

Contractor Performance Assessment Report

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Introduction

49 U.S.C. Section 5309, as amended by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), emphasizes the need to improve the quality of the estimates of ridership and costs used to support funding decisions. To help fulfill this goal, under section 5309(1)(2) the Federal Transit Administration (FTA) is required to publish an annual report that documents and analyzes the performance of contractors developing cost and ridership estimates to support decision-making for New Starts projects. The intent of this requirement is to provide incentives to contractors to produce accurate forecasts at major milestones in a project's development, particularly those that support the local decision at the conclusion of alternatives analysis.

Section 5309(1)(2) provides as follows:

(2) CONTRACTOR PERFORMANCE ASSESSMENT REPORT.

(A) IN GENERAL. Not later than 180 days after the enactment of the Federal Public Transportation Act of 2005, and each year thereafter, the Secretary shall submit to the committees referred to in subsection (k)(1) a report analyzing the consistency and accuracy of cost and ridership estimates made by each contractor to public transportation agencies developing new fixed guideway capital projects.

(B) CONTENTS. The report submitted under subparagraph (A) shall compare the cost and ridership estimates made at the time projects are approved for entrance into preliminary engineering with

(i) estimates made at the time projects are approved for entrance into final design;

(ii) costs and ridership when the project commences revenue operation; and

(iii) costs and ridership when the project has been in operation for 2 years.

(C) CONSIDERATIONS. In making comparisons under subparagraph (B), the Secretary shall consider factors having an impact on costs and ridership not under the control of the contractor. The Secretary shall also consider the role taken by each contractor in the development of the project.

The Contractor Performance Assessment Report requirement is representative of a major theme in SAFETEA-LU that the reliability of planning information is critical for decision-making. This theme is reiterated in several other sections of the Act, such as: 1) section 5309(g)(2)(C), which incorporates the FTA guidance for Before and After Studies into law; 2) section 5309(d)(3)(B), which requires FTA to evaluate the reliability and accuracy of recipients forecasting as part of the New Starts rating criteria; and, 3) sections 5309(h)(3) and 5309(l)(3), which establish various incentive provisions for recipients to produce accurate ridership and cost estimates.

This document constitutes the first annual Contractor Performance Assessment Report due to Congress. For reasons explained in detail below, this initial report does not include any analysis of the consistency and accuracy of cost and ridership estimates for particular projects but, instead, provides the framework that FTA will use for preparing yearly reports in the future, which will contain information on particular projects.

1 Approach to the Contractor Performance Assessments

As this is a new statutory requirement, FTA will initiate contractor performance assessments on those projects that enter preliminary engineering after the publication of FTA's Guidance on New Starts Policy and Procedures (published on May 22, 2006). Thus, FTA will not evaluate the performance of consultants who prepare ridership and cost estimates for projects which are currently in preliminary engineering and beyond. As a result, this report is limited to describing the procedures to be used for these future assessments.

FTA is applying the requirement prospectively for several reasons. First is an issue of fairness. Given the potential monetary impact that a favorable or unfavorable assessment could entail, consultants should have prior notice of the requirement. Second, FTA believes that it is difficult to assess a contractor's performance if the contractor has not provided certain information (assumptions, reliance on data and input from other parties) in advance of the assessment. In those instances when actual or currently projected ridership and costs vary significantly from earlier estimates, contractors may be hesitant to provide information not previously required.

FTA is cognizant of the fact that contractors play a limited role in the development of cost and ridership forecasts. This fact is also recognized in Section 5309(1)(2)(C). Contractors generally make extensive use of information and other forecasts and estimates provided by project sponsors, Metropolitan Planning Organizations (MPOs), and other local agencies. Therefore FTA will require that the responsibilities of all entities involved in these forecasts be identified in order to better assess the context of the contractor's involvement. FTA is also encouraging contractors to perform an uncertainty analysis for these forecasts. The availability of such an analysis would be taken into account by FTA in its assessments.

Finally, FTA will not conduct a contractor performance assessment for Very Small Starts since such projects are expected to be pre-qualified based on meeting certain easily calculated ridership and cost criteria and not based on an extensive analysis by contractors.

2 Reporting Times

For both the Contractor Performance Assessment Report and the Before and After Studies, FTA intends to evaluate cost and ridership estimates at the key decision-making points and compare these estimates to actual results after the project has been completed. FTA intends to track the information for these two efforts together since the information and time periods of analysis are similar. The reporting milestones for cost and ridership forecasts and for identifying the parties responsible for the inputs and estimates will be:

1. Entry into preliminary engineering;
2. Entry into final design;
3. Signing of a Full Funding Grant Agreement (FFGA) or Project Construction Grant Agreement ; and,
4. Two years after starting revenue service.

The first three milestones correspond to key decision points for FTA and the project sponsors. The ability to make sound decisions about the allocation of public funds depends on the reliability of the information used to make those decisions. The final milestone occurs when FTA is able to assess the contractor's performance against the actual costs incurred to construct the project and compare the opening year ridership forecasts to the actual results.

3 Information to Track

The information that FTA will need to analyze contractor performance essentially is the same as that already required to support the Before and After Study requirement, with the addition of assignment of responsibilities for each cost and ridership activity. This information will need to be reported to FTA at the four key project milestones listed above.

3.1 Travel Forecasts and Related Inputs and Assumptions

In order for FTA to evaluate the performance of the contractor in charge of developing the travel forecasts, the project sponsor should submit travel forecasting results for the build and baseline alternatives for at least the following three time periods:

- Current year (if the proposed project were operating today);
- Opening year; and,
- Forecast year

Although most elements of the project's scope are decided in alternatives analysis, certain elements may change during preliminary engineering. For instance, the length of the project may change as well as the number and location of stations. Options related to the horizontal and vertical alignment are also finalized during preliminary engineering. During alternatives analysis, the general location of the project stations are usually defined, but in some cases, the location could move enough during preliminary engineering to have an impact on the number of people with walk access to specific stations. When station locations change, travel forecasts should be updated to reflect the more accurate information. When this occurs, FTA needs the following information, along with an explanation of the reason for any change and a discussion of the impact of the change on the travel forecasts:

- Project length;
- Number and location of stations; and,
- Horizontal and vertical alignment characteristics.

Travel forecasts require a large number of inputs and assumptions in order to develop a reasonable expectation of future conditions. Changes in any of the inputs or assumptions can have a powerful impact on forecasting results. In addition, many of these inputs and assumptions are not the responsibility of the travel forecasting consultant. In order for FTA to make a fair determination of the performance of the contractor and other responsible parties, the project sponsor shall submit the following key inputs used in the development of the ridership forecasts and clearly identify the party responsible for developing them:

- Population and employment forecasts;
- Future land use/growth patterns;
- Transit service levels and policies;
- Operating performance of the proposed project including operating hours, frequencies and station-to-station running times;
- Application of the travel forecasting models;
- Assumptions about fares, parking costs, highway networks, etc.; and,
- Calculation and use of modal constants.

Project sponsors and their contractors will need to provide an analysis of the key uncertainties for their areas of responsibility surrounding the ridership forecasting results. This section will identify the key factors that drive the travel forecasting results, evaluate how sensitive the results are to various assumptions, and the likelihood of those assumptions being correct. One of the key outputs to this analysis should be the reporting of travel forecasting ranges that describe the range of possible outcomes of the project and identification of the key factors that will affect that outcome. FTA will need this information in order to develop an assessment of the reliability of the travel forecasts and allow us to identify the source of any errors that may arise.

3.2 Cost Information

Like ridership forecasts, the actions of project sponsors and other parties can impact the reliability of the cost estimates apart from the actions of the engineering and design contractor. So, in addition to the contractor responsible for the construction cost estimates, project sponsors need to document any changes to the project scope or design standards since the previous reporting period, identify the reason for the changes, and the party responsible for those changes.

Project sponsors and their contractors must report the following information at the key project development milestones identified in Section 2:

- Plan and profile drawings;
- Design standards; and,
- Cost estimates in FTA's standard cost categories.

Project sponsors and their contractors will need to provide an analysis of the key uncertainties surrounding the cost estimates developed at each phase of project development. This section will identify the key factors that impact the cost of the proposed project, evaluate how sensitive the results are to various assumptions, and the likelihood of those assumptions being correct. One of the key outputs to this analysis should be the reporting of reasonable ranges of possible outcomes related to construction costs and identification of the key factors that will effect that outcome. FTA will need this information in order to develop an assessment of the reliability of the project cost estimate and allow us to identify the source of any errors that may arise.

4 Contents of the New Starts Contractor Performance Assessment Report

The first estimates that will be subject to this assessment are those for projects that were approved for entry into preliminary engineering after May 22, 2006, when contractors were notified that this requirement was in effect. It is unlikely that a New Starts project subject to the contractor performance assessment will be complete for several years. The initial reports will document the interim results for any projects that are being tracked.

The assessment of the travel forecasts and contractor performance will be based on consideration of the key inputs and assumptions used to generate the forecasts and the parties responsible for each, forecasting results at key milestones, a discussion of any changes from the previous reporting period and the reasons and sources/factors responsible for any changes, and finally the comparison of the forecasts to the actual results two years after the project opens. FTA will then issue the forecast number for each stage, as available, and a bottom line assessment of the quality of the ridership forecasts, the sources/factors responsible for any significant deviation relative to actual ridership, and a discussion of any mitigating factors based on the uncertainty analysis.

The assessment of the construction cost estimates and contractor performance will be based on consideration of the cost estimates at each key milestone, a discussion of any changes from the previous reporting period and the reasons and sources/factors responsible for any changes, and finally the comparison of the cost estimates to the final as-built costs two-years after the project opens for revenue service. FTA will then issue the forecast number for each stage, as available, and a bottom line assessment of the quality of the cost estimates, the sources/factors responsible for any significant deviation relative to actual as-built costs, and a discussion of any mitigating factors.

Assessments will be organized by contractor with an assessment given for ridership and cost estimates of each project worked on by that contractor.

5 Implementation Plan

Project sponsors with proposed New Starts projects (excluding Very Small Starts) not yet in preliminary engineering must first submit the information required for the Contractor Performance Assessment Report before being admitted into preliminary engineering, and at the other milestones identified above.

SAFETEA-LU directs FTA to publish the contractor assessment report annually. However, since FTA intends to implement the tracking of contractor performance in a forward looking manner beginning with projects not yet in preliminary engineering, a new project will need to advance into preliminary engineering before FTA has the first set of travel forecasting and costing information upon which to build a contractor performance assessment. Further, until a tracked project enters final design, FTA will not have a basis to evaluate contractor performance.

The information required to assess the performance of contractors adds a significant amount of information regarding roles and responsibilities to the information used to prepare the Before and

After Studies also required in SAFETEA-LU. Project sponsors are currently required to follow FTA's guidance for "Before and After Studies." Therefore, a solid framework exists that allows for the roles and responsibilities of each entity involved in forecasting ridership and costs to be identified so that contractor performance can be properly tracked. .