and programs for attracting workforce and market-rate housing. Two comments suggested FTA examine affordable housing funding per track mile. A few comments stated FTA should coordinate with other agencies on developing how it would evaluate plans and policies to support affordable housing, including the U.S. Department of Housing and Urban Development (HUD) and the Partnership for Sustainable Communities. One comment stated FTA should examine the affordability of new residential development near transit stations.

Three comments disagreed with including plans and policies to maintain or increase affordable housing under the economic development criterion. One comment stated affordable housing should be addressed through public policy, rather than transit policy. One comment suggested it should be considered under the land use criterion, not the economic development criterion. Another comment stated plans and policies should not be included because transit agencies can only support, not mandate, plans and policies.

Ten of the comments received about the proposal to evaluate plans and policies to maintain or increase affordable housing were neutral or did not offer a clear position. Two of these comments suggested giving greater weight to proposals that exceed a minimum number of accessible units and that maximize three-bedroom family-sized units. One comment recommended that FTA develop strategies that communities can use to preserve affordable housing. Another comment recommended including "workforce housing." One comment suggested rewarding areas that minimize displacement. One comment proposed "affordability of new residential development near transit

stations." One comment stated that townhouses should meet ICC-ANSI Type C unit requirements for "visitable" housing. One comment supported more FTA efforts to collaborate with others. Finally, one comment recommended FTA focus on projects that reduce combined housing and transportation costs.

*Response:* FTA is expanding its current practice of evaluating transit supportive plans and policies under economic development by including an examination of the plans and policies to maintain or increase the supply of affordable housing in the project corridor because FTA believes that maintaining affordable housing near transit creates more inclusive communities and helps to ensure lower income families have ready access to transit. FTA has outlined in the revised proposed policy guidance published today how it proposes to examine affordable housing plans and policies. The revised proposed policy guidance has been developed in coordination with HUD and is subject to public comment. FTA appreciates the suggestions provided and has taken them into consideration. In addition, FTA will evaluate the amount of existing affordable housing in the project corridor under the land use criterion.

FTA disagrees with comments stating affordable housing should not be addressed through transit policy based on the idea that affordable housing is a land use issue and not an economic development issue, and the comments stating that affordable housing plans and policies should not be included because transit agencies cannot mandate these plans and policies. Affordable housing is an economic development and land use issue because transportation access to affordable housing has great potential to stimulate new development and foster the future economic growth of an area. FTA recognizes transit agencies cannot mandate these plans and policies and they are instead developed by localities. But FTA believes the nature of the area surrounding transit has a great impact on its success, and, thus, through these requirements FTA encourages transit agencies to coordinate and form partnerships with localities to guide transit-supportive development and affordable housing.

#### c. Job Creation

*Comment:* Six comments were received in response to FTA's proposal to report under the economic development criterion the number of domestic jobs created by the design,

construction, and operation of the proposed project. Four of the comments agreed with including job creation as a measure of economic development. One of these suggested “full-time equivalent jobs” as the measure. Another recommended reviewing the track record of local transit supportive policies and domestic jobs created. One comment disagreed with the consideration of job creation, stating any figures would be based on industry averages and not on specific work plans for constructing the project. Thus, the commenter felt such a measure was likely to correlate directly with project cost and did not need to be reported separately. Another comment neither agreed or disagreed, but suggested FTA develop a methodology for calculating indirect jobs based on a measurement of a station area.

*Response:* FTA believes the number of domestic jobs related to the design, construction, and operation of a project is one indicator of how the transit investment contributes to local and regional economic development. FTA is not specifying a methodology for estimating job creation, but rather is allowing project sponsors to determine how to calculate the figure. FTA would not use the estimated number of domestic jobs in development of the economic development rating, but would simply report the number for the project as an informational item. FTA acknowledges that these jobs do not necessarily reflect net increases to overall U.S. employment. A net increase would result to the extent that these workers would otherwise be unemployed or underemployed. When the economy is at full employment, jobs related to New Starts and Small Starts projects are unlikely to have an impact on net overall U.S. employment; instead, labor would primarily be shifted from one sector to another. On the other hand, during a period of high unemployment, jobs related to New Starts and Small Starts projects may affect net overall U.S. employment because the labor market is not in equilibrium.

#### d. Optional Quantitative Analysis

*Comment:* Thirty-five comments were received in response to FTA’s proposal to allow project sponsors, at their option, to perform a quantitative analysis that would estimate the change in indirect VMT resulting from changes in development patterns anticipated with implementation of the proposed project and then monetize the resulting benefits for comparison with the same annualized capital and operating cost of

the project as used in the cost-effectiveness measure.

Twenty-one of the comments agreed with allowing an optional quantitative analysis to be prepared and submitted for evaluation under the economic development criterion. Several suggested FTA continue research in this area and develop guidance or a specific methodology for undertaking the analysis. Two comments supported the optional quantitative analysis, but were concerned with monetizing the benefits and comparing them to cost, stating it could give the impression the measure is a cost-benefit calculation that intends to capture all benefits when it does not. One comment supported an analysis of workforce access for New Starts projects only and not for Small Starts projects. One comment agreed with an optional quantitative scenario analysis but felt that VMT evaluation should be kept under the environmental benefits criterion.

Nine comments disagreed with the proposal to allow an optional quantitative analysis. Three of these comments asserted such an analysis is not well linked with economic development. Three of the comments stated the methodology is unclear and offered an alternative approach. One such suggested approach was to use direct measures such as increased density, job density, affordable housing, and property tax records. Another suggested approach was to consider past regional performance. One comment stated that increased density does not translate to less VMT or job creation. Several of the comments that disagreed with the proposal expressed concern with monetizing the benefits.

Five of the comments received were neutral or did not offer a clear position in agreement or disagreement. Four of these comments wanted the analysis to examine job accessibility such as change in station area access to the regional work force within 40 minutes of transit travel time. One stated that FTA should acknowledge that the purpose of many projects is to retain existing development levels.

*Response:* FTA believes allowing project sponsors the opportunity to do scenario analyses and estimate indirect changes in VMT resulting from changes in development patterns provides additional insight into the potential economic development effects of the proposed project. Such studies can assess whether denser land use patterns in the corridor that may result from implementation of the project will produce fewer VMT than if the development occurred elsewhere in the region at lower densities. Such analyses

are not expected to produce results suggesting that the project is likely to induce additional growth in a region as a whole, but instead are likely to focus primarily the impacts of redirecting land development in the region. FTA notes that a recent Transit Cooperative Research Program (TCRP) report—“TCRP Web Only Document 56—Methodology for Determining the Economic Development Impacts of Transit Projects”—may provide useful insight into how such studies could be conducted. Such studies could lead localities and metropolitan planning organizations to reexamine growth plans and policies to reinforce transit-supportive development. FTA already uses direct measures such as existing population and employment densities to rate projects under the land use criterion. Similarly, FTA already considers past demonstrated regional performance in implementing transit supportive plans and policies under the economic development criterion and plans to continue to do so.

For some time, FTA has been researching methodologies for estimating economic development benefits resulting from implementation of transit projects. FTA sought comment on one potential approach it developed for undertaking such an analysis, but was told in the public comments received that the approach was too cumbersome and time consuming. Through the ANPRM, FTA again sought ideas on how to examine the economic development effects of transit projects. Again, no clear, consistent methodology was suggested that could be implemented nationwide using readily available and verifiable data. Thus, FTA is not prescribing an approach, but allowing project sponsors to undertake the analysis only at their option and only with a methodology they believe makes sense. FTA will continue to research better ways to measure economic development and perhaps propose a specific methodology in future policy guidance.

FTA understands the concerns noted with monetizing the benefits resulting from the change in indirect VMT and comparing them to the annualized capital and operating cost of the project, but believes under the multiple measure evaluation approach specified in law no single measure will be interpreted as a full cost-benefit analysis.

## 6. Policies and Land Use Patterns That Support Public Transportation

### a. General Comments

*Comment:* Twenty comments were offered on FTA’s proposal to base the

land use criterion on the existing population and employment densities in the corridor and the amount of existing publically-supported housing in the corridor today. Twelve of these comments agreed with the proposed land use criterion. One of these emphasized that parking management and pricing policies are key contributors to making transit effective and suggested giving credit to communities that develop parking strategies that complement transit mobility goals. One of the comments in favor of the proposed approach suggested the breakpoints for the land use measures be geared to the cost of the project and the level of population density. Another in favor of the proposed approach expressed appreciation for publically supported housing terminology that permits consideration of both traditional federally-supported public housing as well as other affordable housing developments subject to long-term affordability restrictions. This comment recommended FTA define the term "publically supported housing" in its policy guidance and provided thoughts on what it should include. One comment suggested adding a review of bicycle and local transit-friendliness of the project area under land use.

Four comments disagreed with the proposed land use criterion. Two suggested that rather than looking at existing land use only under this criterion, FTA should also examine regional and local planning documents and policies to support transit-oriented development. Another comment noted FTA does not explain why it proposed to focus on existing conditions only under the land use criterion rather than also looking at future conditions. One comment stated transit agencies have little land use authority and cannot control what is built.

Four of the comments received on the proposed land use criterion were neutral or did not offer a clear position. One of these recommended FTA clarify how it will evaluate non-central business district parking. One suggested adding to the evaluation the number of existing jobs within a corridor. One recommended a higher weight for the land use criterion given that existing patterns in corridors provide strong indicators of project success for environmental benefits, economic development, mobility, and operating efficiencies. One advocated that poor pedestrian accessibility reduce a land use rating.

*Response:* FTA stated previously on numerous occasions that it is difficult to separate land use and economic development when evaluating proposed

projects. Thus, for quite some time, FTA chose to evaluate and rate them together. But the SAFETEA-LU Technical Corrections Act required FTA to give each of the six project justification criteria comparable, but not necessarily equal, weight, which required FTA to evaluate land use and economic development separately and give them distinct ratings. Consequently, FTA chose to look only at existing land use under the land use criterion and to examine the potential the project has of leading to economic development by evaluating transit supportive plans and policies under the economic development criterion. MAP-21 renames this criterion slightly to "Policies and Land Use Patterns That Support Public Transportation" and continues to require that the evaluation criteria be given comparable, but not necessarily equal weights. Thus, land use and economic development must be differentiated. To evaluate land use, FTA will continue to examine existing corridor and station area development, including population and employment within one-half mile of station areas. FTA will also continue to examine corridor and station area parking supply, costs, and parking strategies that support transit-supportive development. Evaluation of pedestrian accessibility will remain a corridor characteristic that FTA examines under the land use criterion as well. Existing site and urban design and the mix of uses serve as key features for evaluating the station area development character under the land use criterion. Lastly, FTA believes examining the amount of affordable housing in the corridor today makes sense given the higher propensity of lower income individuals to take transit. FTA will evaluate the existing amount of affordable housing in the project corridor under the land use criterion. Use of this broader terminology in the Appendix to the regulation will ensure that consideration is given to more than just federally-supported public housing. In this measure, FTA is assessing the current situation with regard to affordable housing. In contrast, the economic development measure is assessing the local plans and policies in place to help ensure affordable housing in the corridor is maintained or increased.

FTA does not agree the breakpoints for the various measures under the land use criterion should be based on the cost of the project or the level of population density. Effective transit service requires sufficient densities of people and destinations to make it

affordable and efficient, regardless of project cost.

FTA agrees transit agencies often have little or no authority over land use decisions. But FTA believes that sufficiently dense land uses are a significant factor in the success of a transit project, and thus FTA expects that transit agencies can engage in discussions with the localities that have decision-making authority over land use in the project corridor.

#### b. Publically Supported Housing

*Comment:* Twenty-two comments were offered in response to FTA's proposal to include an examination of the amount of publically supported housing under the land use criterion.

Nineteen of these comments agreed with the proposal. Most of the comments supported this approach because of the link between transportation and housing policy and the fact that lower income families tend to use transit more frequently than higher income families and provide stable transit ridership and revenue. Several of the comments expressed concern that using HUD data only in the evaluation might underrepresent publically supported housing, and suggested a more expansive approach be used. Some comments recommended a broad definition of publically supported housing that includes housing supported by low-income housing tax credits, housing supported by other affordable housing programs, and housing that includes rent-restricted or income-restricted units per a government program. One comment suggested using the term "publically assisted housing" rather than "publically supported housing."

Three comments disagreed with the consideration of publically supported housing. One of these comments suggested that the proposed approach would duplicate the consideration given under the mobility measure (double weight for transit-dependent trips). One comment suggested FTA consider all housing units in the measure.

*Response:* FTA agrees that transportation and housing policy should be linked. FTA appreciates the comments and suggestions received for how FTA should examine affordable housing in the corridor. Although FTA recognizes there may be other methods for calculating the amount of publically supported or affordable housing in the project corridor, our goals for developing a streamlined and simplified evaluation process require that FTA stick with measures that are easily calculated based on available data. Thus, FTA is outlining in the revised

proposed policy guidance being published today how it will evaluate the amount of existing affordable housing in the project corridor using data obtained from local housing agencies and the Census. Use of this broader terminology in the Appendix to the regulation will ensure that consideration is given to more than just federally-supported public housing. FTA notes that the measure being used focuses on housing units defined as affordable and does not consider the possible use of housing vouchers.

FTA does not believe an evaluation of the extent of affordable housing in the corridor is duplicative of the trips made by transit dependent persons considered under the mobility measure, just as trips on the project used in the mobility criterion is not the same as total population and employment in the corridor evaluated under the land use criterion. The numbers are correlated but not the same. Thus, FTA believes it is prudent to examine them. The mobility criterion evaluates estimated usage of the project, while the land use criterion evaluates the transit supportive nature of the corridor in which the project is being located.

#### 6. Other Factors

*Comment:* FTA received a total of 16 comments related to “other factors.” One comment suggested project sponsors be given the opportunity to define the key features of their projects that might qualify as an “other factor.” Several comments made specific suggestions of possible other factors including: user benefits, if that measure is no longer used for mobility improvements and cost-effectiveness; multimodal connections; livable communities; other public investments; innovative construction or procurement methods; consistency with Regional Sustainability Plans; and unusually large amounts of health, energy use, or traffic impacts. One comment suggested that consideration of other factors is not authorized in law. One comment suggested that the “trip not taken” be included as an “other factor.” Two comments suggested that adequate facilities should be provided to transit dependent users, particularly those with disabilities. Two comments suggested that project sponsors should be given incentives to ensure adequate consideration of fair and affordable housing and environmental justice. On the other hand, one comment questioned why environmental justice was included as an “other factor.” Two comments suggested trips by transit dependent persons be counted as an “other factor,” rather than being treated

as part of the mobility and cost-effectiveness criteria. One comment suggested high gasoline price scenarios be explicitly considered. Another comment suggested projects in areas with a strong transit riding culture or in areas where consideration is given to communities of concern be given priority.

*Response:* MAP-21 eliminates “other factors” as a separate consideration in the evaluation process. Accordingly, this final rule does not include “other factors.”

#### C. Local Financial Commitment

*Comment:* Thirty comments were received on FTA’s proposal to evaluate local financial commitment by examining: current capital and operating condition (25 percent of rating); commitment of capital and operating funds (25 percent of rating); reasonableness of capital and operating cost estimates and planning assumptions/capital funding capacity (50 percent of rating); and the non-New Starts share of the proposed project (can raise the overall local financial commitment rating one level if greater than 50 percent). Of these, twenty-one agreed with the proposed approach, two disagreed with the proposed approach, and six neither agreed nor disagreed but opined on alternate approaches for evaluating some of the metrics.

Of the comments that agreed with the proposed approach, several stated that combining the evaluation of the capital and operating plans made sense given their interdependency. A majority were in favor of FTA’s proposed approach of encouraging overmatch by using the share of non-New Starts funding contributed to the project as a way to boost the overall local financial commitment rating one level. These comments suggested further that FTA consider overmatch provided on the project sponsor’s entire capital program. One of these suggested that rather than giving a one rating level boost to projects with significant overmatch, that FTA instead develop a graduated scale of rating improvements that could be possible based on the amount of overmatch.

A majority of the comments that agreed with the proposed approach also supported the expansion of pre-qualification or warrants to the local financial commitment rating of New Starts projects. Specifically, these comments suggested the same warrant that applies to Small and Very Small Starts projects be applied to New Starts projects. In other words, the comments suggested that if the estimated operating and maintenance cost of the proposed

New Starts project is five percent or less of current system-wide operating and maintenance costs, the project should qualify for an automatic local financial commitment rating of medium without having to submit a detailed financial plan for evaluation and rating.

Several comments received in support of FTA’s proposed approach for evaluating local financial commitment suggested FTA allow additional flexibility as to when funds need to be committed and in what shares under the commitment of funds subfactor. A few of these comments made specific reference to clarifying the commitment of funds necessary for design-build projects. Another comment suggested FTA be flexible when evaluating the current condition of project sponsors that have had to cut service due to extenuating circumstances. Another suggested that FTA’s consideration of fleet age under the current condition subfactor take into account future vehicle purchases programmed in the long-term financial plan as well as reasonable vehicle life-cycles.

Another comment received in support of FTA’s proposed approach suggested FTA ensure nationwide consistency, while considering geography, local economic conditions, and the age of the local transit system in its evaluation.

Of the comments received on the NPRM that disagreed with FTA’s proposed approach to evaluating local financial commitment, one suggested FTA not use fleet age as a metric under the current condition subfactor. Instead, the comment suggested FTA use mean distance between failures as the metric. The comment felt using fleet age alone does not take into consideration aggressive preventative maintenance and rehabilitation programs that may be in place to extend the useful lives of vehicles.

Another comment that disagreed with FTA’s proposed approach suggested FTA eliminate the examination of whether there have been significant service cutbacks in recent years when evaluating the current condition of the project sponsor. This comment felt service cuts do not necessarily reflect an agency’s financial condition and the other metrics identified in FTA’s proposal for evaluating current condition provide a more accurate representation.

Of the comments received on the NPRM that neither agreed nor disagreed with FTA’s proposed approach, one suggested extra credit should be given in the evaluation process to project sponsors that are able to secure private contributions to the project. This same comment suggested FTA include

measures that will encourage states or regions to implement new taxes or user fees. Another comment suggested instead of evaluating the commitment of capital and operating funds for the project and the entire transit system, FTA instead look at “the commitment of capital and operating funds for the project and for maintenance of effort towards its own local transit system(s) as well as toward any regional system which the project sponsor is obligated to support financially.” Another urged FTA to recognize that state law or enabling legislation may limit a project sponsor’s ability to make local financial commitments. Similarly, a separate comment stated that local legislative limitations may exist that would prevent a project sponsor from making capital commitments beyond a five-year timeframe. Lastly, one comment mentioned value capture should be used to evaluate local financial commitment.

*Response:* FTA believes the approach outlined in the NPRM and being adopted with this final rule reflects the interaction between capital and operating budgets and, therefore, reduces redundancy in the current evaluation process. MAP–21 specifies that the proposed New Starts or Small Starts share of a proposed project can only help the local financial commitment rating and not hurt it. Thus, FTA believes it is appropriate to evaluate the share only to the extent that significant overmatch is provided. Although FTA understands the reasoning behind the comments that suggest FTA consider overmatch on a project sponsor’s entire capital program rather than simply the proposed project, FTA believes such an approach would be difficult to put into practice as there would be no way for FTA to verify the data on overmatch submitted by project sponsors. Additionally, it is likely such an approach would lead to all projects receiving an artificially high local financial commitment rating simply because of overmatch provided for ongoing capital rehabilitation and repair projects rather than because of the strength of the financial plan for constructing and operating the proposed project.

The metrics used to evaluate current condition of the project sponsor have worked well for FTA over the past decade to differentiate among projects, including fleet age, recent bond ratings, the ratio of current assets to current liabilities, and whether there have been significant service cuts in the recent past. FTA does not agree that service cuts are an ineffective indicator of the current condition of the project sponsor. Although service adjustments to

improve efficiency are routinely made by project sponsors, these do not typically include significant service reductions. Significant reductions in service generally are not undertaken unless a transit agency is facing a sizeable budget shortfall. FTA agrees fleet age in and of itself does not reflect the current capital condition of the project sponsor as different agencies have different preventative maintenance and rehabilitation cycles for their vehicles. But there is no single definition used by the industry for mean distance between failures, and FTA would have no way to verify such data, whereas fleet age can be verified against what is reported in the National Transit Database. Thus, FTA believes fleet age is the best metric to use at this time. FTA does not agree that examination of fleet age should take into consideration future vehicle purchases. Fleet age is used by FTA to evaluate the current condition of the project sponsor, not a future condition.

With regard to the evaluation of the amount of funds committed to a project, FTA believes it has clear guidance on how it defines committed versus budgeted versus planned funds. These definitions already take into consideration unique local circumstances or legislation that may make commitment of funds beyond a given timeframe difficult. The law requires FTA to evaluate the degree of local financial commitment, including evidence of stable and dependable financing sources to construct, maintain, and operate the transit system or extension, and maintain and operate the entire public transportation system without requiring a reduction in existing services. FTA does not believe design-build projects should operate under a different set of rules with regard to the level of committed funds required at the various stages of project development.

In evaluating the strength of a project sponsor’s financial plan, FTA believes private contributions and value capture mechanisms should be considered in the same way other sources of funds are considered. FTA does not believe it is the role of the Federal government to encourage states or regions to implement new taxes or user fees.

In this rule, FTA is including the opportunity for projects to pre-qualify for various criteria based on project characteristics or the characteristics of the corridor in which a project is located. At this time, FTA is implementing a pre-qualification or warrant for the overall local financial commitment rating for Small Starts and Very Small Starts projects only and not

for New Starts projects. In future policy guidance, FTA may decide to expand local financial commitment warrants to New Starts projects. Such guidance would be subject to a public comment process.

#### *D. Process for Developing and Overseeing New Starts and Small Starts Projects*

##### 1. Pre-Award Authority

*Comment:* FTA received 18 comments on its proposal to codify current practice with respect to those activities for which pre-award authority is given and at what points in time, meaning when project sponsors are given approval to begin certain activities prior to award of a grant but retain eligibility of those activities for future Federal reimbursement should a future grant be awarded. All of these comments agreed that codification of the practice was desirable, with 12 of the comments suggesting that FTA expand the list of activities eligible for pre-award authority at various stages of the process. In addition, three of the comments suggested that pre-award authority for Small Starts be explicitly included.

*Response:* Because of the changes made to the steps in the New Starts and Small Starts processes by MAP–21, FTA is not finalizing the parts of this regulation concerning these steps at this time. This includes the provisions related to pre-award authority and letters of no prejudice. This will be the subject of subsequent interim policy guidance and rulemaking.

##### 2. Alternatives Analysis

*Comment:* FTA received six comments suggesting modification of the definition of the Locally Preferred Alternative (LPA) selected at the conclusion of the alternatives analysis to be the “locally preferred mode and general alignment.” In addition, four comments suggested the regulation be clarified to indicate that alternatives analysis can be conducted concurrently with the NEPA requirements and two comments suggested that the alternatives analysis requirement can be met during the systems planning phase. FTA received one comment suggesting that “Suspended Monorail Automated Rapid Transit” be included in alternatives analyses and one comment suggesting that streetcar projects should be exempt from the alternatives analysis requirement. One comment suggested that lower cost alternatives should be included in alternatives analyses and another suggested that pre-screening

approaches be used in the alternatives analysis process.

*Response:* MAP-21 removes the requirement for a separate alternatives analysis as a prerequisite for entry into the New Starts or Small Starts program. Instead, project sponsors will undertake a step called “project development,” during which the NEPA process is to be completed, a locally preferred alternative is to be adopted and included in the region’s long range transportation plan, and information is to be developed for evaluation and rating of the project by FTA. FTA notes that during the NEPA process project sponsors are required to consider a reasonable range of alternatives. Thus, while the New Starts Alternatives Analysis step is eliminated, project sponsors are still required to consider a reasonable range of alternatives prior to selection of a locally-preferred alternative, based on consideration of a wide range of local goals and objectives in the context of the environmental review process. Thus, much of the same analysis now undertaken during New Starts Alternatives Analysis will be accomplished before a project is identified for advancement into the New Starts process. MAP-21 creates a single subsequent step called “engineering,” at which time FTA must evaluate and rate the proposed project. In this final rule, FTA is finalizing some of the definitions proposed in the NPRM that are consistent with MAP-21. However, FTA believes there are a significant number of items that were not included in the NPRM related to these new steps that cannot be finalized at this time. FTA will issue subsequent interim proposed policy guidance and rulemaking to address these matters to allow for public comments.

### 3. Preliminary Engineering and Final Design

*Comment:* FTA received 16 comments stating that FTA should assure the definitions of preliminary engineering and final design do not interfere with the possible use of alternative project delivery methods such as design-build.

*Response:* While FTA believed the definitions for preliminary engineering and final design in the NPRM were sufficiently flexible to account for use of a wide variety of project delivery methods including design-build, MAP-21 eliminates these as separate steps in the process and instead creates a single step called “engineering.” FTA believes this change will further facilitate use of alternative project delivery methods. In this final rule, FTA is merging the current definitions of preliminary engineering and final design into a

single definition for “engineering.” FTA will continue to work with project sponsors to make sure that their procedures and their engineering and design contract structures allow progress on the project to continue while FTA performs the statutorily required evaluation and rating for entry into engineering, and consideration of a full funding grant agreement. The concerns noted by the industry with stalled work while FTA performs its reviews most often occur because of the way the contracts have been structured by the project sponsor.

### 4. Before and After Studies

*Comment:* FTA received five comments on the requirements for “Before and After” studies. Of these comments, three were in general support of the proposals made in the NPRM to clarify the Before and After study requirements. Two comments addressed the question raised in the NPRM about the appropriate time frame for when the “after” data should be collected, supporting using three years after project opening rather than two years after opening as in the current regulation.

*Response:* FTA appreciates the support for its efforts to clarify the “Before and After” study requirements and is adopting them in this final rule. MAP-21 includes the same requirements for Before and After Studies as in SAFETEA-LU. FTA appreciates the input on when the “after” data should be collected. The two year timeframe is specified in law, so it cannot be changed at this time.

### 5. Ratings Updates

*Comment:* FTA received 14 comments supporting the concept of rating projects at entry into each step in the process, and updating those ratings only if a project has material changes in cost or scope.

*Response:* FTA is adopting this concept in the final rule.

### 6. Timing of Applicability of the New Final Rule Criteria

*Comments:* FTA received 11 comments on when the new criteria should be applied to projects already in the process. All of the comments suggested a flexible approach where a project sponsor could choose to be rated under the new criteria or continue to be rated under the criteria in effect prior to this final rule.

*Response:* FTA agrees with the need for flexibility. New Starts and Small Starts projects already in receipt of a full funding grant agreement or project construction grant agreement will not be

subject to this final rule. New Starts projects approved into final design prior to the effective date of this rule and Small Starts projects approved into project development prior to the effective date of this rule will not be subject to this final rule unless they request to be evaluated under the new procedures. Projects in New Starts preliminary engineering prior to the effective date of this rule can continue to be covered by the former evaluation approach during engineering unless the project sponsor requests to be covered by the new evaluation approach. But when these projects seek a full funding grant agreement, the new procedures outlined in this final rule will apply. This approach will allow project sponsors time during engineering to complete the analysis needed for the new criteria. Because the new criteria generally require less analysis, or are derived from data normally produced during what was formerly preliminary engineering, this will require little if any additional effort.

### 7. Other Process Related Comments

*Comment:* FTA received one comment supporting establishment of a new Subpart C for Small Starts. One comment suggested the use of “interim cooperative agreements” to cover project development for streetcar and other Small Starts projects prior to identification of a public agency sponsor for a project being developed by a non-profit organization. One comment suggested the need for reimbursement of project costs proportional with spending on capital construction. Another comment suggested that projects be judged on their own merit rather than against other projects in the process. One comment suggested that a project in a corridor with a recently funded project be given the same rating as the initial project. FTA received one comment requesting more flexibility in the estimation of project costs.

*Response:* FTA appreciates the comment on establishing a separate subpart for Small Starts and is adopting that approach. FTA believes it is necessary to identify the public agency sponsor at the beginning of the process as only public bodies are eligible for funding. Without identification of the entity that will be the grant recipient, FTA cannot adequately judge the technical, legal, and financial capacity of the sponsor to carry out the project as required by law. FTA notes that project construction costs are already reimbursed as they are incurred based on the relative local and Federal shares for the project. FTA agrees that projects should be judged on their own merits

and has structured the process to do so. But given that the demand for New Starts and Small Starts funding exceeds supply of funds, projects will inevitably be compared to one another. FTA does not believe it is appropriate to grant automatic ratings to projects with existing New Starts projects in the corridor. FTA believes each project needs to be evaluated on its own merits. Further, FTA would be concerned with a project sponsor seeking to implement a second major capital investment in the same corridor and would question whether the projects might compete with one another unnecessarily.

Although FTA understands project costs change during engineering and design of the project, FTA believes estimates should be as accurate as possible given the level of engineering completed.

**V. Section-by-Section Analysis**

*Reorganization*

In the final rule, as proposed in the NPRM, FTA is rewriting and reorganizing 49 CFR Part 611 by dividing it into three subparts. The comments received are supportive of this approach. Subpart A includes general provisions (purpose and contents, applicability, definitions, and

a description of how the provisions of this regulation relate to the requirements of the transportation planning process). Subpart B provides the process and project evaluation requirements applicable to New Starts projects. Subpart C provides the process and project evaluation requirements applicable to Small Starts projects. The current Appendix describing the evaluation measures remains, but is amended significantly to reflect the changes in the measures being made final. This distribution table shows the changes to the organization structure of Part 611 by section:

DISTRIBUTION TABLE

Current Part 611	New Part 611 as set forth by this final rule
611.1 Purposes and contents .....	Subpart A—611.101 Purpose and contents
611.3 Applicability .....	Subpart A—611.103 Applicability
611.5 Definitions .....	Subpart A—611.105 Definitions
611.7 Relation to planning and project development processes .....	Subpart A—611.107 Relation to the planning processes Subpart B—611.209 New Starts process Subpart C—611.309 Small Starts process Subpart B—611.211 New Starts Before and after study. Subpart B—611.203 New Starts Project justification criteria
611.9 Project justification criteria for grants and loans for fixed guideway systems.	Subpart C—611.303 Small Starts Project justification criteria.
611.11 Local financial commitment criteria .....	Subpart B—611.205 New Starts Local financial commitment criteria Subpart C—611.305 Small Starts Local financial commitment criteria
611.13 Overall project ratings .....	Subpart B—611.207 Overall New Starts project ratings Subpart C—611.307 Overall Small Starts project ratings
Appendix A—Description of Measures Used for Project Evaluation .....	Appendix A—Description of Measures Used for Project Evaluation

Although much of the regulation remains the same, FTA is making a series of changes to better comport with the requirements of Section 5309, Title 49, U.S. Code (Section 5309), as had been amended by SAFETEA-LU and the SAFETEA-LU Technical Corrections Act, and which are still in effect pursuant to MAP-21. Other changes made to the major capital investment program by MAP-21 that had not been in SAFETEA-LU or the NPRM, will be the subject of subsequent interim policy guidance and rulemaking.

First, and foremost, as noted above, FTA is creating a new subpart to formally establish the process and evaluation requirements for Small Starts, which was a newly created category in the major capital investment program in SAFETEA-LU that is continued in MAP-21. This final rule specifically adds eligibility of corridor-based bus systems for Small Starts funding as provided by MAP-21. In addition, this final rule does not include the exemption from the evaluation and rating process for projects requesting less than \$25 million in Section 5309 funding that was allowed under SAFETEA-LU.

Second, as proposed in the NPRM, FTA is changing the project justification criteria, especially for cost-effectiveness, mobility benefits, environmental benefits, and economic development benefits. These changes respond to the comments received in response to the questions asked in the ANPRM issued on June 3, 2010, and the comments received on the NPRM. Further, FTA is replacing “operating efficiencies” with “congestion relief,” as required by MAP-21, although the specific measure used to evaluate congestion relief will be the subject of subsequent interim policy guidance and rulemaking.

Third, as proposed in the NPRM, FTA is putting in place a process whereby details related to evaluation measures and processes are included in policy guidance issued periodically for notice and comment, but not less than every two years as specified in MAP-21. This policy guidance will supplement the current Appendix to the regulation and provide a formal process, linked to this regulation, whereby changes in the technical details of the New Starts and Small Starts project development and evaluation processes can be specified and changed over time as needed. FTA made available a draft of its initial

proposed policy guidance together with the NPRM and requested comment on it. In response to the comments received on the draft policy guidance published with the NPRM, FTA is publishing more detailed revised proposed policy guidance for further comment concurrently with this final rule. The effective date for this final rule has been established so that comments can be received and the policy guidance finalized in response to those comments before the final rule will go into effect.

Fourth, as proposed in the NPRM, FTA is changing the point of comparison for incremental measures from the “baseline” alternative (typically a Transportation Systems Management or TSM alternative) to a no-build alternative to be defined in the policy guidance. MAP-21 requires this change for Small Starts projects, and FTA believes it is also appropriate for New Starts projects.

Fifth, as proposed in the NPRM, FTA is establishing a process whereby projects may pre-qualify based on their characteristics or the characteristics of the corridor in which they are located for automatic ratings of “medium” or better on one or more project justification or local financial

commitment criteria. This is similar to the automatic ratings allowed under the “Very Small Starts” category that FTA had established through interim policy guidance. As proposed in the NPRM, this process will be included for both New Starts and Small Starts projects, with details and specific pre-qualification values (“warrants”) specified in future policy guidance that will be subject to a public comment period prior to finalization. MAP–21 provides for “warrants” for projects seeking \$100 million or less in New Starts funds or a 50 percent or less New Starts share if the project sponsor requests the use of warrants and certifies that its existing transit system is in a state of good repair. FTA believes it is also appropriate to allow for the use of warrants for a wider range of projects than those allowed for in MAP–21, including Small Starts projects, but will be mindful of the strictures for “warrants” in MAP–21 as they are established in future proposed policy guidance.

Sixth, as proposed in the NPRM, FTA will re-rate projects only if there have been material changes in scope or estimated costs as they proceed through the process. FTA will continue to use its current practice, as provided in its reporting instructions, to define what constitutes a material change.

Finally, as proposed in the NPRM, FTA is adopting a series of language changes to clarify various requirements and definitions and to alter the references to law to be consistent with changes made by MAP–21. In addition, FTA has made changes in this final rule in a number of provisions to improve readability and clarity. Where such changes have been made from the NPRM they are not intended to have a material effect on the substance of the provision.

#### *Subpart A—General Provisions*

##### Section 611.101 Purpose and Contents

This section, like Section 611.1 in the current regulation, describes the purpose and contents of this regulation, which is to guide the development and evaluation of projects seeking to receive discretionary major capital investment funding under Section 5309 of Title 49, U.S. Code. Those projects can include fixed guideway projects, either completely new systems or extensions to existing systems (“New Starts” or “Small Starts” depending on total project cost and the amount of Section 5309 funding sought) and corridor-based bus systems (under “Small Starts”), as specifically added by SAFETEA–LU and continued in MAP–

21. As part of a subsequent rulemaking, FTA will propose amendments to this section to add the eligibility for core capacity projects, as provided in MAP–21.

This section also specifically allows for separate procedures (described in a new subpart C) for “Small Starts” projects, which are projects that have a total cost of less than \$250 million and are seeking less than \$75 million in major capital investment funding under Section 5309. For New Starts projects, as in the current regulation, this section indicates that projects will be evaluated and rated at several steps during the New Starts process, including advancement into engineering and prior to entering into a full funding grant agreement. Ratings for each project are shown in the Annual Report on Funding Recommendations that FTA is required to submit to Congress each year. New language also indicates that this process will be used for Small Starts projects for advancement into engineering and prior to entering into a single year construction grant or expedited grant agreement. The language has also been changed to reflect that overall ratings will now be assigned on a five-level scale from “high” to “low,” instead of “highly recommended,” “recommended,” or “not recommended,” as was required by amendments to Section 5309 made by SAFETEA–LU, and is continued under MAP–21.

##### Section 611.103 Applicability

As in the current regulation, this section specifies that Part 611 would apply to all projects that are candidates for discretionary major capital investment funding under Section 5309. As in the current regulation, it would apply to new fixed guideway projects and extensions to existing fixed guideway projects. But the section is also amended to add the eligibility of corridor-based bus systems as Small Starts projects as was authorized by SAFETEA–LU and is continued under MAP–21. At a later time, FTA will propose amendments to this section to address core capacity projects made eligible under MAP–21.

The evaluation process in this regulation would not apply to New Starts projects that have already received a full funding grant agreement and to Small Starts projects that have already received a project construction grant agreement. As proposed in the NPRM, this section clarifies that the previous regulation would continue to apply to those projects. In response to comments received on the NPRM, the section has been clarified to indicate

that New Starts projects already approved into final design, or Small Starts projects already approved into project development, would not be covered by this rule and the previous regulation would continue to apply. But in response to comments received on the NPRM, the section clarifies that these project sponsors may opt to be evaluated under this regulation if they so desire. New Starts projects currently approved into preliminary engineering and that have completed the NEPA process may continue in the newly defined step called engineering without being re-rated under this regulation. If material changes to project scope or cost occur (as defined in policy guidance) while these projects are in engineering, these projects will be re-rated under this regulation. Additionally, when these projects seek a full funding grant agreement, they will be subject to the requirements of this rule. Projects currently approved into preliminary engineering that have not yet completed the NEPA process will be considered to be in the newly defined step called project development. They will need to be rated under this regulation to be admitted into the newly defined engineering stage after the completion of NEPA. When these projects seek to move from engineering to a full funding grant agreement, they will be subject to the requirements of this rule. As in the NPRM and consistent with MAP–21, FTA is modifying this section to eliminate the exemption from the New and Small Starts process in the current regulation for projects seeking less than \$25 million in major capital investment funding from Section 5309. In addition, FTA is removing the provision for expedited procedures for projects that are air-quality transportation control measures, because that provision was deleted from the law by SAFETEA–LU.

##### Section 611.105 Definitions

This section provides definitions that apply to terms used throughout Part 611. As proposed in the NPRM, FTA is keeping most of the definitions in the current regulation and adding a number of new definitions.

A new definition is provided for a “corridor-based bus rapid transit project.” This definition is the same as it is now in the law at 49 U.S.C. 5309(a)(3), as amended by MAP–21 and is consistent with how FTA has defined it in policy guidance, except that it now covers only projects which do not have a fixed guideway component. Bus projects operating for a majority of the project on a guideway exclusively for use by public transportation vehicles are now covered by the definition for fixed

guideway projects, as called for by MAP-21. FTA expects to continue to define the term more specifically through policy guidance, which can be updated and revised as needed without the need for rulemaking. This definition essentially replaces the definition of “bus rapid transit” in the current regulation.

FTA is adopting the proposal in the NPRM to most often use the existing system as a point of comparison when calculating incremental measures (i.e., measures that need some other alternative as a point of comparison so that the change in that measure can be shown), but to use the no-build alternative when a project sponsor chooses to forecast benefits in a future year. MAP-21 requires use of the no-action alternative for Small Starts projects, and FTA believes it is appropriate to apply this change to New Starts projects, as proposed in the NPRM. In response to comments received on the NPRM, if a project sponsor chooses to forecast benefits in a future year, FTA is allowing the sponsor the option to choose either a 10-year horizon or a 20-year horizon. As proposed in the NPRM, FTA is deleting the definition of “baseline alternative” and adding a definition of “no-build alternative.” If a project sponsor opts to prepare a 10-year horizon forecast, the no-build alternative is the existing transportation system as well as those transportation investments committed in the Transportation Improvement Plan (TIP). If a project sponsor opts to prepare a 20-year horizon forecast, the no-build alternative is the existing transportation system plus the projects included in the fiscally constrained long-range transportation plan.

FTA is also adopting a number of changes to definitions that relate to the New Starts and Small Starts processes. First, FTA is deleting the definition of “alternatives analysis” in the regulation since an alternatives analysis is no longer required as a result of the changes made to section 5309 by MAP-21. Second, FTA is providing a definition for “early systems work agreement” by expanding on language added in SAFETEA-LU and continued in MAP-21. Third, FTA is expanding slightly that part of the definition of “engineering” which was proposed to be included in the definition of “final design” to indicate that all funding commitments must be obtained during engineering. This definition has been reworded slightly from that proposed in the NPRM to improve readability. Finally, FTA is adding definitions of “long-range transportation plan” and “locally preferred alternative” that are

consistent with the metropolitan planning regulations located in 23 CFR part 450. Note that, rather than include a definition of “metropolitan transportation plan” as proposed by the NPRM, FTA is adopting instead a definition of “long-range transportation plan,” which will allow for the possibility of a project located outside of metropolitan planning areas covered by a long-range statewide transportation plan rather than by a metropolitan transportation plan.

While several comments suggested that FTA modify the definition of “final design” to account better for the use of alternative project delivery methods such as design-build, FTA did not do so because MAP-21 eliminates the preliminary engineering and final design steps and instead creates a single step called engineering.

As proposed in the NPRM, FTA is expanding the definition of “major capital investment project” to include corridor-based bus rapid transit projects as they are eligible in MAP-21 as Small Starts projects. The revision to the definition of “NEPA process” clarifies that NEPA is complete when a project is approved as a categorical exclusion or if it has received a Record of Decision or a Finding of No Significant Impact. FTA is also amending the definition of “New Starts” to account for the funding thresholds added by SAFETEA-LU and continued under MAP-21 and is accordingly adding a definition of “Small Starts.” “Small Starts” is defined as projects for new or extended fixed guideways or corridor-based bus rapid transit projects with a capital cost of less than \$250 million that seek less than \$75 million in major capital investment funding from Section 5309. FTA is also providing definitions for New Starts funds and Small Starts funds to improve the readability of the regulation.

The definition for “project development” accounts for the addition of the Small Starts program by SAFETEA-LU and continued by MAP-21, as that is the primary phase of development for Small Starts projects. The definition for TEA-21 is deleted given that it is no longer necessary.

In response to comments received on the NPRM, and the changes made by MAP-21, FTA is replacing the added definition that had been proposed in the NPRM for project construction grant agreement (PCGA) and instead using that definition for expedited grant agreement (EGA). The definition is consistent with that for full funding grant agreement, but recognizes that an EGA is the funding instrument specified in MAP-21 for a Small Starts project.

In addition, FTA is adding a definition for “horizon year.” This term is used in several places in the final rule, and given the comments received on the NPRM about this issue, FTA believes it should be explicitly defined in the regulation. At the option of the project sponsor, the horizon year may be either 10 or 20 years in the future.

In the NPRM, FTA proposed that the costs of “betterments” not be included in the cost portion of the cost-effectiveness calculation. A significant number of comments received on the NPRM suggested that this term be defined in the final rule. Other comments suggested that the use of the term “betterments” might be confusing given it is used in other contexts in other FTA program guidance. To avoid this problem, FTA is using the term “enrichments” to refer to the kinds of activities that would not be included in the cost portion of the cost-effectiveness calculation for New Starts projects. Because the term “enrichments” is not used in the final rule, and only in the Appendix, FTA has decided to include the definition for “enrichments” in the Appendix along with several other terms used only in the Appendix and not in the final rule itself.

In response to comments, FTA is adding a definition for “transit dependent person” in the Appendix. A number of comments on the NPRM indicated that a formal definition was needed because FTA proposed to weight trips by transit dependent persons more heavily in the measures for mobility and cost-effectiveness.

#### Section 611.107 Relation to the Planning Process

As in the current regulation, this section requires that projects seeking New Starts funds emerge from and be consistent with the metropolitan and statewide planning processes required by 23 CFR part 450. As proposed in the NPRM and as provided for by MAP-21, it adds Small Starts projects to this requirement. It no longer requires, as in the current regulation, that a project be based on the results of an alternatives analysis, since this is no longer a requirement pursuant to MAP-21. As proposed in the NPRM, the section removes the requirement for a specified baseline alternative (which often was required to be the “Transportation System Management” or “TSM” alternative.) The point of comparison for the various incremental measures will hereafter be defined in Appendix A and the policy guidance as the existing system (for comparisons with current travel patterns) or the no-build alternative (for comparisons with travel

patterns in a horizon year in the future.) The no-build alternative is defined as the existing transportation system as well as those transportation investments committed in the Transportation Improvement Plan (TIP) if the project sponsor chooses a 10-year horizon or the existing system plus the projects included in the fiscally constrained long-range transportation plan if the project sponsor chooses a 20-year horizon. The section is also modified slightly to note that the locally preferred alternative (LPA) must be adopted into the fiscally constrained long-range transportation plan, as required by MAP-21.

The project development process included in the current regulation is modified and moved to the separate subparts for New Starts and Small Starts, allowing them to be customized for each of the programs. However, because MAP-21 made substantial changes to the process, these sections are not made final by this final rule but will be the subject of subsequent interim policy guidance and rulemaking.

#### *Subpart B—New Starts*

##### Section 611.201 New Starts Eligibility

As proposed in the NPRM, this is a new section designed to clarify the basic requirements of what must be accomplished to be eligible for approval of grants at various stages of the New Starts process. The requirement for an alternatives analysis to be completed has been removed because MAP-21 no longer requires it. FTA approval of entry into final design is deleted, consistent with the change made by MAP-21 to replace the preliminary engineering and final design steps with one step called engineering. To make explicit a requirement already in place, FTA is adding a new Section 611.201(b)(2) to note that a project must be approved into each phase of the New Starts process in order to receive funding for that phase.

##### Section 611.203 New Starts Project Justification Criteria

As in the NPRM, many of the topics in this section of the final regulation are specified in Appendix A and, in far greater detail, described in the revised proposed policy guidance made available for public comment today. Thus, the section analysis for Section 611.203 contains one portion that describes the changes to the regulation and another portion that discusses what FTA is adopting in the Appendix and is proposing in more detail in the revised proposed policy guidance.

#### A. Final Regulation

Although Section 611.203 is a new section in the regulation, as proposed in the NPRM, much of the content is taken from the current regulation at 49 CFR 611.9. As in the current regulation, FTA is stating that project justification will be evaluated based on a multiple measure approach that takes into account each of the criteria specified in Section 5309(d). The measures for the criteria are included in Appendix A and described further in the revised proposed policy guidance, which may be modified and re-issued periodically by FTA whenever significant changes are proposed, but not less frequently than every two years, as required by Section 5309(g)(5) of Title 49, U.S. Code. This policy guidance supplements Appendix A of the regulation. FTA has found the process of notice and comment for this policy guidance first established by SAFETEA-LU and continued by MAP-21, to be an extremely effective way of continuing the improvement of the New Starts project evaluation process by providing flexibility to make changes to recommended technical methods as new methods become available.

As in the current regulation and as proposed in the NPRM, individual project justification criteria are assigned ratings on a five-level scale from “high” to “low.” The final rule implements the changes first made by SAFETEA-LU and continued in MAP-21, which added economic development to the project justification criteria. It also implements the changes made by MAP-21 to eliminate the operating efficiencies criterion and add the congestion relief criterion, and to rename “public transportation supportive land use policies and future patterns” to “policies and land use patterns that promote public transportation \* \* \*.” In response to comments received on the NPRM, the terms that will be used for these criteria will be changed to “existing land use” and “economic development” as FTA is focusing the land use criterion on current socio-economic data for the corridor including population, employment, and affordable housing and focusing the economic development criterion on the local plans and policies in place to support economic development in future, including plans and policies related to transit supportive development and affordable housing. In addition, as proposed in the NPRM, and consistent with the changes made by MAP-21, the final rule eliminates transportation system user benefits from the cost-effectiveness measure and

eliminates “other factors” in current 611.9(b)(6).

The final rule indicates that any incremental project justification measures would be evaluated against a point of comparison specified in Appendix A and policy guidance. This language replaces the current requirement that a baseline alternative, usually in the form of a TSM alternative, be used as a point of comparison. As in the current regulation, it would be expected that as a project advances through the New Starts process, a greater degree of specificity would be required with respect to project scope and costs, that commitments made to public transportation supportive land use plans and policies would be expected to increase, and that a project sponsor’s technical capacity would be expected to improve. A proposal in the NPRM that described FTA’s expectation that the level of local financial commitment would also increase as a project moves through the process has been moved from the project justification section where it was inadvertently placed to the section on local financial commitment instead.

As proposed in the NPRM, FTA is not including the “considerations” listed in 49 U.S.C. 5309(d)(3) since these were eliminated by MAP-21.

As proposed in the NPRM, the section includes a provision that would allow for a process by which a project could pre-qualify to receive an automatic rating of “medium” or better on one or more of the project justification criteria based on its characteristics or the characteristics of the corridor in which it is being planned. Use of such pre-qualification tests or “warrants” is specifically called for by MAP-21 for projects requesting \$100 million or less in New Starts funds or a 50 percent or less New Starts share. FTA believes that it may be able to specify such characteristics, as it currently does for “Very Small Starts” in policy guidance, for a range of larger projects and a wider range of corridor types. The pre-qualification values would be established by FTA by determining how projects rate on the criteria based on an analysis at the national level. Proposed pre-qualification values would be published in future policy guidance for public comment before finalization and would be consistent with the requirements in MAP-21, although a wider range of project characteristics would be covered. In this way, a project sponsor would not be required to conduct forecasts of various factors, as the project itself would be deemed to have sufficient merit to proceed for purposes of any such criterion.

As first required by the SAFETEA-LU Technical Corrections Act, and continued by MAP-21, FTA is adopting the proposal in the NPRM to combine the ratings on each of the project justification criteria using “comparable, but not necessarily equal” weights into a summary rating of project justification. FTA is adopting the proposal that the process for this, and the specific weights, will be described in policy guidance. Future changes to the policy guidance will be subject to public notice and comment.

#### B. Appendix A and Proposed Guidance

As noted above, FTA made available proposed policy guidance for public review and comment when it published the NPRM. That proposed policy guidance provided greater detail on the proposed project justification measures specified in statute and proposed in regulation. As noted in that draft policy guidance, however, there were a number of issues on which further detail would be forthcoming. Accordingly, FTA is publishing today revised proposed policy guidance that responds to a number of comments made on the earlier proposed policy guidance published at the same time as the NPRM. It proposes additional detail and specificity on many of the key matters raised in the comments. Once FTA has received and reviewed comments on this revised proposed policy guidance, FTA will finalize it. The effective date for this final rule has been developed to allow FTA time to receive and review comments on the revised proposed policy guidance and finalize the policy guidance before the final rule goes into effect.

Appendix A defines the measure of mobility benefits as the number of trips using the project, with extra weight given to trips that would be made on the project by transit dependent persons. This is consistent with the requirement in MAP-21 that the measure of cost-effectiveness be defined as cost per trip. In response to comments, a definition of “transit dependent persons” is included in the Appendix. For those project sponsors choosing to use the simplified national model FTA is developing, trips made by “transit dependent persons” will be defined as trips made by individuals residing in households that do not own a car. Project sponsors that choose to continue to use their local travel model rather than the simplified national model to estimate trips will use trips made by individuals in the lowest socioeconomic stratum in the local model as the measure of trips made by transit dependent persons. Local models

classify trips either by household auto ownership or by income level. Thus, trips made by transit dependent persons would be either trips made by individuals residing in households that do not own a car or trips made by individuals in the lowest income category. Since some local travel demand models use zero-car households as the lowest socio-economic stratum and others use income based strata, to require use of one metric or the other would pose an unnecessary burden on project sponsors. FTA believes that this approach gives a reasonable indication of how well a proposed project supports access for transit dependent persons.

In response to comments seeking clarity, a definition of “trips” is provided in the Appendix as “linked trips using the project.” This is actually a larger number than “boardings,” as suggested in the comments, because, for example, a trip would be counted when a user of the proposed project rides through the project but boards and alights elsewhere in the transit system. Project sponsors would not need to compare the estimated number of trips generated by the proposed project to the estimated number of trips generated by a “baseline alternative” because, consistent with MAP-21, this rule eliminates the requirement to produce a baseline alternative. As noted in the NPRM, this change may have an impact on the kinds of projects that receive favorable ratings on the mobility and cost-effectiveness criteria. Under the former approach, which used “transportation system user benefits” (essentially travel time savings) as the measure of effectiveness, projects that involved longer trips were advantaged because there is more of an opportunity to save time. The revised measure is likely to rate projects with shorter trips better than they would have been rated under the former measure. On the other hand, projects with longer trips that may no longer do as well under the new mobility or cost-effectiveness measures because of the change from travel time savings to trips are more likely to reduce vehicle miles traveled (VMT), and thus are more likely to rate better on the new measure for environmental benefits.

As noted in the NPRM, to facilitate the estimation of project trips, FTA is planning to provide a simplified forecasting model that uses Census data and ridership experience on existing fixed-guideway systems. In response to comments, the revised proposed policy guidance proposes that use of the simplified model will be optional. Thus, project sponsors able to obtain a satisfactory overall rating based on estimates prepared with the simplified

model will not be required to provide to FTA estimates of project trips prepared using traditional local travel forecasting models. As noted in the NPRM, if at the project sponsors’ option they choose to instead estimate project trips prepared with traditional methods, FTA will continue to require that those methods be tested for their understanding of local transit ridership patterns using recent data adequate to the support the tests. FTA notes that if project sponsors choose at their option to submit future year forecasts in addition to those required to be submitted based on current year patterns, they may choose to use either a 10-year horizon or a 20-year horizon. If they choose a 10-year horizon (that requires use of the no-build alternative plus projects committed in the TIP as the background network), use of the FTA-developed simplified model may still be feasible and the scrutiny that FTA will apply will be reduced significantly. If the project sponsor instead chooses to submit a future year forecast based on a 20-year horizon (that requires use of the no-build alternative plus the projects included in the fiscally constrained long-range transportation plan as the background network), then the project sponsor must understand that FTA will be required to perform a similar level of scrutiny to the forecasts as under the current procedures and use of the simplified model may not be possible. Thus, the project sponsor would be choosing to obviate some of the streamlining benefits this new rule is intended to realize.

As proposed in the policy guidance published with the NPRM, FTA is adopting, in Appendix A, the ability for project sponsors to consider the project trips measure in the current year or in both the current year and the horizon year. The estimate of project trips for the current year puts all proposed projects in a consistent near-term timeframe for the evaluation. The estimate of project trips for the horizon year captures the increases in trips on the project that would be associated with population and employment growth and increasing congestion in the future. A definition for “horizon year” has been included in the regulation for clarity. In addition, in response to comments received, the Appendix defines the “current year” as the most recent year for which data on current transit use and demographic factors are available. As proposed in the policy guidance published with the NPRM, sponsors of projects that can obtain a satisfactory mobility, cost-effectiveness, and project justification rating (“medium” or better) based on

current-year estimates of project trips may choose to forego the preparation of horizon year estimates. As proposed in the policy guidance published with the NPRM, if a project sponsor chooses to submit both current-year and horizon-year estimates, the two estimates will be weighted equally.

FTA is also adopting the proposal that the mobility rating be based on the number of trips estimated to use the project with extra weight given to trips made on the project by transit dependent persons. As proposed in the NPRM, FTA is again proposing in the revised proposed policy guidance to give a weight of 2.0 to estimated trips made on the project by transit dependent persons. FTA believes it is appropriate to give a higher weight to such travelers because of their greater mobility needs. Use of a weight of 2.0 is based on information from the National Household Travel Survey that indicates while households owning no cars make up 8.7 percent of total households they make only 4.3 percent of total trips. In the revised proposed policy guidance being published today, FTA is proposing mobility breakpoints based on an assessment of the values calculated for projects now in the pipeline. These breakpoints may be changed in future policy guidance that would be subject to public comment.

FTA is adopting the proposal in the NPRM to evaluate and rate the economic development criterion based on the likely future development outcomes resulting from the project because of local plans and policies in place (the land use criterion would focus on existing land use densities of population, employment, and affordable housing as well as current parking availability and pedestrian amenities). Accordingly, FTA will assess economic development benefits based on: (1) Local plans and policies to support economic development proximate to the project; and (2) at the option of the project sponsor, indirect changes in VMT resulting from changes in development patterns may also be estimated, and the resulting environmental benefits calculated, monetized, and compared to the annualized capital and operating cost of the project. FTA will evaluate the local plans and policies in a manner that is similar to current practice with the addition of an examination of local plans and policies in place to maintain or increase affordable housing in the corridor. As proposed in the policy guidance published with the NPRM, project sponsors may choose whether or not to perform the optional economic development quantitative analysis based

on whether they believe it will help improve the economic development benefit rating for the project. Because of the absence of tools to predict development changes associated with transit projects, FTA is not specifying an approach but rather notes that quantification would involve an examination by the project sponsor of economic conditions in the project corridor, the mechanisms by which the project would improve those conditions, the availability of land in station areas for development and redevelopment, and a pro forma assessment of the feasibility of specific development scenarios. As proposed in the policy guidance published with the NPRM, the environmental benefits stemming from such changes in development patterns would be estimated, monetized, and compared to the annualized capital and operating cost of the proposed project. FTA would review the analysis before assigning a rating.

As proposed in the NPRM in Appendix A, FTA will measure environmental benefits by considering the dollar value of changes in: (1) Air-pollutant emissions, estimated using changes in VMT, with recognition of the air-quality attainment status of the metropolitan area; (2) greenhouse gas emissions estimated using VMT changes; (3) transportation energy use estimated using VMT changes; and (4) transportation fatalities and injuries estimated using changes in VMT and transit-passenger miles of travel. These dollar values would be summed and compared to the annualized capital and operating cost of the proposed project. In response to comments received, FTA has clarified that the cost of project "enrichments" would not be included in the annualized capital cost of the project for the New Starts environmental benefits criterion, just as they are excluded in the measure for cost-effectiveness. Changes in public health costs associated with long-term activity levels would be considered once better methods for calculating the information are developed. In the revised proposed policy guidance published with this final rule, FTA is proposing breakpoints for the environmental benefits rating.

FTA is not adopting the proposal in the NPRM to measure operating efficiencies as the change in operations and maintenance cost per "place-mile" compared to the existing transit system in the current year or to the no-build transit system (as defined in this final rule) in the horizon year. MAP-21 deleted the operating efficiencies criterion and replaced it with a congestion relief criterion. Because a

measure for congestion relief was not proposed in the NPRM and related proposed policy guidance, FTA will propose a measure in subsequent interim policy guidance and rulemaking to allow for public comment. The revised proposed policy guidance being published concurrently with this final rule indicates that all projects will be assigned an automatic medium rating for congestion relief until such time as a measure is identified and the subsequent interim policy guidance and rulemaking are complete.

FTA adopts the proposal in Appendix A to the NPRM to measure cost-effectiveness of New Starts projects as the annualized cost per trip on the project, not including the costs of project enrichments. The Appendix defines annualized costs as the sum of: (1) The annualized capital cost of the project and (2) the change in annual operating and maintenance costs between the proposed project and the existing system or the no-build alternative if a horizon year forecast is prepared. In response to comments received, annual trips on the project used in the cost-effectiveness calculation would not include the additional weight applied to project trips made by transit dependents. FTA believes it is appropriate to consider the mobility provided to transit dependent persons under the mobility measure but focus cost-effectiveness on the anticipated usage of the project by all individuals. The annualized capital cost of the New Starts project used to compute the cost-effectiveness measure would exclude the costs of certain project enrichments. In the proposed policy guidance made available with the NPRM, the concept of "betterments" was introduced as project features that foster economic development and environmental benefits (e.g., the incremental cost of obtaining LEED certifications, station-access provisions beyond those required by the ADA, and station-design and station-access elements that would enhance development impacts) but that do not contribute directly to the measures of benefits used in cost-effectiveness. In response to comments received, this concept has been adopted, but the terminology has been changed from "betterments" to "enrichments" to avoid confusion with other FTA program guidance as suggested by the comments. This should make clear that these features, while not counted in the calculation of cost-effectiveness for New Starts projects, are eligible to be included in the scope of the project for federal funding.

Finally, FTA is adopting in Appendix A its proposal to measure existing land use generally as it does today based on existing population and employment density in the corridor with the addition of the amount of affordable housing in the project corridor. As proposed in the NPRM, the project justification rating would continue to be a weighted combination of the six criteria, which in accordance with the changes made by MAP-21 would be: (1) Mobility, (2) economic development, (3) environmental benefits, (4) congestion relief, (5) cost-effectiveness, and (6) land use. As specified in the proposed policy guidance published with the NPRM, FTA will give equal weights to each measure.

#### Section 611.205 New Starts Local Financial Commitment Criteria

Some of the topics in this section were proposed to be included in Appendix A and were described in far greater detail in the proposed policy guidance made available for public comment along with the NPRM. This final rule adopts the same approach. Thus, the section analysis for Section 611.205 will contain one portion that describes the changes adopted in the regulation and another portion that discusses what FTA is including in Appendix A and in revised proposed policy guidance being published concurrently with the final rule.

##### A. Final Regulation

As under the current regulation, FTA is adopting the proposal in the NPRM that a New Starts project must be supported by an acceptable degree of local financial commitment. FTA is adopting the proposal to continue to rate commitment of the proposed share of funding for the project provided by non-New Starts funds. In accordance with language in MAP-21, however, a project's overall local financial commitment rating cannot be downgraded based on this criterion (i.e., "overmatch" can only help the summary local financial commitment rating). FTA is reorganizing the rating of the other local financial commitment criteria to better reflect the strong interaction between capital and operating funding. FTA has found that the current process, which produces ratings on the capital and operating plans separately, is duplicative in many ways. Thus, in addition to the non-New Starts share of the project, the remaining measures used to evaluate local financial commitment are: (1) The current capital and operating financial condition of the agency that would operate the project; (2) the commitment

of capital and operating funds for the project including an examination of private contributions as required by MAP-21; and (3) the reliability of the capital and operating cost and revenue estimates prepared by the project sponsor and the resulting financial capacity of the project sponsor.

As with the project justification criteria, FTA is adopting the proposal in the NPRM to allow for the possible use of pre-qualification standards for the local financial commitment criteria that would allow a project to receive an automatic rating of "medium" or better based on the characteristics of the project and the project sponsor. These thresholds or "warrants" would be established in future proposed policy guidance for New Starts projects. A reference to the requirement that FTA expects a greater degree of local financial commitment as a project proceeds through the New Starts process, which previously was included inappropriately under the project justification criteria section, has now been moved to this section. A new provision has been added, similar to that included in the project justification section, which indicates the measures for evaluation of local financial commitment may be amended through the issuance of policy guidance made available for public comment.

As in the current regulation, each of the local financial commitment criteria will be rated on a five-level scale from "low" to "high" and a summary local financial commitment rating will be established combining the individual ratings. The process and weights used to develop the summary rating will be established in policy guidance, just as under the current regulation.

##### B. Appendix A and Policy Guidance

As noted above, FTA made available with publication of the NPRM proposed policy guidance for public review and comment. That proposed policy guidance provided greater detail on the proposed local financial commitment measures specified in statute and proposed in regulation, as described above. In the NPRM and proposed policy guidance, FTA proposed to restructure the examination of local financial commitment to better reflect the interdependency of capital and operating financial plans submitted by project sponsors. Currently, FTA examines a project sponsor's financial plan and evaluates and rates: (1) The non-New Starts share of the project; (2) the strength of the capital financial plan (based on the current capital condition, the commitment of capital funds, and the reasonableness of the estimates used

in the financial plan and the resulting financial capacity of the project sponsor); and (3) the strength of the operating financial plan (based on the current operating condition, the commitment of operating funds, and the reasonableness of the estimates used in the financial plan and the resulting financial capacity of the project sponsor). FTA is adopting the proposal in the NPRM to instead examine the project sponsor's financial plan and evaluate and rate it based on: (1) The non-New Starts share of the project; (2) the current financial condition of the project sponsor (both capital and operating); (3) the commitment of capital and operating funds for the project including an examination of private contributions to the project as required by MAP-21; and (4) the reasonableness of the estimates used in the financial plan and the resulting capital and operating financial capacity of the project sponsor. The individual measures are described in Appendix A with more detail and breakpoints provided in the revised proposed policy guidance made available today for public comment. These have been modified slightly from those included in the proposed policy guidance made available with the NPRM to accommodate the elimination in MAP-21 of separate preliminary engineering and final design steps.

#### Section 611.207 Overall New Starts Project Ratings

Because of the changes made by MAP-21 to the evaluation and rating process for major capital investments, which were not subject to comment in the NPRM, FTA is not adopting at this time the details of the process for combining ratings on the various criteria into an overall project rating. The approach for doing so will be the subject of subsequent rulemaking. As a result, Section 611.207(a) will be reserved for this purpose. However, in the revised proposed policy guidance being published concurrently with the final rule, FTA is proposing an interim approach for combining ratings on the various criteria into an overall project rating until subsequent rulemaking on this topic can be completed. As proposed in the NPRM, the final rule assigns an overall rating on a five-level scale from "low" to "high" in line with the changes made by SAFETEA-LU and continued by MAP-21, which replaced ratings of "highly recommended," "recommended," and "not recommended." These overall ratings will be assigned when a project seeks approval into engineering and approval of a full funding grant agreement. In

contrast to the current regulation, however, FTA is adopting the proposal to not require re-rating of the project for each Annual Report to Congress as long as there have been no material changes to the scope or cost of the project since the previous rating. FTA will continue to use its current practice, defined in its reporting instructions, to identify material changes that will trigger a re-rating. These include design and construction scope of work changes, planning context changes, schedule changes of six months or more, or a change in a funding source or financing method. If there are no material changes, the rating developed at the earlier step will continue in force. Because of the changes made by MAP-21, FTA is not adopting the proposal that the overall rating be established by averaging the summary ratings obtained on project justification and local financial commitment and that the rating be rounded up when there is a one-level rating difference for the two summary ratings. Section 611.207(d) is being reserved for finalization in a subsequent rulemaking. In addition, FTA is not adopting in this final rule the requirement that both the summary project justification rating and the summary local financial commitment rating be at least "medium" to receive an overall rating of "medium" or better or that a project rated "low" on either the summary project justification rating or the summary local financial commitment rating will be rated "low" overall. Instead, these considerations will be part of a subsequent rulemaking process.

#### Section 611.209 New Starts Process

In response to comments received on the NPRM, the final rule renames this section "New Starts Process," instead of "project development process," as "project development" refers to a specific step in the process by statute. Because of the significant changes in the process in MAP-21, FTA is not finalizing this section at this time. The details on the steps in the New Starts Process will be covered in subsequent interim policy guidance and rulemaking. As a result, Section 611.209 is being reserved for such rulemaking. This section will include requirements for the New Starts process now included in paragraphs (b) through (d) of Section 611.7 in the current rule. For clarity, provisions related to the "Before and After" study have been moved to Section 611.211 in the final rule.

#### Section 611.211 New Starts Before and After Study

This section provides the requirements for the "Before and After" study required by statute. In the current regulation, these requirements appear in Section 611.7(c)(4) and (5) and in Section 661.7(d)(7). FTA is adopting the proposal to include in this section a consolidation of these requirements in one place and makes certain other changes to improve clarity. As in the current regulation and as proposed in the NPRM, the purpose of the study in the regulatory language is to assess the impacts of the New Starts project and to compare the costs and impacts of the project with costs and impacts forecast during the planning, engineering, and design of the project. Also in the current regulation and in the NPRM, the regulation requires that a project sponsor produce a plan for the "Before and After" study during engineering. New language adopted from the NPRM specifies in more detail the kind of information to be collected as part of the study, including information on the characteristics of the project and other related changes in the transit system (such as service levels and fares), the capital and operating costs of the project, and the impacts of the project on transit service quality, ridership, and fare levels.

As is generally required by the current regulation and as proposed in the NPRM, the final rule requires that the plan developed during engineering provide for preservation of data on the predicted scope, costs, and ridership; collection of "before" data on the transit system and ridership patterns and travel behavior; documentation of capital costs as the project is built; collection of "after" data two years after the project opens on actual project scope, costs, and ridership; an analysis of the project costs and impacts; and an assessment of the consistency of the forecasts of costs and ridership between those forecast and those actually achieved. FTA received a number of comments on the NPRM suggesting that three years after opening of revenue service would be a more appropriate timeframe to conduct the "after" part of the study. MAP-21 explicitly calls for review after two years, and thus the final rule continues this requirement. The final rule adopts the proposal in the NPRM that the final "Before and After" study report be submitted to FTA within three years of project opening. As in the current regulation, and as proposed in the NPRM, the costs of carrying out the "Before and After" study, including the

necessary data collection, are an eligible expense of the proposed project.

A new requirement that FTA is adopting provides that, before execution of the full funding grant agreement, there must have been satisfactory progress on carrying out the "Before and After" study plan. As in the current regulation and as proposed in the NPRM, the full funding grant agreement would include a requirement that the "Before and After" study plan be carried out during the construction of the project and that FTA may condition receipt of annual funding during a full funding grant agreement on satisfactory execution of the "Before and After" study.

#### Subpart C—Small Starts

As proposed in the NPRM, Subpart C is a completely new subpart laying out the requirements for Small Starts projects. These are projects for new fixed guideways or extensions to existing fixed guideways, or new or extended corridor-based bus rapid transit projects meeting the definitions in law. Small Starts projects must have a capital cost of less than \$250 million and seek less than \$75 million in Small Starts funds.

Because the regulatory framework for Small Starts projects in Subpart C is quite similar to that of the framework in Subpart B for New Starts, this portion of the section-by-section analysis will only highlight differences between Subpart B and Subpart C.

#### Section 611.301 Small Starts Eligibility

As proposed in the NPRM, this section as adopted in the final rule is designed to clarify the basic requirements of what must be accomplished for a project to achieve award of an expedited grant agreement (EGA). This section is nearly identical to Section 611.201 for New Starts in Subpart B, except that this section expands eligibility to corridor-based bus rapid transit systems, requires that a project be a Small Starts project rather than a New Starts project, references the Small Starts evaluation criteria rather than the New Starts evaluation criteria, references an expedited grant agreement rather than a full funding grant agreement, and provides details on project development (rather than on engineering).

#### Section 611.303 Small Starts Project Justification Criteria

This section of the final regulatory text provides that the evaluation of project justification for Small Starts be based on a multiple measure approach

that takes into account each of the criteria specified in law. As now required by MAP-21, this section is similar to Section 611.203 for New Starts in that Small Starts projects are now to be rated on the same six project justification criteria. In addition, Small Starts projects are more likely to be able to take advantage of pre-qualification standards that could lead to automatic ratings given that such automatic ratings would more likely be applicable to smaller projects. That said, the regulatory language on that point is the same as in Section 611.203. As in the parallel Section 611.203 for New Starts, details concerning project justification criteria, the point of comparison for certain incremental measures, and the weights given to the criteria in Section 611.303 for Small Starts can be found in Appendix A and in the revised proposed policy guidance made available today for public review and comment. Thus, it is not necessary to repeat the details on Appendix A and the proposed policy guidance located above in Section 611.203, as the same details apply to Small Starts projects, only to slightly different evaluation criteria.

**Section 611.305 Small Starts Local Financial Commitment Criteria**

As proposed in the NPRM, and adopted in this final rule, this section is nearly identical to the parallel section for New Starts projects in Section 611.205 except that references are made to Small Starts and to the statutory language for Small Starts rather than for New Starts; and (2) the local financial commitment is evaluated based on the year the project is put into operation rather than based on a 20-year planning horizon, as provided for in statute.

As with the parallel section for New Starts, details concerning its proposals

for evaluating local financial commitment were contained in proposed policy guidance made available with the NPRM and in revised proposed policy guidance made available for comment today. This process is similar to that of New Starts, so there is no need for a fuller explanation of the revised proposed policy guidance here.

**Section 611.307 Overall Small Starts Project Ratings**

Because MAP-21 did not make significant changes in the approach for developing an overall Small Starts project rating, this section is made final. In this section: (1) References are made to Small Starts and to the statutory language for Small Starts; (2) references focus on project development; and (3) references are made to expedited grant agreements.

**Section 611.309 Small Starts Process**

As noted above with the New Starts process, MAP-21 made significant changes to the process for developing Small Starts projects. Accordingly, FTA is not finalizing this section at this time. The changes made by MAP-21 will be the subject of subsequent interim policy guidance and rulemaking. This section is being reserved for that rulemaking.

**VI. Regulatory Analysis and Notices**

**A. Executive Orders 13563 and 12866**

Executive Orders 13563 and 12866 direct agencies to propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify); tailor its regulations to impose the least burden on society; and assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory

approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 also emphasizes the importance of harmonizing rules and of promoting flexibility. This final rule has been drafted and reviewed in accordance with the principles set forth in Executive Orders 13563 and 12866.

FTA has determined that this is an “economically significant” rule under Executive Order 12866, as it would affect transfer payments totaling more than \$100 million annually. However, FTA is unable to estimate with precision just how much of the New Starts and Small Starts programs’ roughly \$2 billion in annual transfer payments will be affected by this rule. FTA provides a discussion below of the changes to the types, characteristics, and locations of projects it anticipates due this rule. Separate from its effects on transfer payments, and also discussed in more detail below, this rule makes significant changes to the information that sponsors must provide to FTA so that FTA can evaluate and rate projects. For example, the rule adopts a streamlined and simplified measure for justifying a proposed project’s cost-effectiveness, and it eliminates the requirement to develop a “baseline alternative.” These and other similar changes will enable sponsors to develop the information required by FTA for proposed projects in less time and with fewer resources. The following table summarizes the monetized costs, benefits, and changes in transfers of this rule. The table does not include benefits which may arise due to the potential for accelerated project delivery due to process streamlining or reduced costs due to use of simplified forecasting techniques:

**TOTAL BENEFITS AND COSTS SUMMARY FOR MAJOR CAPITAL INVESTMENTS FINAL RULE OVER TEN YEARS, 2012\$**

	3% Discount rate	7% Discount rate
Total Monetized Benefits .....	\$3.7 M	\$3.2 M
Total Cost .....	0.6 M	0.6 M
Total Net Impact (Benefit—Costs) .....	3.1 M	2.6 M
Changes in Transfer Payments .....	2.2 B	1.8 B

In the NPRM, however, FTA stated that it does not know precisely how much transfer payments would be affected by this rule. The NPRM noted that due to changes in the evaluation criteria, the projects selected for funding by the FTA may change. For example, by adding quantified measures for environmental benefits, projects that

have relatively large amounts of such benefits may be advantaged. On the other hand, the change to the cost-effectiveness measure from cost per hour of travel time savings to cost per trip could advantage projects serving shorter trips and more densely developed areas. For the purposes of the initial regulatory impact analysis in the

NPRM, FTA estimated that the proposals in the rule could affect the allocation of about \$250 million of annual New Starts and Small Starts grant funds. FTA requested public comments on this estimate, as well as specific methods for more precisely estimating the impact of the rule.

FTA received no public comment in response to the NPRM on its preliminary estimate of likely impacts or on the methods for estimating such impacts. Accordingly, and given that the changes made by this final rule to the proposals in the NPRM are unlikely to have a substantial effect on the allocation, FTA adopts \$250 million in annual New Starts and Small Starts allocations as its estimate of likely allocation effects. This is the average value of Federal funding for one New Starts or Small Starts project. FTA believes that the changes in evaluation criteria might result in one different project being recommended for funding each fiscal year.

#### B. Need for Regulation

This final rule is issued pursuant to the requirements first outlined in SAFETEA-LU and continued in MAP-21 that the Secretary promulgate regulations to implement the Small Starts program. The final rule and accompanying revised proposed policy guidance change FTA's implementation of the major capital investment program, primarily by giving the project justification criteria specified in law "comparable, but not necessarily equal weights" as required by Sections 5309 (g)(2)(B)(ii) and (h)(6), improving the measures FTA uses for each of the evaluation criteria specified in law, and streamlining and simplifying the means by which project sponsors develop the data needed by FTA.

The final rule, combined with the revised proposed policy guidance being made available concurrently for public comment, would improve the evaluation of project outcomes in mobility improvements, cost-effectiveness, environmental benefits, land use, economic development, and local financial commitment. The final rule provides for simplified measures of mobility improvements and cost-effectiveness which, while being much less burdensome to calculate than under the former regulation, will still provide for sufficient information about project merit on these metrics. The final rule provides for more detailed quantification of environmental benefits and makes clearer how projects will be evaluated in terms of land use, economic development, and local financial commitment. In addition, the final rule provides for optional quantification of the economic development benefits of projects.

In addition, this rule implements an initiative in the Department of Transportation's (DOT) *Plan for Implementation of Executive Order 13563: Retrospective Review and*

*Analysis of Existing Rules* (<http://regs.dot.gov/docs/RRR-Planfinal-8-20.pdf>). Executive Order 13563 called on agencies to identify rules that may be "outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them \* \* \*." This rule streamlines and simplifies the various means through which project sponsors obtain the information they need to provide to FTA for its evaluation and rating of projects. For example, FTA is allowing project sponsors to use a simplified FTA-developed national model, once available, to estimate ridership rather than standard local travel forecasting models; to use a series of standard factors in a simple spreadsheet to calculate vehicle miles traveled (VMT) and environmental benefits; to no longer require the development of a baseline alternative for calculation of incremental measures; and to expand the use of warrants whereby a project may be able to automatically qualify for a rating if it meets parameters established by FTA.

#### C. Regulatory Evaluation

##### 1. Overview

This regulatory evaluation examines the likely effects of this final rule and the revised proposed policy guidance. The NPRM asked the public for information to help FTA quantify the benefits and costs of the proposed provisions. No such information was provided in the public comments on the NPRM. Nevertheless, FTA has made its best efforts to meet the directive in Executive Order 13563 which states that agencies must "use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible \* \* \*." For provisions in which FTA is unable to provide quantified estimates of benefits and costs due to a lack of information, FTA provides a qualitative discussion of their likely effects.

FTA believes this rule will affect transfer payments totaling at least \$100 million annually. In the NPRM, FTA stated that it did not know precisely how much transfer payments would be affected by the proposed rule and policy guidance. Nevertheless, FTA estimated in the NPRM that the proposals could affect the allocation of about \$250 million of annual New Starts and Small Starts grant funds. FTA requested public comments on this estimate, as well as specific methods for more precisely estimating the impact of the rule. FTA received no public comments in response to the NPRM on its preliminary estimate of likely impacts

or on the methods for estimating such impacts. Accordingly, and given that the changes made by this final rule to the proposals in the NPRM are unlikely to have a substantial effect on the allocation, FTA adopts \$250 million in annual New Starts and Small Starts allocations as its estimate of likely allocation effects. This is the average value of Federal funding for one New Starts or Small Starts project. FTA believes that the changes in evaluation criteria might result in one different project being recommended for funding each fiscal year.

Due to changes in the evaluation criteria adopted by this rule and the policy guidance, the projects selected for funding by FTA may change. For example, by adding quantified measures for environmental benefits, projects that have relatively large amounts of such benefits—which tend to be projects that provide transportation over longer distances—may be advantaged. On the other hand, the change to the cost-effectiveness measure from travel time savings to cost per trip could advantage projects serving shorter trips and more densely developed areas. Since there is so much variation from project to project it is difficult to predict which will be the stronger effect.

In addition, the rule may have the effect of altering the pattern or timing of major transit capital expenditures and changing the allocation of funds by transit agency size. Because smaller scale projects are eligible for funding under Small Starts, smaller transit agencies may now be able to obtain funding from the program where prior to passage of SAFETEA-LU they could not. For example, SAFETEA-LU first made corridor-based bus projects eligible for Small Starts funding when previously only fixed guideway projects were eligible for major capital investment program funding, and MAP-21 continued this eligibility. Fixed guideway projects tend to be costlier than corridor-based bus projects. This eligibility change allows smaller transit agencies with smaller scale projects to obtain funding from the program.

Cost-effectiveness. As proposed in the NPRM, this final rule includes several features designed to assure equity in the distribution of benefits to groups of concern to the Federal government. First, the final rule weights trips taken by transit dependent persons more heavily in the measure for mobility. In that way, projects that provide enhanced accessibility to transit dependent persons will be favored. Second, by replacing travel time savings with trips in the measure of cost-effectiveness, projects that serve more

riders, rather than those that reduce more travel time for riders (which are generally projects serving people making longer trips) are likely to be favored. Riders making longer trips tend to be riders from higher-income suburban communities. Third, by including an assessment of existing affordable housing in the project corridor as a subfactor examined under the land use criterion, projects serving larger numbers of affordable housing units will be advantaged. Finally, by including an assessment under the economic development criterion of local plans and policies to support the maintenance of or an increase in affordable housing in the corridor, the evaluation and rating process recognizes that increasing land values around transit projects can sometimes result in a loss of affordable housing in proximity to the project, thereby reducing the accessibility of the people most in need of service.

Finally, as mentioned above, the rule will reduce the amount of time and resources needed by project sponsor to prepare information for FTA for evaluation and rating. For example, as discussed above, the rule adopts a simplified cost-effectiveness measure allowing for simplified methods for estimating trips on the project and it eliminates the requirement to develop a "baseline alternative" for use as a point of comparison for incremental measures. Also, project sponsors are given the latitude to forego the analysis of benefits that are not relevant to individual projects, which will simplify the project evaluation process, eliminating unnecessary analytical effort on the part of project sponsors. The final rule and revised proposed policy guidance achieve this by allowing for the use of default methods and assumptions whenever possible. The final rule and revised proposed policy guidance defer to project sponsors' decisions to pursue estimation of additional benefits and better ratings through more elaborate analysis.

## 2. Covered Entities

Eligible applicants under the major capital investment program are public entities (transit authorities and other state and local public bodies and agencies thereof) including states, municipalities, other political subdivisions of states; public agencies and instrumentalities of one or more states; and certain public corporations, boards, and commissions established under state law. The majority of applicants to the major capital investment program are transit agencies and other state and local public bodies

such as metropolitan planning organizations or units of city or state governments located in areas with greater than 50,000 in population. These would be the entities most affected by the final rule. Over the past four years, FTA has received approximately 60 applications for entry into one of the various phases of the New and Small Starts process, roughly 40 of which were New Starts projects and 20 of which were Small Starts projects. New Starts projects have tended to be proposed primarily in medium- to large-sized urbanized areas with greater than 500,000 in population. Small Starts projects have been proposed in cities of varying size, including some of the largest urbanized areas in the country, as well as in areas with less than 500,000 in population.

The final rule would affect few, if any, local governments with populations of less than 50,000 people, as jurisdictions proposing New Starts and Small Starts projects are usually much larger in size with more extensive transit service already in place. Transit capital and operating funding for areas with populations less than 50,000 people is generally provided by FTA under a separate formula funding program to the states, which decide how to allocate the funds to the local areas within the state. Yet smaller jurisdictions are not prohibited from applying for major capital investment program funding. To date, FTA has funded only one project in an area under 50,000 in population through the major capital investment program.

Public entities often contract with private entities to prepare the information for ratings of project justification for a proposed project. Private entities, however, are not eligible for New Starts or Small Starts funds.

## 3. Cost-Effectiveness

The FTA regulation for the major capital investment program being replaced by this final rule, and still in effect for the next 90 days, defined cost-effectiveness as the incremental annualized capital and operating cost per incremental hour of transportation system user benefits (essentially travel time savings). The cost and travel time savings of the proposed project were compared to a baseline alternative (usually a lower cost bus project serving similar travel pattern in the corridor).

The breakpoints that FTA used to assign cost-effectiveness ratings under the existing regulation were based on the value of time with a 20 percent upward adjustment to account for congestion benefits and a 100 percent

adjustment to account for non-mobility benefits. U.S. Department of Transportation (USDOT) guidance (*Departmental Guidance for the Valuation of Travel Time in Economic Analysis, April 9, 1997*) describes, in detail, the derivation of the standard values of time to be used by all U.S. DOT Administrations in the economic evaluation of proposed projects. Consistent with this departmental guidance, FTA valued travel time-savings at 50 percent of Median Household Income published by the Census Bureau, divided by 2,000 hours. FTA acknowledged, however, that the time savings for transit users alone does not capture the full range of benefits of major transit projects. Pending improved reliability of the estimates of highway congestion relief, FTA assumed that congestion relief adds about 20 percent to the travel time savings generated by the project. Further, indirect benefits (economic development, safety improvements, pollutant reductions, energy savings, etc.) increase that value. By assuming that indirect benefits were approximately equal to the direct transportation benefits, FTA increased the value of each hour of transit travel time by a factor of two. FTA inflated the breakpoints annually based on the Gross Domestic Product Index (also known as the GDP deflator).

This final rule adopts the NPRM proposal to use a simplified cost-effectiveness measure: Annualized capital and operating cost per trip for New Starts projects and Federal share per trip for Small Starts projects. It also eliminates the requirement for a "baseline alternative" For New Starts projects, project elements that provide benefits not captured in whole by the other New Starts measures would not count as project costs, but would rather be excluded from the cost-effectiveness calculation as "enrichments." Enrichments would include items that are above and beyond the items needed to deliver the mobility benefits and that would not contribute to other benefits such as operating efficiencies. For example, enrichments could include features needed to obtain LEED certification for transit facilities or additional features to provide extra pedestrian access to surrounding development or aesthetically-oriented design features. Finally, to further streamline the evaluation and rating process, FTA is adopting the proposal to allow use of "warrants" to pre-qualify New and Small Starts projects as cost-effective based on their characteristics and/or the characteristics of the corridor

in which they are located. For example, if there is a certain level of transit ridership in the corridor today, and the proposed project falls within total cost and cost per mile parameters defined by FTA, then it would be “warranted” by FTA as cost-effective, it would receive an automatic medium rating on the cost-effectiveness criterion, and the project sponsor would not need to undertake or submit the results of certain analyses.

The net effect of these changes is to reduce the reporting and analytical burden on project sponsors. For example, the analytical design of a hypothetical alternative project is a costly effort that is eliminated in this final rule. Any increased burden would result from project sponsors electing to perform optional additional analysis in support of their projects entirely at their option.

The simplified cost-effectiveness measure proposed may result in different kinds of projects receiving more favorable ratings than under the current approach, which could lead to transfer payments totaling more than \$100 million annually. Some examples are described below:

(a) Under the current approach, which uses “transportation system user benefits” (essentially travel time savings) as the measure of effectiveness, projects that involve longer trips are advantaged because there is more of an opportunity to save time. The revised measure values all trips equally, whether short or long. Thus, projects with shorter trips are likely to fare better than they do under the current measure.

(b) Under the current approach, which requires comparing the project to a baseline alternative to calculate cost-effectiveness, many project sponsors have had difficulty demonstrating sufficient travel time savings as compared to project cost. Further, as noted above, many project sponsors considered the baseline alternative a redundant requirement, since an assessment of alternatives is required in the NEPA process. One result of requiring a baseline alternative, was that project sponsors eliminated stations, shortened platforms, reduced parking, purchased only the number of vehicles needed to meet near term demand rather than longer term demand, etc. to reduce the cost of the build alternative in relation to the baseline alternative.

Often such changes were made in a way that resulted in travel time savings for some riders, but only at the expense of accessibility for other riders. In such cases, this resulted in disproportionate impacts to minority and low-income populations and led to litigation that delayed the projects and caused further

cost increases. To add deferred project scope at a later date is far more costly than if it had been constructed as part of the original project. FTA believes the new measure will help reduce these instances of nearsighted scope changes, given its emphasis on trips rather than travel time savings and its elimination of the baseline alternative point of comparison. FTA notes that excluding “enrichments” from the cost part of the cost-effectiveness calculation does not in and of itself address these issues, since “enrichments” are generally project elements whose benefits do not get adequately captured by the criteria.

#### 4. Economic Development

Currently, FTA evaluates economic development based on the local plans and policies in place to enhance transit oriented development in proximity to the proposed transit stations. In other words, FTA examines through a qualitative assessment, the likelihood the project will foster economic development based on the transit supportive plans and policies in place, including whether increased densities are encouraged in station areas, whether there is a plan for pedestrian and non-motorized travel, whether zoning and parking requirements are in place that would support transit-friendly development, etc. FTA does not specify or require local plans and policies to include specific measures or requirements, but rather examines what the local area has included to see if it is generally transit supportive.

As proposed in the NPRM, the final rule continues to evaluate economic development based on a qualitative assessment of the local transit supportive plans and policies in place, but adds a qualitative assessment of local affordable housing plans and policies to encourage maintenance of or an increase in affordable housing in the corridor. As proposed in the NPRM, FTA is also requiring that project sponsors report under economic development the number of domestic jobs related to project design, construction, and operation, although this figure would not be used for evaluation purposes. Lastly, as proposed in the NPRM and implemented with this final rule, project sponsors have the option of using a scenario approach to characterize and estimate the quantitative impacts of economic development resulting from implementation of the project, including the environmental benefits that would result from such economic development due to agglomeration effects.

The added cost of the additions to the economic development criterion will

likely be marginal because most sponsors already develop this information as part of the local planning process, with the exception of the affordable housing data perhaps. Many project sponsors are pursuing major capital investment projects to facilitate efforts to induce economic development, thus, information pertaining to economic development scenarios and job creation are typically developed during the planning process. With regard to the cost of developing the affordable housing data, it is difficult to be any more precise than to provide a qualitative description. Most studies that have examined the impact of transit lines on affordable housing are largely in line with the general consensus that improving accessibility through the addition of public transit increases housing costs in most, but not all, cases (<http://ctod.org/pdfs/2007TODCaseStudies.pdf>, <http://ctod.org/pdfs/2011R2R.pdf>, and <http://www.ctod.org/portal/node/2163>). It is difficult to generalize the magnitude of the impact. As a result, FTA believes examining the local plans and policies in place to mitigate rising rents and property taxes, and help preserve existing or increase affordable housing near transit, is appropriate to ensure that a share of new development is affordable to low- and moderate-income families.

#### 5. Environmental Benefits

Currently, the environmental benefits of New Start projects are evaluated on the basis of the EPA air quality designation for the metropolitan area. Small Starts projects have not been required to estimate environmental benefits because SAFETEA-LU did not include it as a criterion for Small Starts projects. However, MAP-21 now requires that Small Starts projects be evaluated on environmental benefits as well as New Starts projects.

The NPRM proposed to examine under the environmental benefits criterion the direct and indirect benefits to the natural and human environment, including air quality improvement from changes in vehicular emissions, reduced energy consumption, reduced greenhouse gas emissions, reduced accidents and fatalities, and improved public health (once a measure is developed). The final rule adopts this proposal. The direct benefits are calculated using standard factors from changes in VMT and assigned a dollar value. The dollar value of the benefits is then compared to the annualized capital and operating cost of the project for New Starts projects and, in accordance with MAP-21 requirements,

to the Federal share for Small Starts projects. Project sponsors customarily calculate environmental benefits for transit projects to meet local political needs and for the purpose of the review required by the National Environmental Policy Act. FTA is adopting the simplified approach proposed in the NPRM for developing the newly required information needed for the environmental benefits evaluation and rating—a simple spreadsheet that would perform the calculations using a series of standard factors with only a few pieces of data required as input. Therefore, the proposed calculations will likely not measurably change the analytical and reporting burdens of project sponsors. As noted earlier, quantitative evaluation of environmental benefits is likely to be advantageous to projects that produce significant amounts of VMT reduction. These are likely to be projects that serve longer trips, often suburban commuter trips now made by automobile.

#### 6. Mobility Improvements

Currently, five measures are applied to estimate mobility improvements for New Starts projects: (1) The number of transit trips using the project; (2) the transportation system user benefits per passenger mile on the project; (3) the number of trips by transit dependent riders using the project; (4) the transportation system user benefits of transit dependents per passenger mile on the project; and (5) the share of transportation system user benefits received by transit dependents compared to the share of transit dependents in the region. Transportation system user benefits reflect the improvements in regional mobility (as measured by the weighted in- and out-of-vehicle changes in travel-time to users of the regional transit system) caused by the implementation of the proposed project. The measures are calculated by comparing the proposed project to a baseline alternative, which is usually the “Transportation System Management” (TSM) alternative. Small Starts projects have not been required to estimate mobility improvements because SAFETEA-LU did not include it as a criterion for Small Starts projects. However, MAP-21 now requires that Small Starts projects be evaluated on mobility improvements as well as New Starts projects.

In the NPRM, FTA proposed to use total trips on the project as the measure of mobility, with extra weight given to trips made by transit dependents. Because it is not an incremental measure, no comparison to a baseline

alternative is required. FTA is adopting this proposal.

Under the current approach, which uses “transportation system user benefits” (essentially travel time savings), projects that involve longer trips are advantaged because there is more of an opportunity to save time. The revised measure values all trips equally, whether short or long. Thus, projects with shorter trips are likely to fare better than they do under the current mobility improvements measure. As noted earlier, the quantification of the environmental benefits is likely to favor projects with longer trips. Given the wide variety of projects being evaluated, it is difficult to say with any certainty which effect would be more dominant. Because transit dependent trips are given higher weight in the adopted approach than they are given in the current approach, however, not all projects with shorter trips may fare better.

FTA notes that this change focuses the measure on an assessment of the transit project itself. Under the existing regulation, the cost-effectiveness measure was designed to take into account travel time on both the highway and transit system. However, FTA was unable to effectively include highway user travel times in its analyses because of shortcomings in local travel forecasting models in common use. Thus, in concept, the approach in the existing regulation could have accounted for changes in the transportation system as a whole, including the possible negative impacts of a transit project on highway users, but it could not do so in practice. The change made by this final rule will thus not be any different than the current approach in considering impacts on the transportation system as a whole.

The reporting burden for the mobility improvements measure for New Starts project sponsors will be significantly lowered under the approach adopted by this final rule as compared to the current approach because FTA is developing a simplified national model that would calculate trips rather than having project sponsors spend significant time and effort adjusting their local travel forecasting model to estimate trips on the project. Local models are typically developed by the metropolitan planning organization to forecast regional trips and are not often honed to adequately perform corridor-level analyses. In addition, because development of the baseline alternative is no longer required under the new measure, significant time developing that alternative is no longer required if it is not an alternative local decisions-

makers wish to pursue. For local decision-making purposes, the number of trips made on the project is typically calculated, so the data required by FTA is not considered onerous for either New Starts or Small Starts project sponsors.

#### 7. Operating Efficiencies

The current measure for operating efficiencies is the incremental difference in system-wide operating cost per passenger mile between the proposed project and the baseline alternative. In the NPRM, FTA proposed instead that the measure of operating efficiencies be the change in operating and maintenance cost per “place-mile” compared to either the existing transit system in the current year or, at the discretion of the project sponsor, both the existing transit system in the current year and the no-build transit system in the horizon year. MAP-21 eliminated the operating efficiencies criterion. Thus, FTA is not adopting the measure proposed in the NPRM.

#### 8. Congestion Relief

MAP-21 includes a new project justification criterion for New and Small Starts projects called congestion relief. The final rule includes reference to this criterion, but reserves information on it until future interim proposed policy guidance and rulemaking can be undertaken since it was not included in the NPRM. The burden associated with collecting the information necessary for this new criterion will be discussed in that future rulemaking.

#### 9. Regulatory Evaluation

FTA considered the industry-wide costs and benefits of the NPRM in preparing this final rule. Each is discussed below.

##### a. Costs

Regulatory Familiarization—Although FTA believes the rule will have overall net benefits, project sponsors and their contractors will need to expend resources to read and understand the final rule and policy guidance, and may need to make changes to their existing systems, programs, and procedures in response to the changes made by the rule. FTA estimates it will take project sponsors and their contractors 40 hours on average to perform these tasks. Assuming 100 project sponsors and 100 contractors, and an average hourly wage (including benefits) of \$39.04 for project sponsors and \$37.51 for contractors, FTA estimates a cost of \$306,200 for regulatory familiarization. The hourly wage rates assumed came from the Bureau of Labor Statistics’ 2010

National Compensation Survey and represent the median rates for civil engineers in local government and in private industry, respectively. Civil engineers were chosen as the reference point for simplification purposes and also because that hourly rate was higher than the rate for urban planners, but they are just two of the many professions involved in planning and project development of New and Small Starts projects. FTA expects project sponsors and their contractors to incur these regulation familiarization costs one time only. FTA requested comments on these assumptions and estimates and received no comments. Hence, FTA is adopting these estimates as included in the NPRM.

**Project Information**—The final rule will require project sponsors to submit information on project characteristics that they have not previously been required to submit to FTA. This includes the number of jobs resulting from implementation of the project, the change in environmental benefits resulting from the expected change in VMT, the amount of affordable housing existing in the corridor, and the plans and policies to maintain or increase affordable housing in the future. In general, FTA believes this information can be gathered and estimated rather quickly and easily, and will not require significant additional cost, time, or effort. The number of jobs created is information that project sponsors typically estimate for local decision-makers. FTA expects the data needed for the evaluation of the amount of existing affordable housing in the project corridor will come from census data and the local housing agency. FTA will develop spreadsheets with a number of standard factors to estimate environmental benefits. Project sponsors will be asked only to input a few key variables. FTA estimated the time to prepare the additional information proposed in the NPRM to be at most 40 hours per project, and received no public comment on this estimate. Using the same estimates of the value of time used above, FTA estimates this onetime cost at a total of \$306,200. Therefore, FTA is adopting this estimate in this final rule.

The optional scenario analysis allowed under the economic development criterion may require some time and effort to prepare. But project sponsors may choose to forgo this analysis.

**Disbenefits of Streamlining**—The elimination of the requirement for a baseline alternative and the change in the measures could have disbenefits if the changes resulted in assignment of

inappropriate or inaccurate project ratings. However, FTA believes that the measures being proposed are equally as good as the current measures at providing an accurate and appropriate understanding of the merits of proposed projects. A New Starts ratings process has been in place since 1984, and FTA has gained considerable experience in distinguishing between projects and determining those worthy of Federal assistance. Based on this experience, FTA believes that project utilization is as good, if not better, a metric for assessing project worthiness, than travel time savings, particularly since it involves substantially less resources to develop. Further, the current measure requires comparing the results of two estimates of future system characteristics (the proposed project and the proposed baseline alternative), thereby increasing the opportunity for additional imprecision.

#### b. Benefits

The costs to project sponsors associated with familiarizing themselves with the new regulation and providing FTA additional information for some of the criteria under the final rule compared to the former regulations will likely be counterbalanced by the simplification of methods for generating some of the information needed, as provided in the appendix to the final regulation and the revised proposed policy guidance made available today for public comment. Simplifying rules is a principle in Executive Order 13563. As examples of such simplification:

(a) Under the current rule, project sponsors are required to use local travel forecasts to obtain the information needed for FTA's evaluation of the various project justification criteria. The final rule adopts a number of simpler measures for project justification that will allow project sponsors to use a simplified national model once it is developed by FTA. After the simplified national model is in place, project sponsors may continue to use information generated by local travel forecasts if they believe it will result in a more favorable rating for the proposed project, but it is at the project sponsors' discretion (i.e., not required by regulation or suggested in guidance). FTA expects this change will save project sponsors significant time and resources. It often costs project sponsors from several hundreds of thousands of dollars up to millions of dollars in consultant help and six months or longer to adjust local travel forecasting models to obtain acceptable ridership results for FTA's evaluation and rating purposes. This information is based on

anecdotal reporting by project sponsors to FTA as they complete their analyses. Because of the wide variety of project types, project sponsor experience, the state of local travel demand forecasting models, and other local factors, it is difficult to estimate and summarize these costs into a single annualized value.

(b) Project sponsors would no longer be required to develop a baseline alternative. The process of defining a baseline alternative is an iterative one. By eliminating the need to develop a baseline alternative (which is often not an alternative local decision-makers wish to implement), FTA estimates that up to six months of time could be saved. The cost of this time savings is difficult to estimate, and FTA has not seen any particular data on the estimation, but project sponsors have suggested that each month of delay in implementing a project is roughly \$1 million in additional cost. Delay costs would depend on the size of the project. But even for smaller projects, these increases would come from the need to keep project management staff in place during the extended period of project development as well as increases in project construction costs above inflation.

(c) The expanded use of warrants (a process by which a project can qualify for an automatic rating if it can meet certain FTA defined parameters) would eliminate the need for project sponsors to undertake certain analyses and submit that data to FTA. This can save significant time and money because project sponsors often hire consultants to help undertake the analyses required to develop the data for FTA.

FTA believes the improved measures for cost-effectiveness, environmental benefits, and economic development will reduce the influence of a "one size fits all" evaluation approach that, historically, has favored some transit benefits over others and thereby has minimized locally preferred benefits. For example, by focusing on travel time savings, the current process tends to favor projects in areas with extreme congestion over areas that do not currently have extreme congestion but are planning future transit to keep from becoming mired in extreme congestion. This is because projects in areas with extreme congestion today may be able to show significant travel time savings simply because an additional travel option is offered that may operate on an exclusive guideway separate and apart from the roadway congestion. A similar exclusive guideway project in a non-congested area would not show as much travel time savings when compared to

the baseline alternative (a lower cost bus option) because that baseline bus would not be operating in as congested traffic. Similarly, the focus on travel time savings does not acknowledge that some areas undertake transit projects to encourage development rather than to address mobility challenges. Such projects are often tailored to smaller areas where increasing the number of trips on transit in higher density environments can be much more conducive to encouraging development around such stations. The final rule, with its focus on trips rather than travel time savings as the measure of mobility, acknowledges more varied purposes for undertaking these projects and a different “basket” of transit benefits.

FTA estimates the paperwork burden on project sponsors involved with developing and reporting the information to FTA will be lowered as a result of this final rule based on the above mentioned benefits. FTA estimates a reduction of paperwork burden of \$423,750 in benefits on an annual basis. This estimate is only for the reduced reporting of information resulting from the changes made to the criteria in this rule and does not include the difficult to quantify reduction in burden that would come from use of the FTA developed national simplified model if a sponsor opted to use it.

#### D. Departmental Significance

This final rule is a “significant regulation” as defined by the Department’s Regulatory Policies and Procedures because it implements the Departmental initiative to revise, simplify, and streamline the New Starts and Small Starts processes. The NPRM generated interest from sponsors of major transit capital projects, the general public, and Congress.

#### E. Regulatory Flexibility Act

In accordance with the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, FTA evaluated the likely effects of the proposals contained in this final rule on small entities. Based on this evaluation, FTA believes that the proposals contained in this final rule will not have a significant economic impact on a substantial number of small entities because the proposals concern only New Starts and Small Starts which, by their scale and nature, are not usually undertaken by small entities. FTA sought public comment on this assessment in the NPRM and received no comments.

#### F. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 *et seq.*),

a Federal agency may not conduct or sponsor the collection of information and without first obtaining approval and a control number from the Office of Management and Budget (OMB). FTA has been collecting project evaluation information from project sponsors under the existing OMB approval for this program (OMB No. 2132–0561) entitled “49 CFR Part 611 Major Capital Investment Projects.”

FTA has a longstanding requirement to evaluate proposed projects against a prescribed set of statutory criteria at specific points during the projects’ development. In addition, FTA is required by law to report on its project evaluations and ratings annually to Congress. The Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA) established in law a set of criteria that proposed projects had to meet in order to be eligible for federal funding. The requirement for summary project ratings has been in place since 1998. Thus, the requirements for project evaluation and data collection for New Starts projects are not new. However, one change to the program included in SAFETEA–LU, and continued by MAP–21, is the Small Starts program. The Small Starts program enables smaller cost projects with a smaller requested share of Section 5309 major capital investment funds to be eligible for funding. Additionally, MAP–21 reduces the number of steps in the New and Small Starts process, which reduces the number of times project sponsors must submit information to FTA for evaluation and rating purposes. MAP–21 also increases the number of evaluation criteria for Small Starts projects over what had been included in SAFETEA–LU, but with the streamlined approaches FTA is implementing in this final rule for calculating the criteria, the additional burden associated with those additional criteria is somewhat mitigated.

In general, the information used by FTA for New Starts and Small Starts project evaluation and rating should arise as a part of the normal planning process. But due to modifications in the project evaluation criteria and FTA evaluation and rating procedures in the final rule, some information may be beyond the scope of ordinary planning activities.

Eligible applicants under the major capital investment program are public bodies and agencies (transit authorities and other state and local public bodies and agencies thereof) including states, municipalities, other political subdivisions of states; public agencies and instrumentalities of one or more states; and certain public corporations,

boards, and commissions established under state law. Private corporations and private non-profit entities are not eligible for funding under the program; private corporations such as consulting and engineering and construction firms, however, could be affected by the regulation if they are hired by project sponsors to assist in the development of the data needed by FTA.

FTA evaluates and rates projects in order to: (1) Decide whether proposed projects may advance into certain phases of the process; (2) assign ratings to proposed projects for the *Annual Report on Funding Recommendations*; and (3) develop funding recommendations for the President’s budget. The law also requires that FTA evaluate the performance of the projects funded through the New Starts program in meeting ridership and cost estimates two years after they are opened for service, through implementation of a “Before and After” study requirement. This also helps to evaluate the success of the grant program itself for purposes of the Government Performance and Results Act.

MAP–21 requires New and Small Starts project sponsors to seek approval into the project development phase from FTA, which is the initial step in the process. The contents of the application that will be required with a project sponsor’s request to enter project development and the type of review FTA will perform before giving approval into that phase is not covered in this final rule and will instead be discussed in subsequent rulemaking. However, unlike the requirements of SAFETEA–LU whereby FTA had to evaluate and rate a project before it would be approved into the first phase of the process, MAP–21 does not require that FTA evaluate and rate a project when a sponsor requests entry into project development. Thus, the burden hours associated with developing the application for the initial step in the process will be reduced. While a detailed estimate of the burden hours involved in preparing the materials for entry into project development will be prepared during the subsequent rulemaking process, FTA has included some rough estimates of the burden hours in the analysis included in this final rule, since a good part of the reduction will come from adoption of the revised evaluation criteria, rather than from the changes in the process under MAP–21. FTA will ensure that it does not double count burden hour reductions and cost savings when it produces the regulatory evaluation for the subsequent rulemaking needed to

put into effect the procedural changes made by MAP-21.

MAP-21 requires New Starts project sponsors to submit information to FTA for evaluation and rating purposes when the projects wish to enter the engineering phase of development and when they seek a Full Funding Grant Agreement. Small Starts project sponsors must submit information to FTA for evaluation and rating purposes when the project seeks an Expedited Grant Agreement. Both New and Small Starts project sponsors must submit updated information to FTA if the project scope and cost have changed materially since the last rating was assigned.

FTA needs to have accurate information on the status and projected benefits of proposed New Starts and Small Starts projects on which to base its decisions regarding funding recommendations in the President's budget. As discretionary programs, both the New Starts and Small Starts programs require FTA to identify proposed projects that are worthy of federal investment, and are ready to proceed with project development and construction activities.

FTA has tried to minimize the burden of the collection of information, and requests that project sponsors submit project evaluation data by electronic means. FTA has developed standard format templates for project sponsors to complete that automatically populate data used in more than one form. FTA then uses spreadsheet models to evaluate and rate projects based on the information submitted. FTA is adopting project justification measures in this final rule that will allow for the use of a simplified national model once it is developed to estimate project trips on a project based on simple inputs including census data and project

characteristics. Where and when possible, FTA makes use of the information already collected by New Starts and Small Starts project sponsors as part of the planning process. As each proposed project develops at a different pace, however, FTA has a duty to base its funding decisions on the most recent information available. Project sponsors often find it necessary to develop updated information specifically for purposes of the New Starts or Small Starts program. This is particularly true for the *Annual Report on Funding Recommendations*, which is a supporting document to the President's annual budget request to Congress. To reduce the reporting burden on project sponsors, however, FTA has instituted a policy that Annual Report submissions are only required of projects that are seeking a funding recommendation or have changed significantly in cost or scope from the last evaluation.

FTA estimates current overall New Starts and Small Starts annual paperwork burden hours to be approximately 275 hours for each of the estimated 135 respondents, totaling 37,070 hours and annual costs totaling \$2,780,250. The changes made by MAP-21 to the steps in the process, as well as the changes to the evaluation and rating criteria made in this final rule and accompanying policy guidance reflecting comments received on the NPRM, will modify the time required by project sponsors to prepare and submit applications to FTA. FTA now estimates burden hours would be approximately 242 hours for each of the estimated 130 respondents totaling 31,420 hours and annual costs totaling \$2,356,500. Thus, FTA estimates this rule will reduce annual paperwork burden hours by 5,650 hours and paperwork costs by \$423,750.

As discussed above, MAP-21 includes fewer steps in the process and reduced information at the initial step. Additional information will be required of project sponsors due to the revised measures included in the final rule, but FTA has also adopted simplified methods of data collection and data estimation (e.g., FTA will no longer require sponsors to model a baseline alternative; will allow estimation of project trips using a simplified national model, once developed, rather than local travel forecasting models; and will use standard factoring approaches). Thus, the changes made by MAP-21 and by FTA in this final rule and accompanying policy guidance are estimated to reduce the net paperwork burden for project sponsors. These and other paperwork requirement trade-offs were an express objective in developing this final rule and accompanying policy guidance. The amount of paperwork burden is partially proportionate to the scale of the project and the determination by the project sponsor whether it will choose to develop detailed forecasts of project benefits (instead of the simplified default methods FTA allows in its policy guidance). Such increased burdens are at the sponsor's discretion, rather than a requirement of this final rule or the accompanying policy guidance. Most of the estimated paperwork reduction would be realized when project sponsors are preparing the materials that allow FTA to evaluate and rate the project for the first time, which occurs when a New Starts project sponsor seeks entry into the engineering phase and when a Small Starts project sponsor seeks an expedited grant agreement.

The table below shows the annual project paperwork burden across sponsors of New Starts and Small Starts projects.

TOTAL PROJECT SPONSOR COST AND HOURS

Task	# Annual occurrences	Aver hours per occurrence	Total hours	Total \$
<b>Data Submission, Evaluation, and Ratings</b>				
<b>NEW STARTS</b>				
(A) Project Development Request .....	30	20	600	\$45,000
(B) Engineering Request .....	15	152	2,280	171,000
(C) Annual Report .....	20	40	800	60,000
(D) FFGA Approval .....	5	50	250	18,750
Subtotal .....			3,930	294,750
<b>SMALL STARTS</b>				
(A) Project Development .....	15	25	375	28,125
(B) Annual Report .....	15	25	375	28,125
(C) EGA Approval .....	10	82	820	61,500
Subtotal .....			1,570	117,750
Data Sub, Eval, and Ratings Total .....			5,500	412,500

TOTAL PROJECT SPONSOR COST AND HOURS—Continued

Task	# Annual occurrences	Aver hours per occurrence	Total hours	Total \$
<b>Before and After Data Collection</b>				
<i>NEW STARTS</i>				
(A) Data Collection Plan .....	4	80	320	24,000
(B) Before Data Collection .....	4	3,000	12,000	900,000
(C) Documentation of Forecasts .....	4	160	640	48,000
(D) After Data Collection .....	4	3,000	12,000	900,000
(E) Analysis and Reporting .....	4	240	960	72,000
Before and After Total .....			25,920	1,944,000
<b>TOTAL</b> .....			<b>31,420</b>	<b>2,356,500</b>

The estimates for total number of annual submissions are based on projected annual workload. The estimated average number of hours per task is based on professional judgment of FTA staff. Estimated hourly costs are based on information informally shared by project sponsors and the professional judgment of FTA staff.

Interested parties were invited in the NPRM to send comments regarding any aspect of this information collection, including: (1) The necessity and utility of the information collection for the proper performance of the functions of the FTA; (2) the accuracy of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the collected information; and (4) ways to minimize the collection burden without reducing the quality of the collected information. No comments were received on this analysis.

*G. Executive Order 13132*

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 13132. The final rule implements a discretionary grant program that would make funds available, on a competitive basis, to States, local governments, and transit agencies. The requirements only apply to those entities seeking funds under this chapter, and thus this action would have not substantial direct effects on the States, on the relationship between the Federal government and the States, or on the distribution of power and responsibilities among the various levels of government. FTA has also determined that this action would not preempt any State law or regulation or affect the States' ability to discharge traditional State governmental functions. Based on this analysis, it has been determined that the final rule does not have sufficient Federalism implications to warrant the preparation of a Federalism Assessment. Comment was solicited specifically on the

Federalism implications of this proposal in the NPRM and no comments were received.

*H. National Environmental Policy Act*

FTA has analyzed this action for the purpose of the National Environmental Policy Act of 1969 (42 U.S.C. 4321), and has determined that this action would not have any potentially significant effect on the quality of the environment. This action qualifies for a categorical exclusion under FTA's NEPA regulations at 771.117(c)(20), which covers the "[p]romulgation of rules, regulations, and directives."

*I. Energy Act Implications*

The changes made in this final rule and accompanying guidance would likely have a positive effect on energy consumption because, through the Federal investment in public transportation projects, these projects would increase the use of public transportation.

*J. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

Executive Order 13175 requires agencies to ensure meaningful and timely input from Indian tribal government representatives in the development of rules that "significantly or uniquely affect" Indian communities and that impose "substantial and direct compliance costs" on such communities. In the NPRM, we invited Indian tribal governments to provide comments on the effect that adoption of specific proposals in the NPRM and accompanying guidance may have on Indian communities. No comments were received on this issue.

*K. Unfunded Mandates Reform Act*

This rule will not result in the expenditure by State, local, and tribal governments, in the aggregate, of \$100,000,000 or more in any one year.

*L. Statutory/Legal Authority for This Rulemaking*

This rulemaking is issued under authority of 49 U.S.C. 5334(a)(11), which provides that the Secretary may "issue regulations as necessary to carry out the purposes of [Chapter VI of Title 49, U.S. Code]," and 49 U.S.C. 5309(g)(6), which requires the Secretary to issue regulations "establishing an evaluation and rating process" for new fixed guideway capital projects funded under 49 U.S.C. 5309. The Secretary's authority to issue these regulations is delegated to the Federal Transit Administrator through 49 CFR 1.19(a), the delegation from the Secretary to the Administrator to "carry out" the Federal transit programs authorized by 49 U.S.C. chapter 53.

*M. Regulation Identifier Number (RIN)*

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN number contained in the heading of this document may be used to cross-reference this action with the Unified Agenda.

**List of Subjects in 49 CFR Part 611**

Government contracts, Grant programs-transportation, Mass transportation.

**VII. Regulatory Text**

For the reasons set forth in the preamble, and under the authority of 49 U.S.C. 5309(g)(6) and 5334(a)(11), and the delegations of authority at 49 CFR 1.51, FTA hereby amends Chapter VI of Title 49, Code of Federal Regulations, by revising part 611 as set forth below:

## PART 611—MAJOR CAPITAL INVESTMENT PROJECTS

### Subpart A—General Provisions

Sec.

- 611.101 Purpose and contents
- 611.103 Applicability
- 611.105 Definitions
- 611.107 Relation to the planning processes

### Subpart B—New Starts

- 611.201 New Starts eligibility
- 611.203 New Starts project justification criteria
- 611.205 New Starts local financial commitment criteria
- 611.207 Overall New Starts project ratings
- 611.209 New Starts process
- 611.211 New Starts Before and After study

### Subpart C—Small Starts

- 611.301 Small Starts eligibility
- 611.303 Small Starts project justification criteria
- 611.305 Small Starts local financial commitment criteria
- 611.307 Overall Small Starts project ratings
- 611.309 [Reserved]

Appendix A—Description of Measures Used for Project Evaluation

**Authority:** § 49 U.S.C. 5309(g)(6) and 5334(a)(11); 49 CFR 1.51.

### Subpart A—General Provisions

#### § 611.101 Purpose and contents.

(a) This part prescribes the process that applicants must follow to be considered eligible for fixed guideway capital investment grants for a new fixed guideway, an extension to a fixed guideway, or a corridor-based bus rapid transit system (known as New Starts and Small Starts). Also, this part prescribes the procedures used by FTA to evaluate and rate proposed New Starts projects as required by 49 U.S.C. 5309(d) and Small Starts projects as required by 49 U.S.C. 5309(h).

(b) This part defines how the results of the evaluation described in paragraph (a) of this section will be used to:

(1) Rate projects as “high,” “medium-high,” “medium,” “medium-low” or “low” as required by 49 U.S.C. 5309(g)(2)(A) and 49 U.S.C. 5309(h)(6);

(2) Assign individual ratings for each of the project justification criteria specified in 49 U.S.C. 5309(d)(2)(B) and 49 U.S.C. 5309(h)(6);

(3) Determine project eligibility for Federal funding commitments, in the form of full funding grant agreements (FFGA) for New Starts projects and expedited grant agreements (EGA) for Small Starts projects; and

(4) Support funding recommendations for the New Starts and Small Starts programs for the President’s annual budget request.

(c) The information collected and ratings developed under this part will

form the basis for the *Annual Report on Funding Recommendations*, required by 49 U.S.C. 5309(o)(1).

#### 611.103 Applicability.

(a) This part applies to all proposals for Federal major capital investment funds under 49 U.S.C. 5309 for new fixed guideways, extensions to fixed guideways, and corridor-based bus rapid transit systems.

(b) This part does not apply to projects for which an FFGA or PCGA has already been executed, or to projects that have been approved into final design or project development unless the project sponsor requests to be covered by this part. The regulations in existence prior to the effective date of this rule will continue to apply to projects for which an FFGA or PCGA has already been executed and to projects approved into final design or project development unless a project sponsor requests to be covered by this part. New Starts projects approved for entry into final design shall be considered to be in the engineering phase of the New Starts process.

(c) A New Starts project which has been approved for entry into preliminary engineering under the regulations in existence prior to the effective date of this rule shall be considered to be in the engineering phase of the New Starts process. For the purpose of completing engineering, the regulations in existence prior to the effective date of this rule will continue to apply to a New Starts project approved into preliminary engineering until such time as the sponsor requests an FFGA unless the project sponsor requests to be covered by this part prior to an FFGA.

#### § 611.105 Definitions.

The definitions established by Titles 12 and 49 of the United States Code, the Council on Environmental Quality’s regulation at 40 CFR parts 1500–1508, and FHWA–FTA regulations at 23 CFR parts 450 and 771 are applicable. In addition, the following definitions apply:

*Corridor-based bus rapid transit project* means a bus capital project where the project represents a substantial investment in a defined corridor as demonstrated by features such as park-and-ride lots, transit stations, bus arrival and departure signage, intelligent transportation systems technology, traffic signal priority, off-board fare collection, advanced bus technology, and other features that support the long-term corridor investment.

*Current year* means the most recent year for which data on the existing transit system and demographic data are available.

*Early system work agreement* means a contract, pursuant to the requirements in 49 U.S.C. 5309(k)(3), that allows some construction work and other clearly defined elements of a project to proceed prior to execution of a full funding grant agreement (FFGA). It typically includes a limited scope of work that is less than the full project scope of work and specifies the amount of New Starts funds that will be provided for the defined scope of work included in the agreement.

*EGA means an expedited grant agreement.*

*Engineering* is a phase of development for New Starts projects during which the scope of the proposed project is finalized; estimates of project cost, benefits, and impacts are refined; project management plans and fleet management plans are developed; and final construction plans (including final construction management plans), detailed specifications, final construction cost estimates, and bid documents are prepared. During engineering, project sponsors must obtain commitments of all non-New Starts funding.

*ESWA* means early system work agreement.

*Extension to fixed guideway* means a project to extend an existing fixed guideway or planned fixed guideway.

*FFGA* means a full funding grant agreement.

*Fixed guideway* means a public transportation facility that uses and occupies a separate right-of-way or rail line for the exclusive use of public transportation and other high occupancy vehicles, or uses a fixed catenary system and a right of way usable by other forms of transportation. This includes, but is not limited to, rapid rail, light rail, commuter rail, automated guideway transit, people movers, ferry boat service, and fixed-guideway facilities for buses (such as bus rapid transit) and other high occupancy vehicles. A new fixed guideway means a newly-constructed fixed guideway in a corridor or alignment where no such guideway exists.

*FTA* means the Federal Transit Administration.

*Full funding grant agreement* means a contract that defines the scope of a New Starts project, the amount of New Starts funds that will be contributed, and other terms and conditions.

*Horizon year* means a year roughly 10 years or 20 years in the future, at the

option of the project sponsor. Horizon years are based on available socioeconomic forecasts from metropolitan planning organizations, which are generally prepared in five year increments such as for the years 2020, 2025, 2030, and 2035.

*Locally preferred alternative* means an alternative evaluated through the local planning process, adopted as the desired alternative by the appropriate State and/or local agencies and official boards through a public process and identified as the preferred alternative in the NEPA process.

*Long-range transportation plan* means a financially constrained long-range plan, developed pursuant to 23 CFR Part 450, that includes sufficient financial information for demonstrating that projects can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the Federally supported transportation system is being adequately operated and maintained. For metropolitan planning areas, this would be the metropolitan transportation plan and for other areas, this would be the long-range statewide transportation plan. In areas classified by the Environmental Protection Agency as “nonattainment” or “maintenance” of air quality standards, the long-range transportation plan must have been found by DOT to be in conformity with the applicable State Implementation Plan.

*Major capital transit investment* means any project that involves the construction of a new fixed guideway, extension of an existing fixed guideway, or a corridor-based bus rapid transit system for use by public transit vehicles.

*NEPA process* means those procedures necessary to meet the requirements of the National Environmental Policy Act of 1969 (NEPA), as amended, at 23 CFR Part 771; the NEPA process is completed when the project receives a categorical exclusion, a Finding of No Significant Impact (FONSI) or a Record of Decision (ROD).

*New Starts* means a new fixed guideway project, or a project that is an extension to an existing fixed guideway, that has a total capital cost of \$250,000,000 or more or for which the project sponsor is requesting \$75,000,000 or more in New Starts funding.

*New Starts funds* mean funds granted by FTA for a New Starts project pursuant to 49 U.S.C. 5309(d).

*No-build alternative* means an alternative that includes only the current transportation system as well as

the transportation investments committed in the Transportation Improvement Plan (TIP) (when the horizon year is 10 years in the future) or the fiscally constrained long-range transportation plan (when the horizon year is 20 years in the future) required by 23 CFR Part 450.

*Secretary* means the Secretary of Transportation.

*Small Starts* means a new fixed guideway project, a project that is an extension to an existing fixed guideway, or a corridor-based bus rapid transit system project, with a total capital cost of less than \$250,000,000 and for which the project sponsor is requesting less than \$75,000,000 in Small Starts funding.

*Small Starts funds* mean funds granted by FTA for a Small Starts project pursuant to 49 U.S.C. 5309(h).

*Small Starts project development* is a phase in the Small Starts process during which the scope of the proposed project is finalized; estimates of project costs, benefits and impacts are refined; NEPA requirements are completed; project management plans and fleet management plans are further developed; and the project sponsors obtains commitment of all non-Small Starts funding. It also includes (but is not limited to) the preparation of final construction plans (including construction management plans), detailed specifications, construction cost estimates, and bid documents.

#### **§ 611.107 Relation to the planning processes.**

All New Starts and Small Starts projects proposed for funding assistance under this part must emerge from the metropolitan and Statewide planning process, consistent with 23 CFR part 450, and be included in the fiscally constrained long-range transportation plan required under 23 CFR part 450.

#### **Subpart B—New Starts**

##### **§ 611.201 New Starts eligibility.**

(a) To be eligible for an engineering grant under this part for a new fixed guideway or an extension to a fixed guideway, a project must:

(1) Be a New Starts project as defined in § 611.105; and

(2) Be approved into engineering by FTA pursuant to § 611.209.

(b) To be eligible for a construction grant under section 5309 for a new fixed guideway or extension to a fixed guideway, a project must:

(1) Be a New Starts project as defined in § 611.105;

(2) Have completed engineering;

(3) Receive a “medium” or better rating on project justification pursuant to § 611.203;

(4) Receive a “medium” or better rating on local financial commitment pursuant to § 611.205;

(5) Meet the other requirements of 49 U.S.C. 5309.

##### **§ 611.203 New Starts project justification criteria.**

(a) To perform the statutorily required evaluations and assign ratings for project justification, FTA will evaluate information developed locally through the planning and NEPA processes.

(1) The method used by FTA to evaluate and rate projects will be a multiple measure approach by which the merits of candidate projects will be evaluated in terms of each of the criteria specified by this section.

(2) The measures for these criteria are specified in appendix A to this part and elaborated on in policy guidance. This policy guidance, which is subject to a public comment period, is issued periodically by FTA whenever significant changes to the process are proposed, but not less frequently than every two years, as required by 49 U.S.C. 5309(g)(5).

(3) The measures will be applied to projects defined by project sponsors that are proposed to FTA for New Starts funding.

(4) The ratings for each of the criteria in § 611.203(b)(1) through (6) will be expressed in terms of descriptive indicators, as follows: “high,” “medium-high,” “medium,” “medium-low,” or “low.”

(b) The project justification criteria are as follows:

(1) Mobility improvements.

(2) Environmental benefits.

(3) Congestion relief.

(4) Economic development effects.

(5) Cost-effectiveness, as measured by cost per rider.

(6) Existing land use.

(c) In evaluating proposed New Starts projects under these project justification criteria:

(1) As a candidate project proceeds through engineering, a greater level of commitment will be expected with respect to transit supportive plans and policies evaluated under the economic development criterion and the project sponsor’s technical capacity to implement the project.

(2) For any criteria under paragraph (b) of this section that use incremental measures, the point for comparison will be the no-build alternative.

(d) FTA may amend the measures for these project justification criteria. Any such amendment will be included in

policy guidance and subject to a public comment process.

(e) From time to time FTA may publish through policy guidance standards based on characteristics of projects and/or corridors to be served. If a proposed project can meet the established standards, FTA may assign an automatic rating on one or more of the project justification criteria outlined in this section.

(f) The individual ratings for each of the criteria described in this section will be combined into a summary project justification rating of “high,” “medium-high,” “medium,” “medium-low,” or “low,” through a process that gives comparable, but not necessarily equal, weight to each criterion. The process by which the project justification rating will be developed, including the assigned weights, will be described in policy guidance.

**§ 611.205 New Starts local financial commitment criteria.**

In order to approve a grant under 49 U.S.C. 5309 for a New Starts project, FTA must find that the proposed project is supported by an acceptable degree of local financial commitment, as required by 49 U.S.C. 5309(d)(4)(iv). The local financial commitment to a proposed project will be evaluated according to the following measures:

(a) The proposed share of the project’s capital costs to be funded from sources other than New Starts funds, including both the non-New Starts match required by Federal law and any additional state, local or other Federal capital funding (also known as “overmatch”);

(b) The current capital and operating financial condition of the project sponsor;

(c) The commitment of capital and operating funds for the project and the entire transit system including consideration of private contributions; and

(d) The accuracy and reliability of the capital and operating costs and revenue estimates and the financial capacity of the project sponsor.

(e) From time to time FTA may publish through policy guidance standards based on characteristics of projects and/or corridors to be served. If a proposed project can meet the established standards, FTA may assign an automatic rating on one or more of the local financial commitment criteria outlined in this section.

(f) As a candidate project proceeds through engineering, a greater level of local financial commitment will be expected.

(g) FTA may amend the measures for these local financial commitment

criteria. Any such amendment will be included in policy guidance and subject to a public comment process.

(h) For each proposed project, ratings for paragraphs (a) through (d) of this section will be reported in terms of descriptive indicators, as follows: “high,” “medium-high,” “medium,” “medium-low,” or “low.” For paragraph (a) of this section, the percentage of New Starts funding sought from 49 U.S.C. 5309 will be rated and used to develop the summary local financial commitment rating, but only if it improves the rating and not if it worsens the rating.

(i) The ratings for each measure described in this section will be combined into a summary local financial commitment rating of “high,” “medium-high,” “medium,” “medium-low,” or “low.” The process by which the summary local financial commitment rating will be developed, including the assigned weights to each of the measures, will be described in policy guidance.

**§ 611.207 Overall New Starts project ratings.**

(a) [Reserved]

(b) FTA will assign overall project ratings to each proposed project of “high,” “medium-high,” “medium,” “medium-low,” or “low” as required by 49 U.S.C. 5309(g)(2)(A).

(1) These ratings will indicate the overall merit of a proposed New Starts project at the time of evaluation.

(2) Ratings for individual projects will be developed upon entry into engineering and prior to an FFGA. Additionally, ratings may be updated while a project is in engineering if the project scope and cost have changed materially since the most recent rating was assigned.

(c) These ratings will be used to:

(1) Approve or deny advancement of a proposed project into engineering ;

(2) Approve or deny projects for ESWAs and FFGAs; and

(3) Support annual funding recommendations to Congress in the *Annual Report on Funding Recommendations* required by 49 U.S.C. 5309(o)(1).

(d) [Reserved]

**§ 611.209 [Reserved]**

**§ 611.211 New Starts Before and After study.**

(a) During engineering, project sponsors shall submit to FTA a plan for collection and analysis of information to identify the characteristics, costs, and impacts of the New Starts project and the accuracy of the forecasts prepared during development of the project.

(1) The Before and After study plan shall consider:

(i) Characteristics including the physical scope of the project, the service provided by the project, any other changes in service provided by the transit system, and the schedule of transit fares;

(ii) Costs including the capital costs of the project and the operating and maintenance costs of the transit system in appropriate detail; and

(iii) Impacts including changes in transit service quality, ridership, and fare levels.

(2) The plan shall provide for:

(i) Documentation and preservation of the predicted scope, service levels, capital costs, operating costs, and ridership of the project;

(ii) Collection of “before” data on the transit service levels and ridership patterns of the current transit system including origins and destinations, access modes, trip purposes, and rider characteristics;

(iii) Documentation of the actual capital costs of the as-built project;

(iv) Collection of “after” data two years after opening of the project, including the analogous information on transit service levels and ridership patterns, plus information on operating costs of the transit system in appropriate detail;

(v) Analysis of the costs and impacts of the project; and

(vi) Analysis of the consistency of the predicted and actual characteristics, costs, and impacts of the project and identification of the sources of any differences.

(vii) Preparation of a final report within three years of project opening to present the actual characteristics, costs, and impacts of the project and an assessment of the accuracy of the predictions of these outcomes.

(3) For funding purposes, preparation of the plan for collection and analysis of data is an eligible part of the proposed project.

(b) The FFGA will require implementation of the plan prepared in accordance with paragraph (a) of this section.

(1) Satisfactory progress on implementation of the plan required under paragraph (a) of this section shall be a prerequisite to approval of an FFGA.

(2) For funding purposes, collection of the “before” data, collection of the “after” data, and the development and reporting of findings are eligible parts of the proposed project.

(3) FTA may condition receipt of funding provided for the project in the FFGA upon satisfactory submission of the report required under this section.

**Subpart C—Small Starts****§ 611.301 Small Starts eligibility.**

(a) To be eligible for a project development grant under this part for a new fixed guideway, an extension to a fixed guideway, or a corridor-based bus rapid transit system, a project must:

(1) Be a Small Starts project as defined in § 611.105; and

(2) Be approved into project development by FTA pursuant to § 611.309.

(b) To be eligible for a construction grant under this part for a new fixed guideway, an extension to a fixed guideway, or a corridor-based bus rapid transit system, a project must:

(1) Be a Small Starts project as defined in § 611.105;

(2) Receive a “medium” or better rating on project justification pursuant to § 611.303;

(3) Receive a “medium” or better rating on local financial commitment pursuant to Sec. 611.305; and

(4) Meet the other requirements of 49 U.S.C. 5309.

**§ 611.303 Small Starts project justification criteria.**

(a) To perform the statutorily required evaluations and assign ratings for project justification, FTA will evaluate information developed locally through the planning, NEPA and project development processes.

(1) The method used by FTA to evaluate and rate projects will be a multiple measure approach by which the merits of candidate projects will be evaluated in terms of each of the criteria specified by this section.

(2) The measures for these criteria are specified in Appendix A and elaborated on in policy guidance. This policy guidance, which is subject to a public comment period, is issued periodically by FTA whenever significant changes are proposed, but not less frequently than every two years, as required by 49 U.S.C. 5309(g)(5).

(3) The measures will be applied to projects defined by project sponsors that are proposed to FTA for Small Starts funding.

(4) The ratings for each of the criteria in § 611.303(b)(1) through (6) will be expressed in terms of descriptive indicators, as follows: “high,” “medium-high,” “medium,” “medium-low,” or “low.”

(b) The project justification criteria are as follows:

(1) Cost-effectiveness, as measured by cost per rider.

(2) Economic development effects.

(3) Existing land use.

(4) Mobility improvements.

(5) Environmental benefits.

(6) Congestion relief.

(c) In evaluating proposed Small Starts projects under these criteria:

(1) As a candidate project proceeds through project development, a greater level of commitment will be expected with respect to transit supportive land use plans and policies and the project sponsor’s technical capacity to implement the project.

(2) For any criteria under paragraph (b) of this section that use incremental measures, the point for comparison will be the no-build alternative.

(d) FTA may amend the measures for these project justification criteria. Any such amendment will be included in policy guidance and subject to a public comment process.

(e) From time to time FTA may publish through policy guidance standards based on characteristics of projects and/or corridors to be served. If a proposed project can meet the established standards, FTA may assign an automatic rating on one or more of the project justification criteria outlined in this section.

(f) The individual ratings for each of the criteria described in this section will be combined into a summary project justification rating of “high,” “medium-high,” “medium,” “medium-low,” or “low” through a process that gives comparable, but not necessarily equal, weight to each criterion. The process by which the project justification rating will be developed, including the assigned weights, will be described in policy guidance.

**§ 611.305 Small Starts local financial commitment criteria.**

In order to approve a grant under 49 U.S.C. 5309 for a Small Starts project, FTA must find that the proposed project is supported by an acceptable degree of local financial commitment, as required by 49 U.S.C. 5309(h)(3)(c). The local financial commitment to a proposed project will be evaluated according to the following measures:

(a) The proposed share of the project’s capital costs to be funded from sources other than Small Starts funds, including both the non-Small Starts match required by Federal law and any additional state, local, or other Federal capital funding (known as “overmatch”);

(b) The current capital and operating financial condition of the project sponsor;

(c) The commitment of capital and operating funds for the project and the entire transit system including consideration of private contributions; and

(d) The accuracy and reliability of the capital and operating costs and revenue estimates and the financial capacity of the project sponsor.

(e) From time to time FTA may publish through policy guidance standards based on characteristics of projects and/or the corridors to be served. If a proposed project can meet the established standards, FTA may assign an automatic rating on one or more of the local financial commitment criteria outlined in this section.

(f) FTA may amend the measures for these local financial commitment criteria. Any such amendment will be included in policy guidance and subject to a public comment process.

(g) As a candidate project proceeds through project development, a greater level of local financial commitment will be expected.

(h) For each proposed project, ratings for paragraphs (a) through (d) of this section will be reported in terms of descriptive indicators, as follows: “high,” “medium-high,” “medium,” “medium-low,” or “low.” For paragraph (a) of this section, the percentage of Small Starts funding sought from 49 U.S.C. 5309 will be rated and used to develop the summary local financial commitment rating, but only if it improves the rating and not if it worsens the rating.

(i) The ratings for each measure described in this section will be combined into a summary local financial commitment rating of “high,” “medium-high,” “medium,” “medium-low,” or “low.” The process by which the summary local financial commitment rating will be developed, including the assigned weights to each of the measures, will be described in policy guidance.

**§ 611.307 Overall Small Starts project ratings.**

(a) The summary ratings developed for project justification and local financial commitment (§§ 611.303(f) and 611.305(i)) will form the basis for the overall rating for each project.

(b) FTA will assign overall project ratings to each proposed project of “high,” “medium-high,” “medium,” “medium-low,” or “low,” as required by 49 U.S.C. 5309(e)(8).

(1) These ratings will indicate the overall merit of a proposed Small Starts project at the time of evaluation.

(2) Ratings for individual projects will be developed prior to an EGA.

(c) These ratings will be used to:

(1) Approve or deny projects for EGAs; and

(2) Support annual funding recommendations to Congress in the

*Annual Report on Funding Recommendations* required by 49 U.S.C. 5309(k)(1).

(d) FTA will assign overall ratings for proposed Small Starts projects by averaging the summary ratings for project justification and local financial commitment. When the average of these ratings is unclear (e.g., summary project justification rating of “medium-high” and summary local financial commitment rating of “medium”), FTA will round up the overall rating to the higher rating except in the following circumstances:

(1) A “medium” overall rating requires a rating of at least “medium” on both project justification and local financial commitment.

(2) If a project receives a “low” rating on either project justification or local financial commitment, the overall rating will be “low.”

#### § 611.309 [Reserved]

### Appendix A to Part 611—Description of Measures Used for Project Evaluation

#### Project Justification

##### *New Starts*

##### *New Starts Project Justification*

FTA will evaluate candidate New Starts projects according to the six project justification criteria established by 49 U.S.C. 5309(d)(2)(A)(iii). From time to time, but not less frequently than every two years as directed by 49 U.S.C. 5309(g)(5), FTA publishes for public comment policy guidance on the application of these measures, and the agency expects it will continue to do so. Moreover, FTA may choose to amend these measures, pending the results of ongoing studies regarding transit benefit and cost evaluation methods. In addition, FTA may establish warrants for one or more of these criteria through which an automatic rating would be assigned based on the characteristics of the project and/or its corridor. FTA will develop these warrants based on analysis of the features of projects and/or corridor characteristics that would produce satisfactory ratings on one or more of the criteria. Such warrants would be included in policy guidance issued for public comment before being finalized.

(a) *Definitions.* In this Appendix, the following definitions apply:

(1) *Enrichments* mean certain improvements to the transit project desired by the grant recipient that are non-integral to the basic functioning of the project, whose benefits are not captured in whole by other criteria, and are carried out simultaneous with grant execution and may be included in the Federal grant. Enrichments include but are not limited to artwork, landscaping, and bicycle and pedestrian improvements such as sidewalks, paths, plazas, site and station furniture, site lighting, signage, public artwork, bike facilities, and permanent fencing. Enrichments also include sustainable building design features of up to

2.5 percent of the total cost of the facilities (when such facilities are designed to achieve a third-party certification or to optimize a building’s design to use less energy, water and reduce greenhouse gas emissions that may not lead directly to an official certification).

(2) *Transit dependent person as used in this context* means either a person from a household that owns no cars or a person whose household income places them in the lowest income stratum of the local travel demand model. For those project sponsors choosing to use the simplified national model “transit dependent persons” will be defined as individuals residing in households that do not own a car. Project sponsors that choose to continue to use their local travel model rather than the FTA developed simplified national model to estimate trips will define transit dependent persons as individuals in the lowest socioeconomic stratum as defined in the local model, which is usually either households with no cars or households in the lowest locally defined income bracket.

(3) *Trips* mean linked trips riding on any portion of the New Starts or Small Starts project.

(b) *Mobility Improvements.* (1) The total number of trips using the proposed project. Extra weight may be given to trips that would be made on the project by transit dependent persons in the current year, and, at the discretion of the project sponsor, in the horizon year. The method for assigning extra weight is set forth in policy guidance. (2) If the project sponsor chooses to consider project trips in the horizon year in addition to the current year, trips will be based on the weighted average of current year and horizon year.

(c) *Environmental Benefits.* (1) The monetized value of the anticipated direct and indirect benefits to human health, safety, energy, and the air quality environment that are expected to result from implementation of the proposed project compared to: (i) The existing environment with the transit system in the current year or, (ii) at the discretion of the project sponsor, both the existing environment with the transit system in the current year and the no-build environment and transit system in the horizon year. The monetized benefits will be divided by the annualized capital and operating cost of the New Starts project, less the cost of enrichments.

(2) Environmental benefits used in the calculation would include:

- (i) Change in air quality criteria pollutants,
- (ii) Change in energy use,
- (iii) Change in greenhouse gas emissions and

(iv) Change in safety,

(3) If the project sponsor chooses to consider environmental benefits in the horizon year in addition to the current year, environmental benefits will be based on the weighted average of current year and horizon year.

(d) *Congestion Relief.* [Reserved]

(e) *Cost-effectiveness.* (1) The annualized cost per trip on the project, where cost includes changes in capital, operating, and maintenance costs, less the cost of enrichments, compared to:

(i) The existing transit system in the current year, or

(ii) At the discretion of the project sponsor, both the existing transit system in the current year and the no-build transit system in the horizon year.

(2) If the project sponsor chooses to consider cost-effectiveness in the horizon year in addition to the current year, cost-effectiveness will be based on the weighted average of current year and horizon year.

(f) *Existing Land Use.* (1) Existing corridor and station area development;

(2) Existing corridor and station area development character;

(3) Existing station area pedestrian facilities, including access for persons with disabilities;

(4) Existing corridor and station area parking supply; and

(5) Existing affordable housing in the project corridor.

(g) *Economic Development.* (1) The extent to which a proposed project is likely to enhance additional, transit-supportive development based on a qualitative assessment of the existing local plans and policies to support economic development proximate to the project including:

(i) Growth management plans and policies;

(ii) Local plans and policies in place to support maintenance of or increases to affordable housing in the project corridor; and

(iii) Demonstrated performance and impact of policies.

(2) At the option of the project sponsor, an additional quantitative analysis (scenario-based estimate) of indirect changes in VMT resulting from changes in development patterns that are anticipated to occur with implementation of the proposed project. The resulting environmental benefits from the indirect VMT would be calculated, monetized, and compared to the annualized capital and operating cost of the New Starts project in a manner similar to that under the environmental benefits criterion. Such benefits are not included in the environmental benefits measure.

#### *New Starts Local Financial Commitment*

From time to time, but not less than frequently than every two years as directed by U.S.C. 5309(g)(5), FTA publishes policy guidance on the application of these measures, and the agency expects it will continue to do so. Moreover, FTA may choose to amend these measures, pending the results of ongoing studies. In addition, FTA may establish warrants for one or more of these criteria through which an automatic rating would be assigned based on the characteristics of the project and/or its corridor. FTA will develop these warrants based on analysis of the features of projects and/or corridor characteristics that would produce satisfactory ratings on one or more of the criteria. Such warrants would be included in draft policy guidance issued for comment before being finalized.

FTA will use the following measures to evaluate the local financial commitment of a proposed New Starts project:

(a) The proposed share of total project costs from sources other than New Starts funds,

including other Federal transportation funds and the local match required by Federal law;

(b) The current financial condition, both capital and operating, of the project sponsor;

(c) The commitment of funds for both the proposed project and the ongoing operation and maintenance of the existing transit system once the project is built including consideration of private contributions.

(d) The reasonableness of the financial plan, including planning assumptions, cost estimates, and the capacity to withstand funding shortfalls or cost overruns.

#### *Small Starts*

##### Small Starts Project Justification

FTA will evaluate candidate Small Starts projects according to the six project justification criteria established by 49 U.S.C. 5309(h)(4). From time to time, but not less than frequently than every two years as directed by 49 U.S.C. 5309(g)(5), FTA publishes for public comment policy guidance on the application of these measures. Moreover, FTA may choose to amend these measures, pending the results of ongoing studies regarding transit benefit and cost evaluation methods. In addition, FTA may establish warrants for one or more of these criteria through which an automatic rating would be assigned based on the characteristics of the project and/or its corridor. Such warrants would be included in the policy guidance so that they may be subject to public comment.

(a) *Mobility Improvements.* (1) The total number of trips using the proposed project with extra weight given to trips that would be made on the project by transit dependent persons in the current year, and, at the discretion of the project sponsor, in the horizon year.

(2) If the project sponsor chooses to consider project trips in the horizon year in addition to the current year, trips will be based on the weighted average of current year and horizon year.

(b) *Environmental Benefits.* (1) The monetized value of the anticipated direct and indirect benefits to human health, safety, energy, and the air quality environment that are expected to result from implementation of the proposed project compared to:

(i) The existing environment with the transit system in the current year or,

(ii) At the discretion of the project sponsor, both the existing environment with the transit system in the current year and the no-build environment and transit system in the

horizon year. The monetized benefits will be divided by the annualized federal share of the project.

(2) Environmental benefits used in the calculation would include:

(i) Change in air quality criteria pollutants,  
(ii) Change in energy use,  
(iii) Change in greenhouse gas emissions,  
and

(iv) Change in safety.

(3) If the project sponsor chooses to consider environmental benefits in the horizon year in addition to the current year, environmental benefits will be based on the weighted average of current year and horizon year.

(c) *Congestion Relief.* [Reserved]

(d) *Cost-effectiveness.* (1) The annualized federal share per trip on the project where federal share includes funds from the major capital investment program as well as other federal funds, compared to:

(i) The existing transit system in the current year, or

(ii) At the discretion of the project sponsor, both the existing transit system in the current year and the no-build transit system in the horizon year.

(2) If the project sponsor chooses to consider cost-effectiveness in the horizon year in addition to the current year, cost-effectiveness will be based on the weighted average of current year and horizon year.

(e) *Existing Land Use.* (1) Existing corridor and station area development;

(2) Existing corridor and station area development character;

(3) Existing station area pedestrian facilities, including access for persons with disabilities;

(4) Existing corridor and station area parking supply; and

(5) Existing affordable housing in the project corridor.

(f) *Economic Development.* (1) The extent to which a proposed project is likely to enhance additional, transit-supportive development based on the existing plans and policies to support economic development proximate to the project including:

(i) Growth management plans and policies;

(ii) Policies in place to support maintenance of or increases to the share of affordable housing in the project corridor; and

(iii) Demonstrated performance and impact of policies.

(2) At the option of the project sponsor, an additional quantitative analysis (scenario-based estimate) to estimate indirect changes

in VMT resulting from changes in development patterns that are anticipated to occur with implementation of the proposed project. The resulting environmental benefits would be calculated, monetized, and compared to the annualized federal share of the project.

##### Small Starts Local Financial Commitment

If the Small Starts project sponsor can demonstrate the following, the project will qualify for a highly simplified financial evaluation:

(a) A reasonable plan to secure funding for the local share of capital costs or sufficient available funds for the local share;

(b) The additional operating and maintenance cost to the agency of the proposed Small Starts project is less than 5 percent of the project sponsor's existing operating budget; and

(c) The project sponsor is in reasonably good financial condition, as demonstrated by the past three years' audited financial statements.

Small Starts projects that meet these measures and request greater than 50 percent Small Starts funding would receive a local financial commitment rating of "Medium." Small Starts projects that request 50 percent or less in Small Starts funding would receive a "High" rating for local financial commitment.

FTA will use the following measures to evaluate the local financial commitment to a proposed Small Starts project if it cannot meet the conditions listed above:

(a) The proposed share of total project costs from sources other than Small Starts funds, including other Federal transportation funds and the local match required by Federal law;

(b) The current financial condition, both capital and operating, of the project sponsor;

(c) The commitment of funds for both the proposed project and the ongoing operation and maintenance of the project sponsor's system once the project is built.

(d) The reasonableness of the financial plan, including planning assumptions, cost estimates, and the capacity to withstand funding shortfalls or cost overruns.

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