

2 Submission Requirements

This section describes the information applicants must submit to FTA for evaluation and rating under the Section 5309 New Starts process as specified in TEA-21. FTA requires that project sponsors provide information on the characteristics of the proposed New Starts project and the existing regional transit system, to develop and submit information addressing each of the New Starts rating criteria, and to certify that the technical methods and assumptions used to develop the submittal are consistent with FTA policy and sound planning principles as described in this chapter.

2.1 Reporting Requirements

Many of the required data inputs and qualitative assessments are based upon information developed by local project sponsors during alternatives analysis and other planning/project development activities. The FTA will work with local agencies to address questions and issues regarding individual data items and reporting of specific criteria and measures.

This section specifies the information local project sponsors are to submit on their proposed project to ensure that FTA can give the project an adequate evaluation and a fair rating. These items will be described in detail in the following sections. Table 2-1 identifies the items to be reported, the section of this document where it is discussed, the template number where the template is found in the appendix, and provides a checklist for project sponsors to complete as they prepare their submittal. Reporting templates are also available on the World Wide Web at www.fta.dot.gov in the *New Starts* section.

2.1.1 Project Description

Applicants are to provide descriptive information on the proposed New Starts investment and the regional public transportation system. FTA uses the project description to understand the project, to develop a project profile for the *Annual Report on Funding Levels and Allocations of Funds* and to establish a database of project characteristics and local contact information.

The project description template includes the following information:

- Contact information for all key staff and organizations that are involved with the proposed project;
- Project function and its relationship to the existing transportation system;
- Features of the proposed project including length, mode, alignment, stations...etc;
- Cost estimates;
- Travel demand estimates for opening and forecast year;
- New required demand forecast for the proposed project using current year population and employment; and
- Project schedule and milestones.

To fulfill this requirement, project sponsors must complete Template 1 in Appendix A.

2.1.2 *New Starts Project Maps*

FTA includes maps for each of the proposed New Starts investments in the annual *Report on Funding Levels and Allocations of Funds*. FTA produces maps based on information provided by the project sponsor. Project sponsors are encouraged to submit electronic versions of their project maps. To ensure compatibility, maps should be created in a geographic information system (GIS) program such as Map Info, Arc Info, Maptitude, or TransCAD. In lieu of a GIS formatted map, a clearly legible “hardcopy” map of the project may be submitted. To ensure consistency, maps must focus on the proposed New Starts investment and its relation to other major transportation facilities and major trip generators. Maps shall include a legend, compass and scale. Hardcopy maps should be submitted on 8.5 by 11 inch paper and printed in black and white.

Table 2-1: Checklist for Required Information Submission

Reporting Item	Discussed in Section	Template Number	Project Sponsor Checklist
General			
Project Description Worksheet	2.1.1	Template 1	
Project Maps	2.1.2	NA	
Certification of Technical Assumptions	2.1.3	Template 2	
Mobility Improvements			
Travel Time Savings Worksheet	3.1.1	Template 3	
Low Income Households Served Worksheet	3.1.2	Template 4	
Employment Worksheet	3.1.3	Template 5	
Environmental Benefits			
Change in Emissions and Energy Consumption Worksheet	3.2.1	Template 6	
Current Regional Air Quality Designation	3.2.2	NA	
Operating Efficiencies			
Change in Operating Cost per Passenger Mile Worksheet	3.3	Template 7	
Cost Effectiveness			
Transportation System User Benefits	3.4.1	Template 9	
Incremental Cost per New Rider	3.4.2	Template 10	
Annualized Cost Worksheet	3.4.1	Template 8	
Other Factors			
Other Factors, as appropriate	3.5	NA	
Transit Supportive Existing Land Use and Future Patterns			
Land Use Documentation and Supporting Information	3.6.3	Template 11	
Quantitative Land Use Data Worksheet	3.6.3	Template 12	
Additional Supporting Land Use Documentation	3.6.4	NA	
Local Financial Commitment			
Project Finance Worksheet	4.1.1	Template 13	
Project Finance Plan	4.1.2	NA	
Additional Supporting Financial Documentation	4.1.3	NA	

2.1.3 Certification of Assumptions

The Section 5309 New Starts criteria are used to evaluate and rate a wide variety of proposed projects nationally. Therefore, project sponsors must develop the New Starts submissions according to FTA policy. This section prescribes the basic technical approach related to the definition of alternatives and forecasting assumptions, and requires project sponsors to certify that they have complied with the prescribed approach.

The information needed to address the New Starts criteria should be a normal product of the planning and development process. Project sponsors are strongly encouraged to recognize and address the substance of this submission at the earliest stages of corridor planning and preliminary engineering. Otherwise, additional time and expense may be incurred before project sponsors can submit their applications and certify that they have followed these guidelines.³

2.1.4 Definition of Alternatives

Change Due to Major Capital Investment Projects Final Rule

In response to comments submitted by the transit industry and in recognition of the desire to simplify the New Starts process, the New Starts Final Rule eliminates the requirement for an evaluation comparing the New Starts criteria for the build alternative against both the no-build and the Transportation System Management (TSM) alternatives. Instead, the Final Rule requires that the proposed New Starts project be evaluated against a single “New Starts baseline alternative”. The Final Rule also requires that FTA must approve the definition of the New Starts baseline alternative for specific projects prior to approval to advance to preliminary engineering.

2.1.4.1 Baseline Alternative

The New Starts baseline alternative is best defined as the “best that can be done” to improve transit service in the corridor without a major capital investment in new infrastructure. In most cases, the New Starts baseline alternative will be identical to the TSM alternative of past practice; the alternative will include a series of relatively low cost transit improvements designed to improve measures of transit mobility in the corridor.

The New Starts baseline alternative must be defined so that comparisons with the New Starts project isolate the costs and benefits of the proposed major transit capital investment. At a minimum, the New Starts baseline must include in the project corridor all reasonable cost-effective transit improvements short of the major capital investment often required for a New Starts project. The New Starts baseline alternative should include relatively low cost actions such as traffic engineering, enhanced bus service and other transit operational changes, and modest capital improvements such as reserved lanes, park-and-ride lots, and transit terminals. The New Starts baseline should be designed to address identified transportation needs in the New Starts project’s service area and demonstrate the extent to which these problems can be solved without a proposed major capital investment such as a New Starts fixed guideway transit project. However, it is important to note that in some cases the New Starts baseline alternative may still

³ Any methods and assumptions that differ from those described in this section should be discussed with FTA before they are used. FTA’s intent is not to totally preclude approaches that depart from this guidance, but for FTA and project sponsors to reach a mutual decision on approaches that may vary from these instructions.

result in substantial capital and operating costs, particularly in complex study areas with significant transportation problems.

Depending on the specific corridor and circumstances, and through prior agreement with FTA, the New Starts baseline alternative can be defined in one of three general ways:

- **First, where the adopted financially constrained long range transportation plan includes all reasonable cost-effective transit improvements within the study area short of the proposed New Starts project, the no-build alternative that includes those improvements may serve as the New Starts baseline alternative.** In this case, the NEPA no-action alternative and the New Starts baseline alternative would generally correspond to one another.
- **Second, where additional cost-effective transit improvements can be made beyond those provided by the adopted plan, the New Starts baseline alternative will incorporate those additional cost-effective transit improvements along with the actions in the adopted long range plan. In this case, the New Starts baseline alternative is essentially the TSM alternative of past practice.** All elements of the New Starts baseline alternative are not required to be included in the financially constrained long range plan unless and until the NEPA process leads to its selection over the proposed New Starts project. This New Starts baseline alternative (i.e., the TSM alternative) would be addressed in the NEPA process. However, whether it would be addressed in full detail or in the screening of alternatives would depend on the specific factors considered during scoping.
- **Lastly, where the proposed New Starts project is part of a multimodal alternative that includes major highway components, the New Starts baseline alternative will be the proposed multimodal alternative without the New Starts project and its associated transit services.**

In the majority of cases, the second definition listed above will serve as the appropriate New Starts baseline alternative. Most metropolitan areas where New Starts projects are proposed would likely fit in this category where additional transit actions short of a New Starts major capital investment are feasible. There will be selected cases where the first definition listed above is appropriate, but these appear likely only in highly urbanized corridors with high current levels of transit service. The third definition, multimodal corridors, will be reviewed closely on a case-by-case basis. FTA staff will work with local project sponsors to examine the specific circumstances related to the definition of alternatives.

The *New Starts Final Rule* requires that FTA approve the New Starts baseline alternative before projects can be approved to advance to preliminary engineering. Local project sponsors considering a potential New Starts project as a build alternative in an alternatives analysis planning study, should consult with the FTA Regional Office. More detailed information on the definition of the New Starts baseline alternative and on FTA approval procedures is presented in the *Frequently Asked Questions as Interim Guidance on the Major Transit Capital Investment Projects Final Rule*, released by FTA in July 2001, and in the *Policy and Procedural Guidance on the New Starts Program*, scheduled for release by FTA in Fall/Winter 2001.

2.1.4.2 Build Alternative

The build alternative is the project that the sponsoring agency is or will be seeking FTA New Starts funding to build. The New Starts project should be evaluated as a stand alone project. In many instances, the preferred alternative that is adopted into the MPO's plan following a corridor study will include a variety of elements, such as highway and HOV improvements, as well as transit. When addressing the New Starts criteria, those elements of the preferred alternative which are not proposed for New Starts funding should be treated as separate and distinct projects from the New Starts project. This is necessary to accurately identify the transit benefits that the New Starts project will produce.

If the project sponsor intends to build the New Starts project in phases, starting with a Minimum Operating Segment (MOS), then it is the MOS that should be evaluated using the New Starts criteria. The project sponsor may also address the criteria for a more extensive project if that project is shown in the MPO's adopted plan. This supplementary information may be useful to show the MOS in the context of the plan. Local project sponsors considering implementation of an MOS should discuss with the FTA Regional Office and the FTA Office of Planning.

The capital and operating cost estimates for the New Starts build alternative should include the feeder bus system and other project elements that are assumed in forecasting ridership.

2.1.4.3 Additional Guidance for Multimodal Projects

Defining alternatives for projects that contain more than one mode is more complex. The FTA New Starts evaluation process is designed to analyze the impact of the New Starts project alone. When build alternatives include highway or high-occupancy vehicle (HOV) elements, FTA needs the project sponsor to identify alternatives that isolate the impacts of the proposed New Starts project. The baseline alternative and the build alternative will need to assume the existence of the highway or HOV elements within the corridor to provide a consistent basis of comparison for the New Starts ratings.

This highway-only New Starts baseline alternative may, in some cases, be a reasonable alternative that addresses the purpose and need for Federal action that underlies the NEPA evaluation. In this case, the NEPA scoping process would be expected to advance such highway-only alternative for evaluation during the NEPA process. However, it is expected that, in many cases, the highway-only alternative created to serve as the New Starts baseline alternative, will not sufficiently address the established purpose and need that the scoping process would retain it for NEPA evaluation. In this case, the highway-only alternative would be developed only for use in the New Starts rating process and it would NOT be included in the NEPA evaluation.

2.1.5 Travel Demand Forecasting Assumptions

There is significant variability in the travel demand forecasting models maintained by agencies across the country so that inputs and model assumptions are different in different places. Nevertheless, a number of good practices have evolved that ensure consistent treatment of alternatives. The basic guiding principle in developing model input assumptions is to make sure that the travel forecasting approach does not bias the results in favor of any particular alternative. The following practices must be followed:

- Model assumptions regarding socio-economic variables and land use, modeling parameters, and inputs are the same for all alternatives except for changes in the transportation network or other data that are directly attributable to each alternative.⁴
- Assumptions about travel times and operating speeds of transit services must be consistent among the alternatives.
- Access, egress, walking, waiting, and transfer times must be estimated consistently for all alternatives.
- Transit vehicle operating speeds in mixed traffic must reflect anticipated congestion and traffic flow characteristics.
- Transit sub-mode bias constants cannot be used without submitting technical justification to FTA in advance.
- Factors to convert daily ridership to annual ridership must be consistent among all alternatives and must be reasonable and reflective of the operator's recent experience. Any annualization factor over 300 requires a written justification and will be scrutinized by FTA.
- The highway network and zone system must be the same among all alternatives except for changes that result from the alternatives themselves.
- Highway volume-time functions used to determine highway link speeds and assignments based on traffic volumes need to be the same among all alternatives.
- Assumptions about highway tolls and parking costs need to be the same among all alternatives.

2.1.6 *Certification Letter*

The use of consistent measures, data inputs, and analytical assumptions as outlined in this chapter is intended to improve the information provided by project sponsors and to support FTA's decision making process. Project sponsors need to provide, along with each New Starts submission, a statement certifying that the technical approaches and assumptions used in the analysis were in accordance with the principles discussed above. The sponsoring agency's general manager or chief executive officer shall sign the certification. Template 2 in Appendix A provides the certification statement.

⁴ With supporting evidence that local adopted land use plans stipulate that intensity of development in a particular area will increase once a transit investment occurs, FTA may agree that the ridership analysis for the Build project could assume a different allocation of population and employment than the Baseline Alternative. Project sponsors must discuss this approach in advance with FTA where applicable.